

Test Item File to Accompany

**Principles of  
Microeconomics  
Test Item File 2**  
*Ninth Edition*

by

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# Contents

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Chapter 1	The Scope and Method of Economics	1
Chapter 2	The Economic Problem: Scarcity and Choice	29
Chapter 3	Demand, Supply, and Market Equilibrium	55
Chapter 4	Demand and Supply Applications	98
Chapter 5	Elasticity	117
Chapter 6	Household Behavior and Consumer Choice	135
Chapter 7	The Production Process: The Behavior of Profit-Maximizing Firms	171
Chapter 8	Short-Run Costs and Output Decisions	207
Chapter 9	Long-Run Costs and Output Decisions	252
Chapter 10	Input Demand: The Labor and Land Markets	292
Chapter 11	Input Demand: The Capital Markets and Investment Decision	323
Chapter 12	General Equilibrium and the Efficiency of Perfect Competition	348
Chapter 13	Monopoly and Antitrust Policy	377
Chapter 14	Oligopoly	425
Chapter 15	Monopolistic Competition	449
Chapter 16	Externalities, Public Goods, Imperfect Information, and Social Choice	476
Chapter 17	Uncertainty and Asymmetric Information	517
Chapter 18	Income Distribution and Poverty	535
Chapter 19	Public Finance: The Economics of Taxation	563
Chapter 20	International Trade, Comparative Advantage, and Protectionism	592
Chapter 21	Economic Growth in Developing and Transitional Economies	628

# Chapter 1 The Scope and Method of Economics

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## 1.1 Why Study Economics?

### 1 Multiple Choice

1) The reasons to study economics include which of the following?

- A) to be an informed voter
- B) to understand society and global affairs
- C) to learn a way of thinking
- D) all of the above

Answer: D

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

2) Marginalism is

- A) the best alternative that we forego when making a decision.
- B) the study of how societies choose to use scarce resources.
- C) a market situation in which profit opportunities are eliminated almost instantaneously.
- D) the process of analyzing the additional costs or benefits arising from a decision.

Answer: D

Diff: 1

Topic: *Why Study Economics?*

Skill: *Definition*

3) Economics is best defined as the study of

- A) financial decision-making.
- B) how consumers make purchasing decisions.
- C) choices made by people faced with scarcity.
- D) inflation, unemployment, and economic growth.

Answer: C

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

4) The Industrial Revolution refers to the rise of the modern factory system in \_\_\_\_\_ during the late eighteenth and early nineteenth centuries.

- A) the United States
- B) England
- C) France
- D) Germany

Answer: B

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

- 5) Which of the following statements is correct?
- A) Economics is a natural science.
  - B) In large measure, economics is the study of how people make choices.
  - C) If poverty was eliminated there would be no reason to study economics.
  - D) Economic analysis can be used to explain how societies, but not individuals, make decisions.

Answer: B

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

- 6) Economics is the study of
- A) how to invest in the stock market.
  - B) how society uses limited resources.
  - C) the role of money in markets.
  - D) how government officials decide which goods and services are produced.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

- 7) Costs that cannot be avoided, because they have already been incurred are known as
- A) differential costs.
  - B) marginal costs.
  - C) opportunity costs.
  - D) sunk costs.

Answer: D

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

- 8) Suppose that two weeks ago you purchased a ticket to the symphony for \$40. Last week someone invited you to go camping on the same night as the symphony concert. You would much rather go camping than go to the symphony. You have tried unsuccessfully to sell the symphony concert ticket. Which of the following statements regarding this situation is correct?
- A) The \$40 symphony ticket should be irrelevant in your decision making, because it represents the marginal cost of going camping.
  - B) The \$40 you paid for the symphony ticket should be irrelevant in your decision making, because it is a sunk cost.
  - C) The \$40 you paid for the symphony ticket is relevant to the decision, as this represents the opportunity cost of going camping.
  - D) You should base your decision on whether or not going camping will provide you with more than \$40 in satisfaction.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

9) You have decided that you want to attend a renaissance fair as King Henry VIII. You estimate that it will cost \$80 to assemble your costume. After spending \$80 on the costume, you realize that the additional pieces you need will cost you \$20 more. The marginal cost of completing the costume is

- A) \$20.                      B) \$60.                      C) \$80.                      D) \$100.

Answer: A

Diff: 2

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

10) The concept of opportunity cost can be applied to the analysis of \_\_\_\_\_ decision-making processes.

- A) only economy-wide                      B) only global  
C) only-small-scale                      D) any

Answer: D

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

11) That which we forgo, or give up, when we make a choice or a decision is known as

- A) equity.                      B) causation.  
C) correlation.                      D) opportunity cost.

Answer: D

Diff: 2

Topic: *Why Study Economics?*

Skill: *Definition*

12) Scarce resources give rise to the concept of

- A) efficient markets.                      B) opportunity costs.  
C) laissez-faire.                      D) positive economics.

Answer: B

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

13) Which of the following is an opportunity cost of attending college?

- A) the cost of your apartment or dorm  
B) the income you could have earned if you didn't attend college  
C) the cost of the food that you consume while you are attending college  
D) the education you gain from attending college.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

14) If your tuition is \$2,000 this semester, your books cost \$400, you can only work 10 rather than 40 hours per week during the 15 weeks you are taking classes and you make \$12 per hour, and your room and board is \$4,000 this semester, then your opportunity cost of attending college this semester is

- A) \$2,400.                      B) \$2,760.                      C) \$7,800.                      D) \$11,800.

Answer: C

Diff: 3

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

15) If your tuition is \$20,000 this semester, your books cost \$2,000, you can only work 10 rather than 40 hours per week during the 15 weeks you are taking classes and you make \$15 per hour, and your room and board is \$8,000 this semester, then your opportunity cost of attending college this semester is

- A) \$22,000.                      B) \$22,150.                      C) \$28,750.                      D) \$36,750.

Answer: C

Diff: 3

Topic: *Why Study Economics?*

Skill: *Analytic*

AACSB: *Analytic Skills*

16) If you own a condo and you decide to lease it to your cousin

- A) there is no opportunity cost of leasing the condo because you own it.  
B) there is an opportunity cost of leasing the condo because you could have chosen to live in it.  
C) there is no opportunity cost of leasing the condo because you collect rent from your cousin.  
D) the only cost relevant to this decision is the price you paid for the condo.

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

17) You own *The Wedding Crasher* on DVD. The opportunity cost of watching this DVD for the fourth time

- A) is zero, since you own it.  
B) is one-fourth the cost of the DVD, as this is the fourth time you have watched it.  
C) is the value of the alternative use of the time you spend watching the DVD.  
D) must be the same as the opportunity cost of watching it the first time.

Answer: C

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 18) Opportunity cost is
- A) what we give up to get something else.
  - B) marginal cost divided by sunk cost.
  - C) the same as real cost.
  - D) all of the above

Answer: A

Diff: 1

Topic: Why Study Economics?

Skill: Definition

- 19) Sunk costs
- A) are costs which have been incurred.
  - B) are costs which cannot be avoided but have yet to be incurred.
  - C) the sum of all marginal costs.
  - D) the sum of all opportunity costs.

Answer: A

Diff: 1

Topic: Why Study Economics?

Skill: Definition

- 20) If you can download 10 ring tones for your cell phone for \$10 or you could download 11 ring tones for your cell phone for \$10.50, then the marginal cost of the eleventh ring tone is
- A) \$0.50.
  - B) \$10.00.
  - C) \$10.50.
  - D) \$20.50.

Answer: A

Diff: 2

Topic: Why Study Economics?

Skill: Analytic

AACSB: Analytic Skills

- 21) If you eat at a Las Vegas casino that charges \$12 for its all you can eat buffet, then the marginal cost of your third trip to the buffet is
- A) zero.
  - B) \$4.
  - C) \$12.
  - D) \$36.

Answer: A

Diff: 2

Topic: Why Study Economics?

Skill: Analytic

AACSB: Analytic Skills

- 22) An efficient market is a market
- A) that deals in unlimited resources.
  - B) in which long-term profits are guaranteed.
  - C) in which profit opportunities are eliminated almost instantaneously.
  - D) in which there are no opportunity costs.

Answer: C

Diff: 2

Topic: Why Study Economics?

Skill: Definition

- 23) If information is more costly and less easily available, then usually this
- A) makes markets more efficient.
  - B) makes markets less efficient.
  - C) decreases profit opportunities.
  - D) decreases the opportunity cost of acquiring more information.

Answer: B

Diff: 3

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 24) The common way of expressing the efficient market concept is
- A) "the only true market is a profitable market."
  - B) "there's no such thing as a free lunch."
  - C) "only without government interference can a market survive."
  - D) "once an efficient market, always an efficient market."

Answer: B

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) Related to the *Economics in Practice* on p. 6: An example of a sunk cost to Apple in its production of the iPod is
- A) the \$73 cost of the Toshiba hard drive.
  - B) the cost of conception and design of the iPod.
  - C) the \$80 value-added received by Apple.
  - D) the cost of all of the 451 components needed to produce the iPod.

Answer: B

Diff: 2

Topic: *Why Study Economics?: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) Related to the *Economics in Practice* on p. 6: The opportunity cost to Apple of having its 30-gigabyte video iPod assembled in China is
- A) the low wages paid to Chinese workers.
  - B) the \$4 per unit cost of assembly in China.
  - C) having the iPod assembled in the next best available location.
  - D) the value-added received by Apple.

Answer: C

Diff: 2

Topic: *Why Study Economics?: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



## 2 True/False

- 1) Resources are limited in both wealthy and poor societies.

Answer: TRUE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

- 2) The value of the best alternative foregone is the sunk cost of making a decision.

Answer: FALSE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

- 3) Opportunity costs arise because resources are limited.

Answer: TRUE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) Sunk costs affect marginal decision making.

Answer: FALSE

Diff: 2

Topic: *Why Study Economics?*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Sunk costs are those that cannot be recaptured.

Answer: TRUE

Diff: 1

Topic: *Why Study Economics?*

Skill: *Fact*

## 1.2 The Scope of Economics

### 1 Multiple Choice

- 1) Microeconomics is best described as the study of
- A) the choices made by individual households, firms, and governments.
  - B) inflation, unemployment, gross national product, and the nation's economy as a whole.
  - C) how markets interact in the aggregate economy.
  - D) marginal changes in the economy.

Answer: A

Diff: 2

Topic: *The Scope of Economics*

Skill: *Definition*

- 2) Macroeconomics is best described as the study of
- A) very large issues.
  - B) the choices made by individual households, firms, and governments.
  - C) the nation's economy as a whole.
  - D) the relationship between inflation and wage inequality.

Answer: C

Diff: 2

Topic: *The Scope of Economics*

Skill: *Definition*

- 3) Which of the following is a microeconomics question?
- A) Is it sensible for a government to subsidize tobacco production?
  - B) Why do some countries grow faster than others?
  - C) Should Congress and the president take action to reduce global warming?
  - D) Should the government attempt to influence the interest rate to lower inflation?

Answer: A

Diff: 2

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) Which of the following is a macroeconomics question?
- A) Should we have a constitutional amendment to balance the federal budget?
  - B) Why does a firm decide to enter a particular market?
  - C) Should the government prevent the merger of two large firms?
  - D) Should the government put a tax on alcohol in an attempt to reduce highway fatalities?

Answer: A

Diff: 1

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) We can use macroeconomic analysis to
- A) learn how to balance a checkbook.
  - B) study the choices made by households.
  - C) understand marginal changes in the macroeconomy.
  - D) understand why economies grow.

Answer: D

Diff: 1

Topic: *The Scope of Economics*

Skill: *Fact*

## 2 True/False

- 1) The rate of unemployment is a topic of microeconomics.

Answer: FALSE

Diff: 1

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) The rate of inflation is a topic of macroeconomics.

Answer: TRUE

Diff: 2

Topic: *The Scope of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 1.3 The Method of Economics

### 1 Multiple Choice

1) Which of the following is an example of a normative question?

- A) How will an increase in the price of diesel fuel affect truck drivers?
- B) What fraction of an income-tax rebate check will be spent on consumer goods?
- C) Should the government provide free prescription drugs to lower-income citizens?
- D) How will an increase in the minimum wage affect migrant workers?

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) The compilation of data that describe phenomena and facts is referred to as

- A) an economic model.
- B) Marxist ideology.
- C) a normative statement.
- D) descriptive economics.

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

3) The amount of exercise that one gets is an important factor in the determination of his general state of health. This is best described as

- A) a positive statement.
- B) Marxist ideology.
- C) a normative statement.
- D) descriptive economics.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) Opportunity cost is

- A) the additional cost incurred from the consumption of one more unit of output.
- B) the cost involved when choosing between alternatives.
- C) the cost of production which cannot be recaptured.
- D) the total cost incurred from the consumption of additional output.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 5) An approach to economics that applies statistical techniques and data to economic problems is called
- A) Ockham's razor.
  - B) laissez-faire economics.
  - C) positive economics.
  - D) normative economics.

Answer: C

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 6) Normative economics
- A) is the focus of most modern economic reasoning.
  - B) answers the question "What ought to be?"
  - C) predicts the consequences of alternative actions.
  - D) answers the question "What is?"

Answer: B

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

- 7) Which of the following is a question answered with normative economic reasoning?
- A) If the college offers free parking for students, will more students drive to campus?
  - B) If the college provided more financial aid assistance, would more students benefit?
  - C) If the college increased tuition, would class size decline?
  - D) Should the college cut tuition to stimulate enrollment?

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) Which of the following is a question answered with positive economic analysis?
- A) Should the college offers free parking for students?
  - B) Should the college provide more financial aid assistance?
  - C) If the college increased tuition, will class size decline?
  - D) Should the college cut tuition to stimulate enrollment?

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) The reoccurrence of contagious diseases should be significantly lower in a technically advanced nation such as the United States. This statement is best described as
- A) a normative statement.
  - B) a positive statement.
  - C) a descriptive economics statement.
  - D) an implication of an efficient market.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

10) There is great concern over the fact that global warming is causing permanent damage to the global environment. A study of the costs and benefits of purchasing carbon offsets to combat global warming is an example of

- A) labor economics.
- B) normative economics.
- C) positive economics.
- D) laissez-faire economics.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

11) The compilation of data that describe phenomena and facts refers to

- A) descriptive economics.
- B) normative economics.
- C) laissez-faire economics.
- D) collective economics.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

12) An economist collecting data on the employment benefits and salaries in the chemical engineering industry is an example of

- A) descriptive economics.
- B) the fallacy of composition.
- C) the post hoc fallacy.
- D) ceteris paribus.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

***Refer to Scenario 1.1 below to answer the questions that follow.***

SCENARIO 1.1: A scientist wants to understand the relationship between automobile emissions and the level of global warming. The scientist collects data on the volume of automobile emissions and the levels of global warming over time. The scientist concludes that a 1% increase in automobile emissions causes a 0.0003% increase in average global temperatures. From this information he concludes that the automobile emissions are harmful to the environment and should be reduced to stop the increase in global temperatures.

13) Refer to Scenario 1.1. The statement that a 1% increase in the automobile emissions causes a 0.0003% increase in average global temperatures is an example of

- A) positive economics.
- B) descriptive economics.
- C) normative economics.
- D) Marxist economics.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 14) Refer to Scenario 1.1. The statement, "automobile emissions are harmful to the environment and should be reduced to stop the increase in global temperatures," is an example of
- A) positive economics.
  - B) descriptive economics.
  - C) normative economics.
  - D) Marxist economics.

Answer: C

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 15) Refer to Scenario 1.1. The process of collecting data on automobile emissions and global warming levels is an example of
- A) law and economics.
  - B) economic history.
  - C) econometrics.
  - D) descriptive economics.

Answer: D

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 16) Refer to Scenario 1.1. The statement that an increase in automobile emissions causes an increase in global warming is an example of
- A) an economic theory.
  - B) descriptive reasoning.
  - C) deductive reasoning.
  - D) normative economics.

Answer: A

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 17) Refer to Scenario 1.1. A graph of the volume of automobile emissions on one axis and the level of average global temperatures on the other axis is an example of
- A) an economic model.
  - B) an economic theory.
  - C) a variable theory.
  - D) inductive reasoning.

Answer: A

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 18) By invoking the assumption of *ceteris paribus*, economists
- A) consider the impact of all relevant factors.
  - B) hold all variables constant when analyzing a model.
  - C) isolate the impact of one single variable while holding all other variables constant.
  - D) exclude irrelevant detail when analyzing a model.

Answer: C

Diff: 2

Topic: The Method of Economics

Skill: Conceptual

AACSB: Reflective Thinking

- 19) Ockham's razor is the principle that states
- A) supply creates its own demand.
  - B) we must forego something when making a decision.
  - C) costs which have been incurred cannot be avoided.
  - D) irrelevant detail should not be included in a model.

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 20) The phrase *ceteris paribus* means
- A) "scarcity is a fact of life."
  - B) "all else equal."
  - C) "there is no such thing as a free lunch."
  - D) "everything affects everything else."

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 21) The Latin phrase *ceteris paribus* means that when a relationship between two variables is being studied
- A) both are treated as unpredictable.
  - B) neither of those two variables is allowed to change.
  - C) all other variables are held fixed.
  - D) we recognize that some factors are unknown.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 22) Isabel noted that whenever she wore her green contact lenses, the Chicago White Sox would win that evening. Based on this observation, she developed the "green-eyes-for-White-Sox" theory of winning. It is most likely true that Isabel
- A) showed good reasoning for the reason the White Sox would win.
  - B) committed the *ceteris paribus* error.
  - C) committed the fallacy of composition.
  - D) was too quick to conclude that correlation implies causation.

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 23) Whenever a former governor is elected president, the unemployment rate decreases; whenever a former congressman is elected president, the inflation rate increases. This statement is an example of
- A) fallacy of composition.
  - B) *post hoc, ergo propter hoc* fallacy.
  - C) *ceteris paribus* fallacy.
  - D) fallacy of inductive reasoning.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 24) The erroneous belief that what is true for a part is necessarily true for the whole is referred to as the
- A) fallacy of composition.
  - B) *post hoc, ergo promppter hoc* fallacy.
  - C) *ceteris paribus* fallacy.
  - D) fallacy of inductive reasoning.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 25) The unemployment rate was falling during all of the years that I was a student, but as soon as I graduated, the unemployment rate started to rise. Therefore, the job market was waiting until I started looking for employment to start to go bad. This statement is an example of
- A) fallacy of composition.
  - B) *post hoc, ergo promppter hoc* fallacy.
  - C) *ceteris paribus* fallacy.
  - D) fallacy of inductive reasoning.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) Research conducted in border states suggests that speaking a second language increases the prospects for employment. Therefore, we should require all citizens to speak a second language. This statement is an example of
- A) fallacy of composition.
  - B) *ceteris paribus* fallacy.
  - C) fallacy of inductive reasoning.
  - D) *post hoc, ergo promppter hoc* fallacy.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) Salary caps are imposed when league officials believe some football team owners are taking advantage of their deep pockets and buying more quality players than the other owners can afford to buy. Which of the following criteria are they using to guide their actions?
- A) growth
  - B) stability
  - C) efficiency
  - D) equity

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 28) A government policy that tries to minimize inflation and unemployment can best be described as trying to achieve economic
- A) growth.
  - B) stability.
  - C) profitability.
  - D) equity.

Answer: B

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 29) The concept of equity would explain the redistribution from the rich to the poor which is achieved from a tax system that requires taxes to
- A) fall when income rises.
  - B) rise when income rises.
  - C) remain stable when income rises.
  - D) be unrelated to income.

Answer: B

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 30) You know that the school parking lot gets very congested about 8:30 a.m. To avoid this congestion, you start arriving at school at 8:00 a.m. However many other students make the same decision, and now the parking lot becomes very congested at 8:00 a.m. This is an example of the
- A) fallacy of composition.
  - B) *ceteris paribus* fallacy.
  - C) fallacy of division.
  - D) *post hoc, ergo prompter hoc* fallacy.

Answer: A

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 31) You always have math problems to work in class whenever you forget to bring your calculator to school. Concluding that forgetting your calculator causes your professor to assign math problems is an example of the
- A) fallacy of composition.
  - B) fallacy of inductive reasoning.
  - C) *ceteris paribus* conditions.
  - D) *post hoc, ergo prompter hoc* fallacy.

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 32) At a NASCAR race, you stand up to see better. Everyone else stands up, as well. This is an example of
- A) the fallacy of composition.
  - B) the *post hoc, ergo prompter hoc* fallacy.
  - C) *ceteris paribus*.
  - D) Ockham's razor.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

33) You have observed that every time you get a new tattoo the day before you take an exam you get an A. You therefore conclude that to get an A on an exam, all you have to do is get a new tattoo the day before. You have committed the

- A) fallacy of division.
- B) fallacy of inductive reasoning.
- C) *post hoc, ergo prompter hoc* fallacy.
- D) fallacy of composition.

Answer: C

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

34) If you observe that Kelly Clarkson won American Idol 3 years before Carrie Underwood won, and you conclude that Kelly Clarkson winning caused Carrie Underwood to win 3 years later, you would be guilty of an error called the

- A) fallacy of inductive reasoning.
- B) fallacy of *ceteris paribus*.
- C) fallacy of composition.
- D) *post hoc, ergo prompter hoc* fallacy.

Answer: D

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

35) Two variables are said to be correlated if

- A) one variable changes when the other variable changes.
- B) the first variable changes when the second variable does not change.
- C) the first variable does not change when the second variable changes.
- D) the variables share no relation with each other.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

36) The belief that what is true for a part is necessarily true for the whole describes the

- A) fallacy of composition.
- B) *post hoc, ergo prompter hoc* fallacy.
- C) fallacy of division.
- D) fallacy of inductive reasoning.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

37) Empirical economics refers to the

- A) exclusion of irrelevant data when analyzing a model.
- B) collection and use of data to test economic theories.
- C) model of economics used prior to the Industrial Revolution.
- D) belief that what is true for a part is necessarily true for the whole.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

38) A change in economic output is potentially efficient if the value of the resulting gains \_\_\_\_\_ the value of the resulting losses.

- A) exceeds                      B) is less than                      C) is equal to                      D) is unrelated to

Answer: A

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

39) An efficient economy is an economy that produces what \_\_\_\_\_ demand and does so at the \_\_\_\_\_ possible cost.

- A) consumers; highest                      B) consumers; least  
C) the government; highest                      D) the government; least

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

40) An efficient market is characterized by the fact that profit opportunities are

- A) guaranteed to everyone.  
B) eliminated almost instantaneously.  
C) only provided to government-subsidized producers.  
D) available only to the most efficient producers.

Answer: B

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

41) The four criteria that are frequently used in judging the outcome of economic policy are efficiency, stability, economic growth, and

- A) equity.                      B) equality.                      C) profitability.                      D) resolution.

Answer: A

Diff: 1

Topic: *The Method of Economics*

Skill: *Fact*

42) You have noticed that there is an increase in the number of homeless people in your city and at the same time you observe that there are a number of vacant apartments. You believe that if landlords were required to rent their apartments for less than they are currently charging, the government could reduce the number of homeless people. This policy recommendation would be motivated by concerns over

- A) economic growth.                      B) stability.  
C) profitability.                      D) equity.

Answer: D

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

43) Many economists argue that items such as food and clothing should be exempt from sales tax because low-income people spend a greater percentage of their income on these goods than do high-income individuals. This argument is motivated by concerns over

- A) economic stability.
- B) economic growth.
- C) equity.
- D) efficiency.

Answer: C

Diff: 3

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

44) The statement "people should pollute as little as possible" is an example of a

- A) positive statement.
- B) normative statement.
- C) factual statement.
- D) non-judgmental statement.

Answer: B

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

45) The statement "the unemployment rate is 5.1%" is an example of a

- A) positive statement.
- B) value judgement.
- C) normative statement.
- D) non-verifiable statement.

Answer: A

Diff: 2

Topic: *The Method of Economics*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

1) Positive economics questions "What ought to be?" Normative economics predicts the consequences of alternative actions, answering the questions "What is?" or "What will be?"

Answer: FALSE

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

2) Normative economics questions "What ought to be?" Positive economics predicts the consequences of alternative actions, answering the questions "What is?" or "What will be?"

Answer: TRUE

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

3) An efficient economy is one that produces what the government demands and does so at the least possible cost.

Answer: FALSE

Diff: 2

Topic: *The Method of Economics*

Skill: *Definition*

- 4) "Post hoc, ergo propter hoc" literally translated means, "all else equal."  
Answer: FALSE  
Diff: 2  
Topic: *The Method of Economics*  
Skill: *Definition*
- 5) Normative economics seeks to understand behavior, but not make judgments.  
Answer: FALSE  
Diff: 2  
Topic: *The Method of Economics*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 6) Stability implies a steady rate of economic growth regardless of the inflation rate.  
Answer: FALSE  
Diff: 2  
Topic: *The Method of Economics*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 7) The compilation of data to describe phenomena and facts is known as empirical economics.  
Answer: FALSE  
Diff: 2  
Topic: *The Method of Economics*  
Skill: *Definition*

## 1.4 Appendix: How to Read and Understand Graphs

### 1 Multiple Choice

Refer to the information provided in Figure 1.1 below to answer the questions that follow.

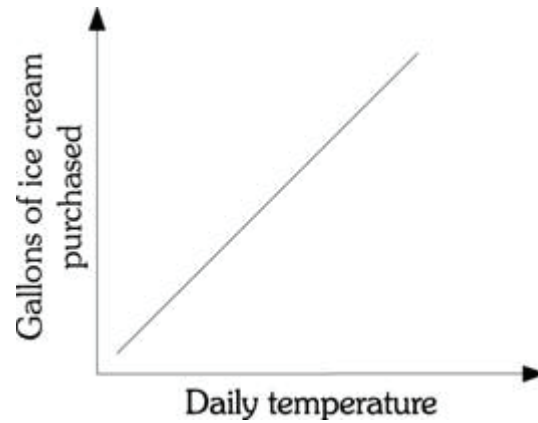


Figure 1.1

- 1) Refer to Figure 1.1. The relationship between the daily temperature and the number of gallons of ice cream purchased demonstrates
- A) an infinite slope.
  - B) a negative slope.
  - C) a positive slope.
  - D) a zero slope.

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 1.2 below to answer the questions that follow.

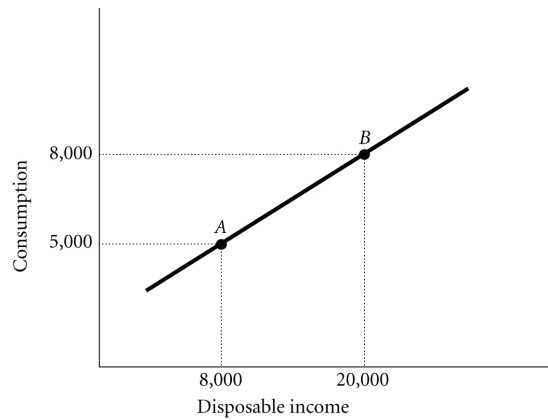


Figure 1.2

- 2) Refer to Figure 1.2. The slope of the line between Points A and B is
- A) positive and increasing.
  - B) positive and constant.
  - C) negative and decreasing.
  - D) negative and constant.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 1.2. If the slope of a straight line is  $-2$ , and if  $X$  (the variable on the horizontal axis) decreases by 8, then  $Y$  (the variable on the vertical axis) will
- A) increase by 4.
  - B) decrease by 4.
  - C) increase by 16.
  - D) decrease by 16.

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 1.2. The slope of the line between Points A and B is
- A) 0.25.
  - B) 4.
  - C)  $-0.25$ .
  - D)  $-4$ .

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 1.3 below to answer the questions that follow.

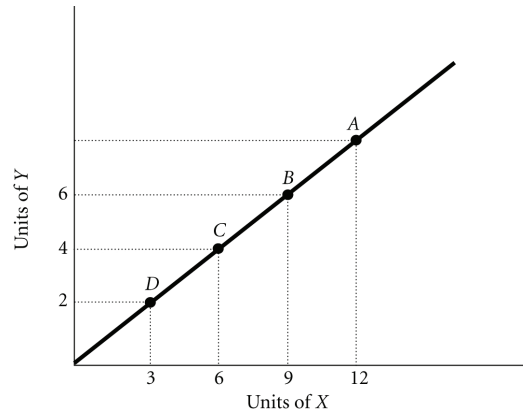


Figure 1.3

5) Refer to Figure 1.3. The slope of the line is

A) negative.

B) increasing at a decreasing rate.

C) decreasing at an increasing rate.

D) positive

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

6) Refer to Figure 1.3. The slope of the line between Points D and B is

A) 1.5.

B) -0.67.

C) -1.5.

D) 0.67.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

7) Refer to Figure 1.3. The slope of the line between Points A and B is

A) 1.5.

B) -0.67.

C) -1.5.

D) 0.67.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

8) Refer to Figure 1.3. If a 45 degree line were also graphed, it would \_\_\_\_\_ the line shown on the graph.

A) lie above

B) lie below

C) cross

D) indeterminate from this information

Answer: A

Diff: 3

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills



- 9) Refer to Figure 1.3. At Point C, what is the value of Y?  
 A) 2  
 B) 4  
 C) 6  
 D) indeterminate from this information

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 1.3. At Point A the slope of the line is 0.67, so at Point C the slope would be  
 A) greater than 0.67.  
 B) less than 0.67.  
 C) equal to 0.67.  
 D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 1.4 below to answer the questions that follow.

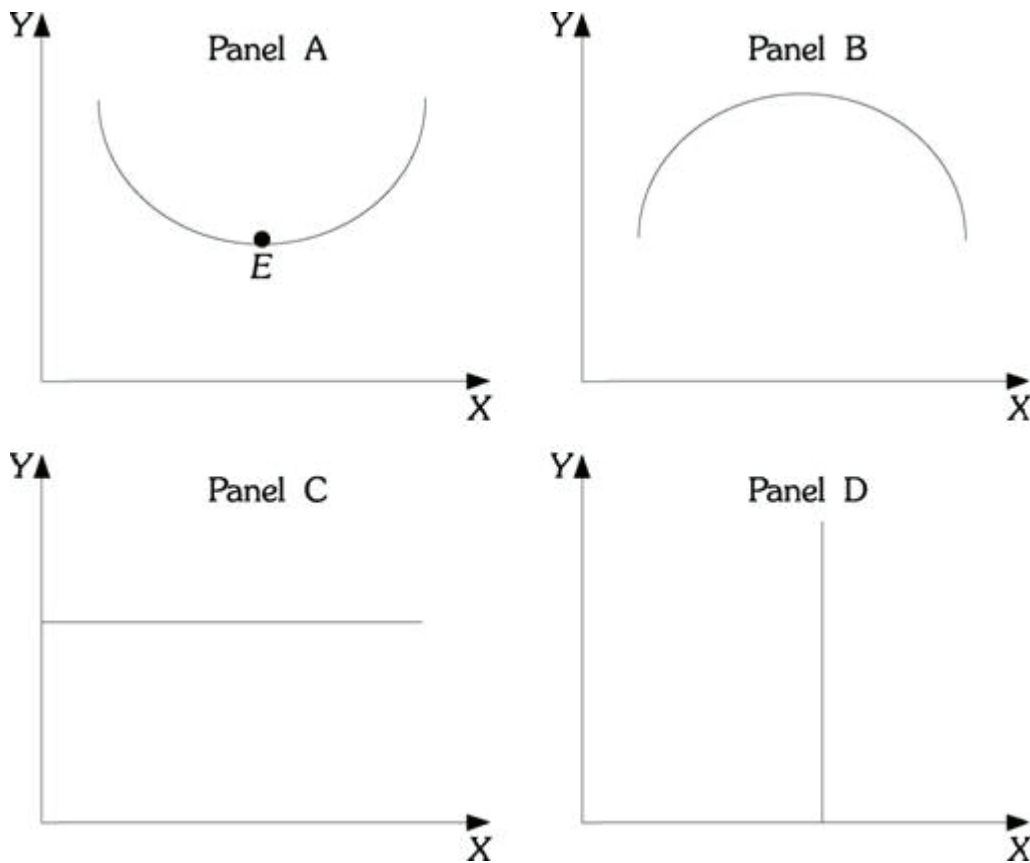


Figure 1.4

- 11) Refer to Figure 1.4. Panel A shows a curve which has a slope that is  
 A) first positive, then zero, and then negative.  
 B) first negative, then zero, and then positive.  
 C) infinite throughout.

D) zero throughout.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

12) Refer to Figure 1.4. Panel B shows a curve which has a slope that is

- A) first positive and then negative.                      B) first negative and then positive.  
C) infinite throughout.                                      D) zero throughout.

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

13) Refer to Figure 1.4. Panel C shows a curve which has a slope that is

- A) first positive and then negative.                      B) first negative and then positive.  
C) infinite throughout.                                      D) zero throughout.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

14) Refer to Figure 1.4. Panel D shows a curve which has a slope that is

- A) first positive and then negative.                      B) first negative and then positive.  
C) infinite throughout.                                      D) zero throughout.

Answer: C

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

15) Refer to Figure 1.4. At Point E in panel A, the slope is

- A) infinite.                                                      B) zero.  
C) negative.                                                    D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

16) The slope of a straight line

- A) is always positive.                                      B) must first increase then decrease.  
C) is not constant.                                          D) is constant.

Answer: D

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

- 17) The slope of a vertical line is
- A) negative.
  - B) zero.
  - C) continually changing.
  - D) infinite.

Answer: D

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

- 18) If the slope of a straight line is 5 and if X (the variable on the horizontal axis) increases by 4, then Y (the variable on the vertical axis) will
- A) decrease by 0.8.
  - B) decrease by 20.
  - C) increase by 0.8.
  - D) increase by 20.

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 19) If the slope of a straight line is 6 and if Y (the variable on the vertical axis) decreases by 60, then X (the variable on the horizontal axis)
- A) increases by 10.
  - B) decreases by 10.
  - C) increases by 600.
  - D) decreases by 600.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 20) The slope of a horizontal line is
- A) zero.
  - B) infinite.
  - C) continually changing.
  - D) negative.

Answer: A

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Fact

Refer to the information provided in Figure 1.5 below to answer the questions that follow.

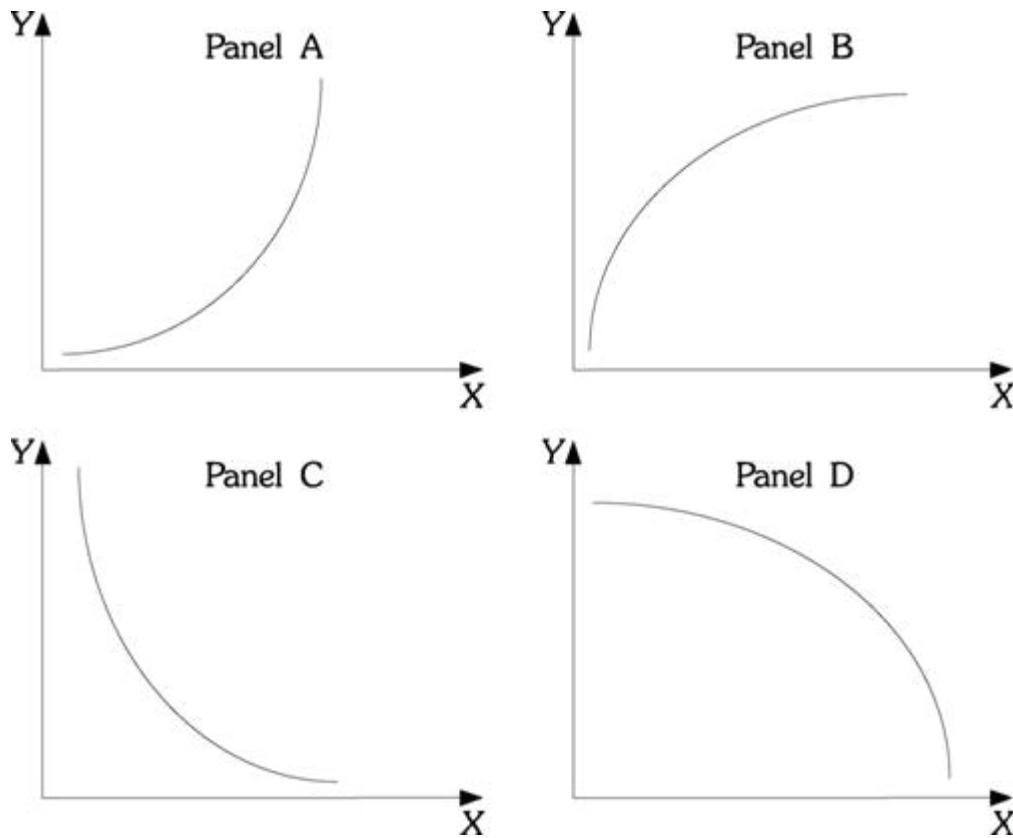


Figure 1.5

- 21) Refer to Figure 1.5. Panel A shows a curve with a slope that is
- A) positive and increasing.
  - B) positive and decreasing.
  - C) negative and increasing.
  - D) negative and decreasing.

Answer: A

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

- 22) Refer to Figure 1.5. Panel B shows a curve with a slope that is
- A) positive and increasing.
  - B) positive and decreasing.
  - C) negative and increasing.
  - D) negative and decreasing.

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

23) Refer to Figure 1.5. As income decreases, consumption decreases by a decreasing amount. If consumption is graphed on the vertical axis and income is graphed on the horizontal axis, the relationship between consumption and income would look like which of the following panels?

- A) A                                      B) B                                      C) C                                      D) D

Answer: B

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

24) Refer to Figure 1.5. As firms produce additional units, average costs declines by a smaller and smaller amount. If output is graphed on the horizontal axis and average costs are graphed on the vertical axis, the relationship between average costs and output would be like which of the following panels?

- A) A                                      B) B                                      C) C                                      D) D

Answer: D

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

1) Dividing the change in quantity on the X axis by the change in quantity on the Y axis calculates the slope of a line.

Answer: FALSE

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

2) A graph illustrating how two variables change over time is a Cartesian coordinate system.

Answer: TRUE

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

3) As the variable on the Y-axis rises the variable on the X-axis rises. The relationship between x and y is said to be direct.

Answer: TRUE

Diff: 2

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

4) As the variable on the Y-axis rises the variable on the X-axis falls. The relationship between X and Y is said to be direct.

Answer: FALSE

Diff: 1

Topic: Appendix: How to Read and Understand Graphs

Skill: Definition

5) The slope of a curve is constant.

Answer: FALSE

*Diff: 1*

*Topic: Appendix: How to Read and Understand Graphs*

*Skill: Fact*

# Chapter 2 The Economic Problem: Scarcity and Choice

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## 2.1 Scarcity, Choice, and Opportunity Cost

### 1 Multiple Choice

- 1) Production is the process by which
- A) products are used by consumers.
  - B) resources are transformed into useful forms.
  - C) products are converted into capital.
  - D) resources are allocated and distributed.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 2) Goods and services of value to households are
- A) inputs in the production process.
  - B) outputs in the production process.
  - C) both inputs and outputs in the production process.
  - D) unrelated to the production process.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 3) Which of the following is a resource as the term is used by economists?
- A) buildings
  - B) labor
  - C) land
  - D) all of the above

Answer: D

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

- 4) Which of the following would an economist classify as capital?
- A) a new deposit of natural gas
  - B) a government savings bond
  - C) a police car
  - D) a \$100 traveller's check

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Economists refer to things that have already been produced that are in turn used to produce other goods and services as
- A) land.
  - B) labor.
  - C) entrepreneurship.
  - D) capital.

Answer: D

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 6) The principle that the cost of something is equal to what is sacrificed to get it is known as the
- A) marginal principle.
  - B) principle of opportunity cost.
  - C) principle of diminishing returns.
  - D) reality principle.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 7) If scarcity was eliminated
- A) trade would become unnecessary.
  - B) opportunity costs would increase.
  - C) all nations would have an absolute advantage in producing all products.
  - D) the concept of trade-offs would become irrelevant.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

- 8) According to the theory of \_\_\_\_\_, specialization and free trade will benefit all trade partners, even when some are absolutely more efficient producers than others.
- A) comparative advantage
  - B) absolute advantage
  - C) social equity
  - D) laissez-faire

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

*Refer to the information provided in Table 2.1 below to answer the following questions.*

**Table 2.1**

	Molly	Pete
Avatar Design	6	8
Tattoo Design	3	2

- 9) Refer to Table 2.1. For Molly, the opportunity cost of designing one tattoo is
- A) 1/2 of an avatar design.
  - B) 1 avatar design.
  - C) 2 avatar designs.
  - D) 3 avatar designs.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills



- 10) Refer to Table 2.1. For Pete, the opportunity cost of designing one tattoo is
- A) 1/4 of an avatar design.
  - B) 2 avatar designs.
  - C) 4 avatar designs.
  - D) 6 avatar designs.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 2.1. Which of the following statements is *true*?
- A) Molly has a comparative advantage in both avatar design and tattoo design.
  - B) Pete has a comparative advantage in both avatar design and tattoo design.
  - C) Molly has a comparative advantage in avatar design and Pete has a comparative advantage in tattoo design.
  - D) Pete has a comparative advantage in avatar design and Molly has a comparative advantage in tattoo design.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 2.1. To maximize total production
- A) Molly should specialize in avatar design and Pete should specialize in tattoo design.
  - B) Pete should specialize in avatar design and Molly should specialize in tattoo design.
  - C) Molly and Pete should both split their time between designing avatars and tattoos.
  - D) Molly should design avatars and tattoos, but Pete should only design avatars.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 2.1. For Pete, the opportunity cost of designing three tattoos is \_\_\_\_\_ avatar designs.
- A) 6
  - B) 12
  - C) 24
  - D) an indeterminate number of

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Table 2.1. For Molly, the opportunity cost of designing four tattoos is \_\_\_\_\_ avatar designs.
- A) 6
  - B) 8
  - C) 12
  - D) 24

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

15) According to the theory of comparative advantage, trade and specialization \_\_\_\_\_ productivity by \_\_\_\_\_ opportunity costs.

- A) raise; raising
- B) raise; lowering
- C) lower; raising
- D) lower; lowering

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

16) Specialization and trade exploit differences in productivity across workers and

- A) only benefit the exporter.
- B) only benefit the importer.
- C) make everyone better off.
- D) make everyone worse off.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

17) If someone can produce a good at a lower opportunity cost, she \_\_\_\_\_ in producing that good.

- A) has a comparative advantage
- B) has an absolute advantage
- C) experiences no diminishing returns
- D) experiences no sunk costs

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

18) If a vintner has a comparative advantage in producing wine

- A) he can produce more wine using the same resources than other vintners.
- B) wine is the only product he can produce.
- C) he can produce wine at a lower opportunity cost than other vintners.
- D) he also has an absolute advantage in producing wine.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

19) Which of the following is an act of economic "investment"?

- A) The state legislature authorizes the sale of a state park.
- B) An entrepreneur buys 5000 shares of stock at \$5 a share and then sells the stock at a profit for \$60 a share.
- C) A brewer purchases a new fermentation system for his beer.
- D) A teacher deposits \$500 in a retirement account.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 20) In economics, the creation of capital is referred to as
- A) investment.
  - B) comparative advantage.
  - C) consumption.
  - D) allocation.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 21) The process of using \_\_\_\_\_ to produce new capital is known as \_\_\_\_\_.
- A) money; specialization
  - B) resources; investment
  - C) specialization; absolute advantage
  - D) comparative advantage; inefficient production

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 22) Saving is an example of
- A) exchanging capital for cash.
  - B) exchanging scarce resources for unlimited resources.
  - C) trading present benefits for future benefits.
  - D) trading future benefits for present benefits.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 23) The opportunity cost of investment in capital is forgone present consumption when
- A) resources are scarce.
  - B) resources are unlimited.
  - C) capital is in greater supply than labor.
  - D) the public chooses consumption over investment.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 24) An example of an investment is
- A) the purchase of an iPhone by a company for one of its salesmen.
  - B) the purchase of a share of Berkshire Hathaway stock.
  - C) the purchase of a government Treasury bill.
  - D) all of the above

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 25) Because resources are scarce, the opportunity cost of investment in capital is
- A) past investment.
  - B) past consumption.
  - C) foregone present consumption.
  - D) future consumption.

Answer: C

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 26) If the unemployment rate decreases from 9% to 6%, the economy will
- A) move closer to a point on the ppf.
  - B) move away from the ppf toward the origin.
  - C) remain on the ppf.
  - D) remain on the origin.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 27) Periods of full employment correspond to
- A) points outside the ppf.
  - B) points inside the ppf.
  - C) points on the ppf.
  - D) either points inside or outside the ppf.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.1 below to answer the questions that follow.

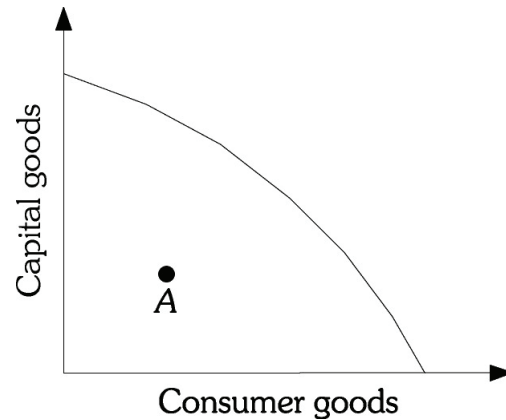


Figure 2.1

- 28) Refer to Figure 2.1. The economy is currently operating at Point A. The best explanation for this is that
- A) the economy has experienced increasing technology.
  - B) the economy's resources are being underemployed.
  - C) the economy has too few resources to operate on the production curve.
  - D) the economy is operating above full employment.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 29) Refer to Figure 2.1. The economy's production possibility frontier \_\_\_\_\_ due to specialized resources.
- A) is convex to the origin
  - B) displays constant opportunity costs
  - C) demonstrates decreasing opportunity costs
  - D) is bowed out from the origin

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 30) Refer to Figure 2.1. The shape of the economy's production possibility frontier shows
- A) decreasing opportunity costs.
  - B) constant opportunity costs.
  - C) increasing opportunity costs.
  - D) random opportunity costs.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 31) If an economy is fully utilizing its resources, it can produce more of one product only if it
- A) doubles manufacturing of the product.
  - B) produces less of another product.
  - C) adds more people to the labor force.
  - D) reduces the price of the most expensive products.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.2 below to answer the questions that follow.

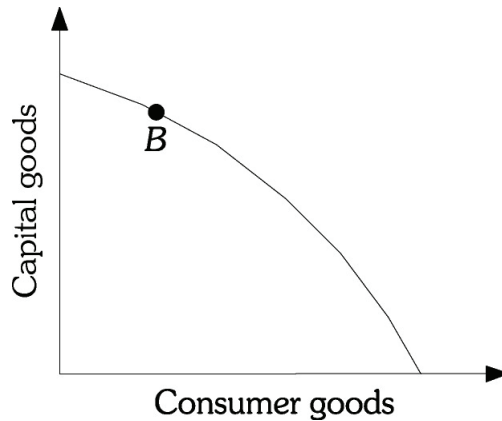


Figure 2.2

- 32) Refer to Figure 2.2. Full resource employment and production efficiency is represented by a point
- A) inside the production curve.
  - B) along the production curve.
  - C) outside the production curve.
  - D) either inside or along the production curve.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 33) Refer to Figure 2.2. You correctly deduce that all resources are fully employed and there are no production inefficiencies if this economy is currently operating at a point
- A) inside the production curve.
  - B) along the production curve.
  - C) outside the production curve.
  - D) either inside or along the production curve.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 34) All the combinations of goods and services that can be produced if all of society's resources are used efficiently are represented on an economy's
- A) production possibility frontier.
  - B) resource availability diagram.
  - C) factors of production statement.
  - D) allocative allotment graph.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 35) When an economy is producing inside its production possibility frontier
- A) production inefficiency occurs.
  - B) only technological advances will allow it to increase production.
  - C) it is efficient so long as it is producing what people want.
  - D) it must overcompensate by producing outside the curve to achieve efficiency.

Answer: A

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 36) If an economy is producing on its production possibility frontier but is not producing what people want, the economy
- A) is experiencing technological advancement.
  - B) is producing at more than one point on the production possibility frontier.
  - C) is not being allocatively efficient.
  - D) is not being productively efficient.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 37) If a society is producing at a point along its production possibility frontier, then the society
- A) is fully employing its resources so it must be allocatively efficient.
  - B) is fully employing its resources, but not necessarily being allocatively efficient.
  - C) is underallocating resources so it must be inefficient.
  - D) is overallocating resources so efficiency is indeterminant.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 38) Suppose an economy produces cell phones and GPS devices in perfectly competitive industries. The economy is currently operating at a point on its production possibility frontier. The economy will most likely move to a less-desirable point on the production possibility frontier if
- A) more firms enter the GPS device industry.
  - B) more firms enter the cell phone industry.
  - C) more firms enter both the GPS device industry and the cell phone industry.
  - D) a single firm gains control over the production of cell phones.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 39) The value of the slope of a society's production possibility frontier is called its
- A) value of diminishing efficiency.
  - B) marginal rate of substitution.
  - C) marginal rate of transformation.
  - D) diminishing opportunity cost of capitalization.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 40) Assume a society can produce either beer or wine. If the marginal rate of transformation of gallons of beer into gallons of wine is 0.5, then the opportunity cost of wine is
- A) the 2 gallons of beer that must be forgone.
  - B) the 2 gallons of wine that must be forgone.
  - C) the 0.5 gallons of beer that must be forgone.
  - D) the additional 0.5 gallons of beer that can be produced.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

- 41) The marginal rate of transformation is
- A) also called the marginal rate of substitution.
  - B) growth associated with technological advances.
  - C) the measure of diminishing marginal utility.
  - D) the slope of the production possibility frontier.

Answer: D

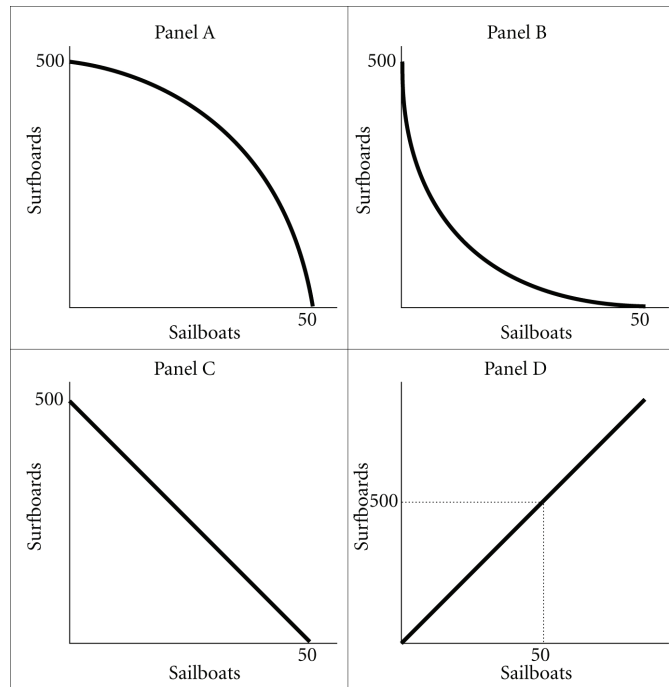
Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition



Refer to the information provided in Figure 2.3 below to answer the questions that follow.



**Figure 2.3**

- 42) Refer to Figure 2.3. Assume that this society's production possibility frontier is represented by Panel C. The marginal rate of transformation of sailboats for surfboards is
- A) 1/10.                      B) -1/10.                      C) 10.                      D) -10.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 43) Refer to Figure 2.3. Assume that this society's production possibility frontier is represented by Panel C. The opportunity cost of sailboats in terms of surfboards is
- A) constant.                      B) increasing.                      C) decreasing.                      D) infinite.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 44) Refer to Figure 2.3. Increasing opportunity costs are best depicted by the production possibility frontier in panel
- A) A.                      B) B.                      C) C.                      D) D.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

45) A society can produce two goods: green tea and vitamin water. As this society moves down its production possibility frontier, producing more and more units of vitamin water, the opportunity cost of producing vitamin water increases. The society's production possibilities frontier will be

- A) positively sloped and bowed outward.
- B) positively sloped and bowed inward.
- C) negatively sloped and bowed outward.
- D) negatively sloped and bowed inward.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.4 below to answer the questions that follow.

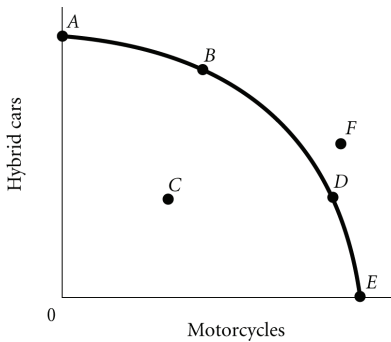


Figure 2.4

46) According to Figure 2.4, Point A necessarily represents

- A) an unattainable production point.
- B) only hybrid cars being produced.
- C) the economy's optimal production point.
- D) what society wants.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

47) According to Figure 2.4, the optimal point for the economy is

- A) B.
- B) D.
- C) F.
- D) indeterminate from the information given.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 48) According to Figure 2.4, Point *F*
- A) is efficient and attainable.
  - B) represents underallocation of resources.
  - C) represents what the people want.
  - D) cannot be produced with the current state of technology.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 49) According to Figure 2.4, Point *E* necessarily represents
- A) an impossible production point.
  - B) technological advancement.
  - C) overallocation of resources.
  - D) only motorcycles being produced.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 50) According to Figure 2.4, an increase in unemployment may be represented by the movement from
- A) *B* to *A*.
  - B) *B* to *D*.
  - C) *C* to *D*.
  - D) *A* to *C*.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 51) According to Figure 2.4, as the economy moves from Point *B* to Point *D*, the opportunity cost of motorcycles, measured in terms of hybrid cars
- A) remains constant.
  - B) decreases.
  - C) increases.
  - D) initially increases, then decreases.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 52) According to Figure 2.4, as the economy moves from Point *D* to Point *B*, the opportunity cost of hybrid cars, measured in terms of motorcycles
- A) remains constant.
  - B) decreases.
  - C) increases.
  - D) initially increases, then decreases.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 53) Refer to Figure 2.4. The economy moves from Point *E* to Point *B*. This could be explained by
- A) an increase in unemployment.
  - B) a reduction in unemployment.
  - C) a change in society's preferences for hybrid cars versus motorcycles.
  - D) an increase in economic growth.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 2.5 below to answer the questions that follow.

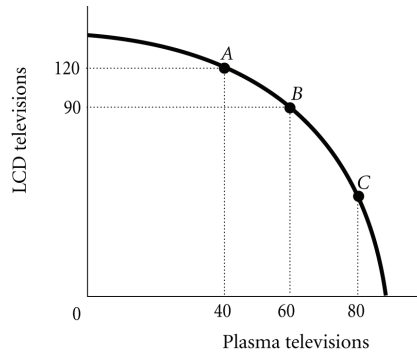


Figure 2.5

- 54) Refer to Figure 2.5. The economy is currently at Point *B*. The opportunity cost of moving from Point *B* to Point *A* is the
- A) 40 plasma TVs that must be forgone to produce 120 additional LCD TVs.
  - B) 20 plasma TVs that must be forgone to produce 30 additional LCD TVs.
  - C) 30 LCD TVs that must be forgone to produce 40 additional plasma TVs.
  - D) 120 LCD TVs that must be forgone to produce 20 additional plasma TVs.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 55) Refer to Figure 2.5. The marginal rate of transformation in moving from Point *B* to Point *A* is
- A)  $-2/3$ .
  - B)  $-3/4$ .
  - C)  $-1.5$ .
  - D)  $-20$ .

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills



- 60) Because resources are not equally well suited to producing all goods
- A) as more of a good is produced the inputs used to produce that good will increase in price.
  - B) the opportunity costs of producing a good will increase as more of that good is produced.
  - C) the opportunity costs of producing a good will decrease as more of that good is produced.
  - D) as more of a good is produced the quality of that good declines and therefore the costs of production increase.

Answer: B

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 61) Economic growth will most likely occur when
- A) a society acquires new resources.
  - B) a society decides to produce less using existing resources.
  - C) the society begins to produce the combination of goods society wants most.
  - D) technology remains unchanged but unemployment increases.

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 2.6 below to answer the questions that follow.

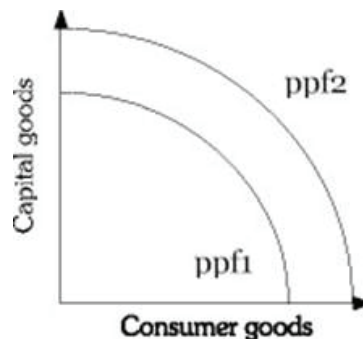


Figure 2.6

- 62) Refer to Figure 2.6. An increase in the economy's capital stock is represented by a
- A) shift from ppf2 to ppf1.
  - B) shift from ppf1 to ppf2.
  - C) movement along ppf1.
  - D) movement along ppf2.

Answer: B

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 63) Refer to Figure 2.6. A shift from ppf1 to ppf2 may be caused by
- A) an increase in inflation.
  - B) an increased desire for consumer goods.
  - C) a change in consumer tastes.
  - D) an improvement in technology.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 64) Refer to Figure 2.6. Which of the following will shift an economy's production possibility frontier from ppf2 to ppf1?
- A) a decrease in the economy's capital stock
  - B) an increase in production efficiency
  - C) a change in consumer's tastes
  - D) economic growth

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 65) Refer to Figure 2.6. Which of the following will NOT cause the production possibility frontier to shift from ppf1 to ppf2?
- A) a decrease in the unemployment rate assuming a constant labor force.
  - B) an increase in the stock of capital
  - C) the discovery of previously unknown natural gas sources
  - D) an improvement in technology

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

- 66) Refer to Figure 2.6. Which of the following is most likely to shift the production possibility frontier from ppf2 to ppf1?
- A) a change in consumer tastes
  - B) the purchase of government Treasury bills
  - C) moving resources from consumer goods to capital goods
  - D) a decrease in the general educational level of the population

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

67) Refer to Figure 2.6. If the economy is at ppf<sup>2</sup>, a change in consumer preferences would be shown by a

- A) shift from ppf<sup>2</sup> to ppf<sup>1</sup>.
- B) movement along ppf<sup>1</sup>.
- C) movement along ppf<sup>2</sup>.
- D) shift from ppf<sup>1</sup> to ppf<sup>2</sup>.

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

68) Due to a mild winter, Florida experienced a bumper crop of oranges. This would best be represented by a(n)

- A) movement down the U.S. production possibility frontier.
- B) movement off the U.S. production possibility frontier to some point inside the frontier.
- C) movement up the U.S. production possibility frontier.
- D) outward shift of the U.S. production possibility frontier away from the origin.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Analytic

AACSB: Analytic Skills

69) For an economy to produce at a point \_\_\_\_\_ current production possibility frontier, the economy must increase its resource base.

- A) higher up on its
- B) inside its
- C) beyond its
- D) which is optimally efficient on its

Answer: C

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

70) In terms of the production possibility frontier, \_\_\_\_\_ would best be shown by the production possibility frontier shifting outward.

- A) an increase in productivity attributable to new technology
- B) a decrease in the unemployment rate
- C) a shift in resources from capital goods to consumer goods
- D) a change in consumer tastes

Answer: A

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking



- 71) A decrease in the stock of capital will cause the
- A) production possibility frontier to shift outward.
  - B) production possibility frontier to shift inward.
  - C) economy to move down the production possibility frontier.
  - D) economy to move closer to its production possibility frontier.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 72) Consider two countries, Estonia and Ukraine. Estonia devotes a larger portion of its production to capital. All other things equal which of the following statements is most likely true?
- A) Estonia is a poorer country than Ukraine.
  - B) Estonia will move up its production possibility curve faster than Ukraine.
  - C) Estonia's production possibility frontier will shift up and out farther and faster than Ukraine's.
  - D) Ukraine is producing inside its production possibility frontier, whereas Estonia is producing at a point on its production possibility frontier.

Answer: C

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 73) The gap between rich and poor countries has \_\_\_\_\_ over time because poor countries find it difficult to devote resources to \_\_\_\_\_ production.
- A) increased; capital
  - B) decreased; capital
  - C) remained constant; capital
  - D) remained constant; capital and consumer goods

Answer: A

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

- 74) An economy produces capital goods and consumer goods. This economy is operating at a point on its production possibility frontier associated with a large amount of capital goods and a small amount of consumer goods. This is most likely to be a
- A) "poor" country because such a nation has difficulty devoting many resources to the production of consumer goods.
  - B) "rich" country because such a nation can afford to sacrifice.
  - C) country with a free market.
  - D) country with a command economy.

Answer: B

Diff: 3

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

- 75) Given scarce resources, how societies go about deciding what to produce, how to produce it and for whom to produce best describes
- A) decreasing opportunity costs.
  - B) the fallacy of composition.
  - C) Ockham's razor.
  - D) the economic problem.

Answer: D

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 76) Related to the *Economics in Practice* on p. 28: Based on the increase in the number of women in the labor force over the past 50 years, the opportunity cost of preparing a home-cooked meal
- A) decreased.
  - B) increased.
  - C) remained constant.
  - D) dropped to zero.

Answer: B

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 77) Related to the *Economics in Practice* on p. 28: One reason for the increase in sales of frozen foods from \$1 billion in 1950 to \$27 billion in 2007 is the
- A) increased opportunity cost of cooking frozen meals.
  - B) decrease in the number of women in the labor force.
  - C) increased opportunity cost of preparing home-cooked meals.
  - D) decrease in popularity of the microwave oven.

Answer: C

Diff: 1

Topic: Scarcity, Choice, and Opportunity Cost: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) In economics, the term "investment" refers to the purchase of stocks and bonds.

Answer: FALSE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 2) Among the resources used in production are land and capital.

Answer: TRUE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Fact

- 3) Things that have already been produced that are in turn used to produce other goods and services over time are called "production possibility frontiers."

Answer: FALSE

Diff: 2

Topic: Scarcity, Choice, and Opportunity Cost

Skill: Definition

- 4) When two people trade, one must lose for the other to win.  
Answer: FALSE  
Diff: 2  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 5) Economic growth shifts a society's production possibility frontier toward the origin.  
Answer: FALSE  
Diff: 1  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 6) A society's production possibility frontier is bowed out from the origin because some resources are better suited for producing one good as opposed to the other.  
Answer: TRUE  
Diff: 1  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 7) The "economic problem" is that given scarce resources, how do large societies go about answering the basic economic questions of what will be produced, why it will be produced, and how it will be equitably distributed.  
Answer: FALSE  
Diff: 1  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Definition*
- 8) Comparative advantage refers to the ability to produce goods at a lower opportunity cost, and therefore more efficiently, than a competitor.  
Answer: TRUE  
Diff: 2  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Definition*
- 9) Comparative advantage refers to the ability to produce at a lower financial cost than a competitor.  
Answer: FALSE  
Diff: 2  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Definition*
- 10) Manufacturers produce only what the market is willing to pay for.  
Answer: FALSE  
Diff: 1  
Topic: *Scarcity, Choice, and Opportunity Cost*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*

## 2.2 Economic Systems

### 1 Multiple Choice

- 1) In a command economy, \_\_\_\_\_ establishes what will be produced and when, sets production goals, and makes rules for distribution.
- A) individuals and households
  - B) only privately owned firms
  - C) a centralized authority
  - D) individuals, households and privately owned firms

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Definition

- 2) In a laissez-faire economy
- A) individual people and firms pursue their own self-interest.
  - B) the government decided how to distribute goods and services.
  - C) a centralized authority establishes what will be produced.
  - D) consumers do not exercise choice.

Answer: A

Diff: 2

Topic: Economic Systems

Skill: Definition

- 3) Which of the following statements is *true*?
- A) Planned economies have fared very well in recent years, with many of these economies thriving.
  - B) Command economies operate the most efficiently because the government makes all the production decisions.
  - C) In command economies consumers still exercise choice.
  - D) In a command economy, consumers answer the questions of what to produce, how to produce it, and how to distribute it.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

- 4) Production decisions are centralized in a
- A) laissez-faire economy.
  - B) command economy.
  - C) invisible-hand economy.
  - D) utopian economy.

Answer: B

Diff: 1

Topic: Economic Systems

Skill: Fact

- 5) Which of the following statements is true for a command economy?
- A) Consumers have no choice concerning what they buy.
  - B) Manufacturers decide what is produced.
  - C) The amount of a good supplied always equals the amount of the good demanded.
  - D) The state decides how to distribute what is produced.

Answer: D

Diff: 1

Topic: Economic Systems

Skill: Fact

- 6) In a \_\_\_\_\_ economy, the behavior of buyers and sellers determines what gets produced, how it is produced, and who gets it.
- A) command
  - B) laissez-faire
  - C) socialist
  - D) utopian

Answer: B

Diff: 1

Topic: Economic Systems

Skill: Fact

- 7) In a market system, self-interest motivates most people to
- A) avoid paying insurance premiums.
  - B) remain self-sufficient.
  - C) provide products for other people.
  - D) rely on government central planning.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

- 8) Which of the following is true of a market economy?
- A) In its pure form, it is also known as a command economy.
  - B) Decisions are regulated by a central agency.
  - C) The government answers the basic economic questions of what gets produced, how it gets produced, and who gets it.
  - D) It relies on millions of individual economic decisions to determine economic outcomes.

Answer: D

Diff: 2

Topic: Economic Systems

Skill: Definition

- 9) The idea that consumers determine what is produced in the economy through their demands is known as
- A) a laissez-faire economy.
  - B) a command economy.
  - C) consumer sovereignty.
  - D) free enterprise.

Answer: C

Diff: 2

Topic: Economic Systems

Skill: Definition

10) The freedom of individuals to start and operate private business in search of profits is known as

- A) laissez-faire.
- B) free enterprise.
- C) centralized decision making.
- D) consumer sovereignty.

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Definition

11) The amount that \_\_\_\_\_ have accumulated out of past income through saving and inheritance is wealth.

- A) governments
- B) households
- C) markets
- D) corporations

Answer: B

Diff: 2

Topic: Economic Systems

Skill: Definition

12) In a \_\_\_\_\_, the amount of output that any one household gets depends on its income and wealth.

- A) Marxist economy
- B) socialist economy
- C) command system
- D) free market system

Answer: D

Diff: 1

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

13) In which system are decisions made by thousands of people who have information about resources, production technology and consumer desires?

- A) market system
- B) centrally planned system
- C) command system
- D) socialist system

Answer: A

Diff: 1

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

14) In a laissez-faire economy, what provides individuals the information needed to make decisions?

- A) insurance
- B) prices
- C) patents
- D) government

Answer: B

Diff: 1

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

15) Which of the following statements is *true*?

- A) In a free market system, the basic economic questions are answered with the help of a central government plan or directive.
- B) Individuals guided by selfish behavior will produce products and services that generate the highest profits.
- C) The basic coordinating mechanism in a free market system is quantity adjustments toward equilibrium.
- D) In a free market system, competition forces firms to adopt efficient production techniques.

Answer: D

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

16) Some economists advocate government intervention in a market economy when resource costs for a private producer \_\_\_\_\_ to society.

- A) are greater than the full cost
- B) are equal to the full cost
- C) do not reflect the full cost
- D) have no relevant cost

Answer: C

Diff: 1

Topic: Economic Systems

Skill: Fact

## 2 True/False

1) The market system works by getting each person, motivated by his or her own self-interest, to produce products for other people.

Answer: TRUE

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

2) A command economy is one in which individuals and firms set output targets, incomes and prices.

Answer: FALSE

Diff: 2

Topic: Economic Systems

Skill: Definition

3) Markets exist in a command economy.

Answer: TRUE

Diff: 2

Topic: Economic Systems

Skill: Conceptual

AACSB: Reflective Thinking

4) Price is the coordinating mechanism in a laissez-faire economy.

Answer: TRUE

*Diff: 2*

*Topic: Economic Systems*

*Skill: Conceptual*

*AACSB: Reflective Thinking*

5) The notion that buyers determine what will be produced by choosing what they purchase is called a command economy.

Answer: FALSE

*Diff: 2*

*Topic: Economic Systems*

*Skill: Definition*



# Chapter 3 Demand, Supply, and Market Equilibrium

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## 3.1 Firms and Households: The Basic Decision Making Units

### 1 Multiple Choice

- 1) Mary Kay Ash was one of the first individuals who sold cosmetics directly to customers via independent sales representatives. The company founded by Mary Kay is now one of the largest and most successful cosmetics companies in the world. Mary Kay Ash would be classified as a(n)

A) entrepreneur.      B) opportunist.      C) monopolist.      D) socialist.

Answer: A

Diff: 1

Topic: Firms and Households

Skill: Conceptual

- 2) Organizations that transform resources into products are known as

A) firms.      B) entrepreneurs.      C) households.      D) factors.

Answer: A

Diff: 1

Topic: Firms and Households

Skill: Definition

- 3) An entrepreneur is a person who

A) assumes the risk of a firm.  
B) organizes and manages a firm.  
C) turns a new idea or product into a business.  
D) all of the above

Answer: D

Diff: 1

Topic: Firms and Households

Skill: Definition

- 4) Firms engage in production to

A) develop a supply schedule.      B) participate in the circular flow.  
C) acquire profits.      D) assume risk.

Answer: C

Diff: 1

Topic: Firms and Households

Skill: Conceptual

### 2 True/False

- 1) Economists would classify the New York Mets as a firm.

Answer: TRUE

Diff: 2

Topic: Firms and Households

Skill: Conceptual

AACSB: Reflective Thinking

2) Firms are the consuming units of the economy.

Answer: FALSE

Diff: 1

Topic: Firms and Households

Skill: Definition

3) Entrepreneurs are necessary in a market economy and their profit is earned.

Answer: TRUE

Diff: 1

Topic: Firms and Households

Skill: Conceptual

AACSB: Reflective Thinking

## 3.2 Input Markets and Output Markets: The Circular Flow

### 1 Multiple Choice

1) In factor or input markets

A) consumers purchase products.

C) firms demand resources

B) firms supply goods.

D) households demand goods.

Answer: C

Diff: 1

Topic: Input Markets and Output Markets

Skill: Conceptual

2) Resources are exchanged in \_\_\_\_\_ markets.

A) product

B) factor

C) exchange rate

D) stock

Answer: B

Diff: 1

Topic: Input Markets and Output Markets

Skill: Conceptual

3) Consumers purchase products in \_\_\_\_\_ markets.

A) output

B) factor

C) resource

D) input

Answer: A

Diff: 2

Topic: Input Markets and Output Markets

Skill: Conceptual

4) Capital, wages and income are

A) factors of production.

C) resources.

B) inputs.

D) all of the above

Answer: D

Diff: 2

Topic: Input Markets and Output Markets

Skill: Fact

## 2 True/False

- 1) Inputs are traded in the factor market.

Answer: TRUE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

- 2) Households are paid income for the resources they supply in an output market.

Answer: FALSE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

- 3) Labor is demanded by firms in an input market.

Answer: TRUE

Diff: 1

Topic: *Input Markets and Output Markets*

Skill: *Conceptual*

## 3.3 Demand in Product / Output Markets

### 1 Multiple Choice

- 1) Income \_\_\_\_\_ along the demand curve.

A) increases

B) decreases

C) is held constant

D) either increases or decreases

Answer: C

Diff: 1

Topic: *Demand in Product / Output Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Which of the following will NOT cause a shift in the demand curve for DVDs?

A) a change in income

B) a change in wealth

C) a change in the price of prerecorded VHS tapes

D) a change in the price of DVDs

Answer: D

Diff: 1

Topic: *Demand in Product / Output Markets*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) The law of \_\_\_\_\_ implies that as prices fall, \_\_\_\_\_.

A) demand; demand increases

B) demand; demand falls

C) demand; quantity demanded increases

D) supply; supply increases

Answer: C

Diff: 2

Topic: *Demand in Product / Output Markets*

Skill: *Definition*

- 4) According to the law of demand, quantity demanded increases as \_\_\_\_\_, *ceteris paribus*.
- A) prices rise
  - B) prices fall
  - C) demand increases
  - D) demand decreases

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 5) According to the law of demand there is negative relationship between \_\_\_\_\_ and \_\_\_\_\_.
- A) price; demand
  - B) quantity; income
  - C) price; income
  - D) price; quantity demanded

Answer: D

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 6) As an individual consumes \_\_\_\_\_ of a product within a given period of time, it is likely that each additional unit consumed will yield \_\_\_\_\_ satisfaction.
- A) more; successively more
  - B) more; successively less
  - C) more; no additional
  - D) less; negative

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in the Figure below to answer the questions that follow.

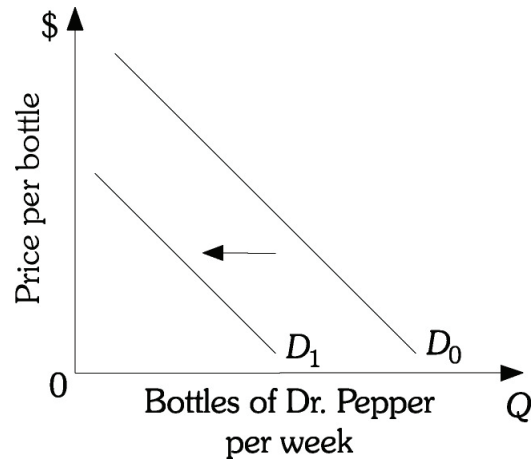


Figure 3.1

- 7) Refer to Figure 3.1. Which of the following would be most likely to cause the demand for Dr. Pepper to shift from  $D_0$  to  $D_1$ ?
- A) an increase in income, assuming that Dr. Pepper is a normal good
  - B) a decrease in the price of 7-UP, assuming 7-UP is a substitute for Dr. Pepper
  - C) an increase in the price of Dr. Pepper
  - D) an increase in the price of sugar used to make Dr. Pepper

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in the Figure below to answer the questions that follow.

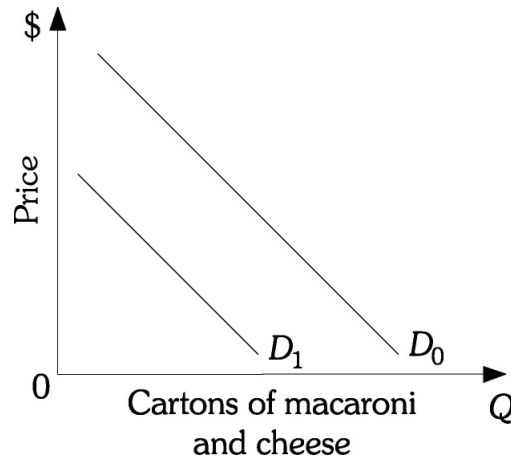


Figure 3.2

- 8) Refer to Figure 3.2. Which of the following would be most likely to cause the demand for macaroni and cheese to shift from  $D_0$  to  $D_1$ ?
- A) an increase in the price of macaroni and cheese
  - B) an increase in the price of flour used to make macaroni and cheese
  - C) a decrease in income, assuming macaroni and cheese is a normal good
  - D) an increase in the quantity demanded for macaroni and cheese

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) If the demand for mac and cheese decreases as income increases, mac and cheese is a(n)
- A) complementary good.
  - B) normal good.
  - C) inferior good.
  - D) substitute good.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

- 10) If the demand for green tea increases as income increases, green tea is a(n)
- A) complementary good.
  - B) substitute good.
  - C) normal good.
  - D) inferior good.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Definition

Refer to the information provided in Figure 3.3 below to answer the questions that follow.

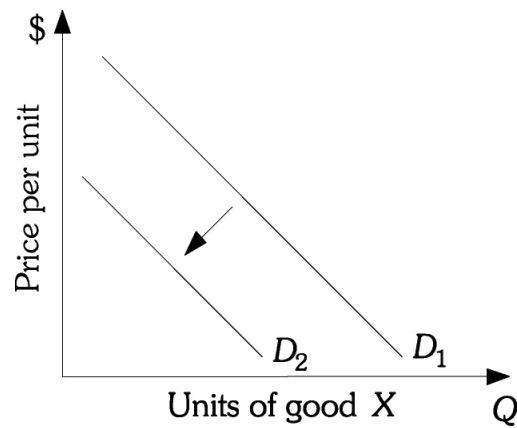


Figure 3.3

- 11) Refer to Figure 3.3. As your income decreased, the demand for X shifted from  $D_1$  to  $D_2$ . Good X is
- A) an inferior good.
  - B) a normal good.
  - C) a luxury good.
  - D) an income-neutral good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.4 below to answer the questions that follow.

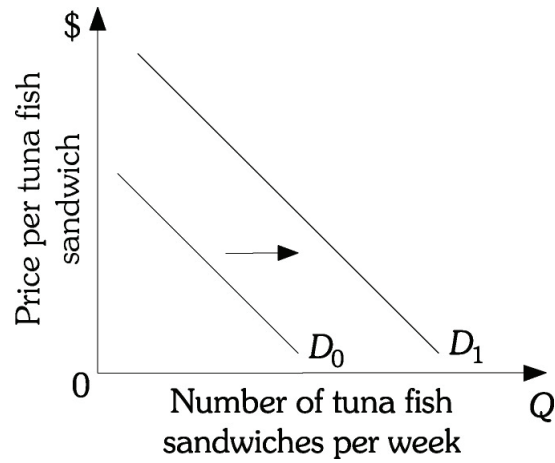


Figure 3.4

- 12) Refer to Figure 3.4. If consumer income increases, the demand for tuna fish sandwiches shifts from  $D_0$  to  $D_1$ . This implies that tuna fish sandwiches are a(n)
- A) normal good.
  - B) inferior good.
  - C) substitute good.
  - D) complementary good.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills



Refer to the information provided in Figure 3.5 below to answer the questions that follow.

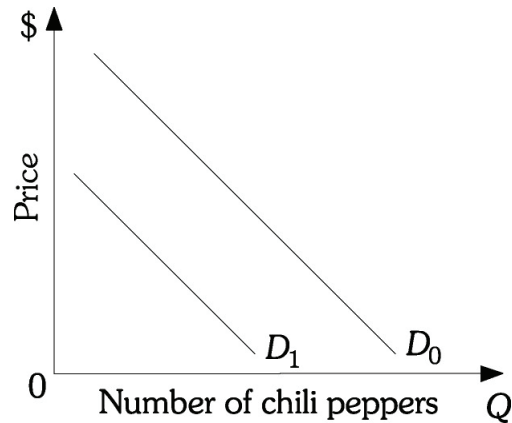


Figure 3.5

- 13) Refer to Figure 3.5. If consumer income decreases, the demand for chili peppers shifts from  $D_0$  to  $D_1$ . This implies that chili peppers are a(n)
- A) normal good.
  - B) inferior good.
  - C) substitute good.
  - D) complementary good.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 14) Suppose the demand for lawnmowers goes down when the price of gasoline goes up. We can say that these two goods are
- A) complements.
  - B) substitutes.
  - C) unrelated goods.
  - D) perfect substitutes.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 15) During an economic upturn when consumer income rises, the demand for caviar increases and the demand for hummus decreases. This implies that caviar
- A) and hummus are complements.
  - B) is a normal good and hummus is an inferior good.
  - C) is an inferior good and hummus is a normal good.
  - D) is an economic bad and hummus is an economic good.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 16) A good whose demand is directly related to income is a(n)  
A) normal good.            B) inferior good.            C) regular good.            D) new good.
- Answer: A  
Diff: 2  
Topic: Demand in Product / Output Markets  
Skill: Definition
- 17) In college you could barely afford to dine in restaurants. Now you earn \$80,000 a year. and dine out at least three times per week. We can safely conclude that you consider restaurant meals to be a(n)  
A) normal good.                            B) inferior good.  
C) substitute good.                            D) complementary good.
- Answer: A  
Diff: 2  
Topic: Demand in Product / Output Markets  
Skill: Conceptual  
AACSB: Reflective Thinking
- 18) For inferior goods, demand will fall when  
A) income increases.                            B) income decreases.  
C) price increases.                            D) price decreases.
- Answer: A  
Diff: 1  
Topic: Demand in Product / Output Markets  
Skill: Definition
- 19) When the increase in the price of one good causes the demand for another good to decrease, the goods are  
A) normal.                            B) inferior.                            C) substitutes.                            D) complements.
- Answer: D  
Diff: 2  
Topic: Demand in Product / Output Markets  
Skill: Definition
- 20) An increase in demand for laptop computers would likely be caused by  
A) an increase in the price of a substitute good.  
B) an increase in the price of laptop computers.  
C) an increase in the price of a complementary good.  
D) a decrease in the price of laptop computers.
- Answer: A  
Diff: 2  
Topic: Demand in Product / Output Markets  
Skill: Conceptual  
AACSB: Reflective Thinking
- 21) Demand for one item goes down when the price of another item goes down. These items must be  
A) substitutes.                            B) complements.                            C) normal goods.                            D) inferior goods.
- Answer: A  
Diff: 2  
Topic: Demand in Product / Output Markets  
Skill: Definition

- 22) In response to news reports that drinking a glass of red wine each day can reduce an individual's risk of heart disease, there will most likely be a(n)
- A) increase in the demand for red wine.
  - B) decrease in the supply of red wine.
  - C) increase in the supply of red wine.
  - D) increase in the quantity demanded of red wine.

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 23) \_\_\_\_\_ curves are derived while holding constant income, tastes, and the prices of other goods.
- A) Distribution
  - B) Production
  - C) Demand
  - D) Supply

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 24) The quantity demanded of Coca Cola has increased. The best explanation for this is that
- A) the price of Pepsi has decreased.
  - B) Coca Cola has instituted a new, successful advertising campaign.
  - C) the price of Coca Cola has decreased.
  - D) Coca Cola consumers had an increase in income.

Answer: C

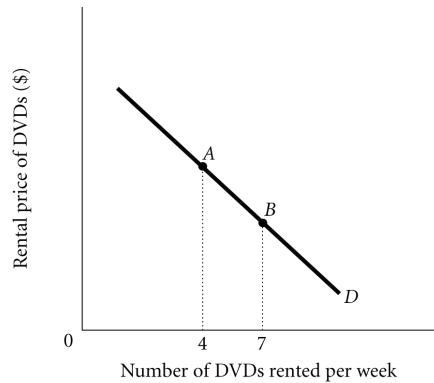
Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.6 below to answer the questions that follow.



**Figure 3.6**

- 25) Refer to Figure 3.6. The number of DVDs Isabel rents per week decreases from 7 to 4. This is caused by
- A) a decrease in income if DVDs are a normal good.
  - B) an increase in the price of popcorn which is a complement to DVDs.
  - C) an increase in the rental price of DVDs.
  - D) a decrease in the cable price of pay-per-view movies.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 26) A change in the \_\_\_\_\_ of a good or service leads to a change in \_\_\_\_\_ that leads to a \_\_\_\_\_.
- A) supply; demand; change in price
  - B) demand; quantity demanded; change in supply
  - C) price; quantity demanded; movement along the demand curve
  - D) quantity; supply; change in demand

Answer: C

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 27) A change in \_\_\_\_\_ leads to a change in demand that causes a \_\_\_\_\_.
- A) income or price of other goods; shift in the demand curve
  - B) income or price of other goods; movement along the demand curve
  - C) the price of the original product; shift of the demand curve
  - D) income or price of the original product; movement along the demand curve

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.7 below to answer the following questions.

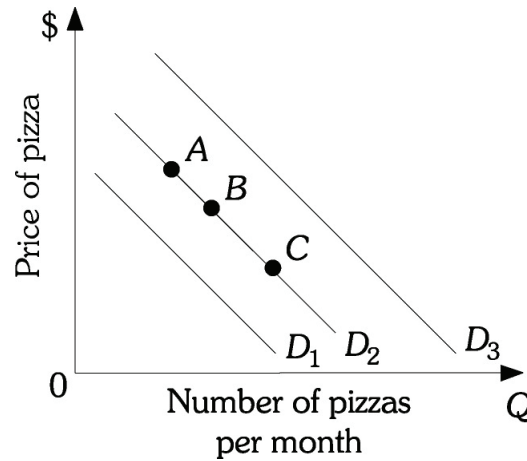


Figure 3.7

- 28) Refer to Figure 3.7. Assume the market is initially at Point B and that pizza is a normal good. An increase in income would cause the market to move from Point B on demand curve  $D_2$  to
- A) Point A on demand curve  $D_2$ .
  - B) Point C on demand curve  $D_2$ .
  - C) demand curve  $D_1$ .
  - D) demand curve  $D_3$ .

Answer: D

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 3.7. If pizza and beer are complementary goods, an increase in the price of beer will cause a movement from Point B on demand curve  $D_2$  to
- A) demand curve  $D_1$ .
  - B) demand curve  $D_3$ .
  - C) Point A on demand curve  $D_2$ .
  - D) Point C on demand curve  $D_2$ .

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 30) Refer to Figure 3.7. If pizza and burritos are substitutes, a decrease in the price of burritos will cause a movement from Point B on demand curve  $D_2$  to
- A) demand curve  $D_1$ .
  - B) demand curve  $D_3$ .
  - C) Point A on demand curve  $D_2$ .
  - D) Point C on demand curve  $D_2$ .

Answer: A

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 3.7. A movement from Point *A* to Point *B* on demand curve *D*<sub>2</sub> would be caused by a(n)
- A) decrease in income, assuming pizza is a normal good.
  - B) decrease in the price of burritos, assuming that pizza and burritos are substitutes.
  - C) decrease in the price of pizza.
  - D) increase in the price of pizza.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 32) Refer to Figure 3.7. An increase in demand is represented by the movement
- A) from *D*<sub>2</sub> to *D*<sub>1</sub>.
  - B) from *D*<sub>2</sub> to *D*<sub>3</sub>.
  - C) along *D*<sub>2</sub> from Point *B* to Point *A*.
  - D) along *D*<sub>2</sub> from Point *B* to Point *C*.

Answer: B

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 33) Refer to Figure 3.7. A decrease in quantity demanded is represented by movement
- A) from *D*<sub>2</sub> to *D*<sub>1</sub>.
  - B) from *D*<sub>2</sub> to *D*<sub>3</sub>.
  - C) along *D*<sub>2</sub> from Point *B* to Point *A*.
  - D) along *D*<sub>2</sub> from Point *B* to Point *C*.

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.8 below to answer the following questions.

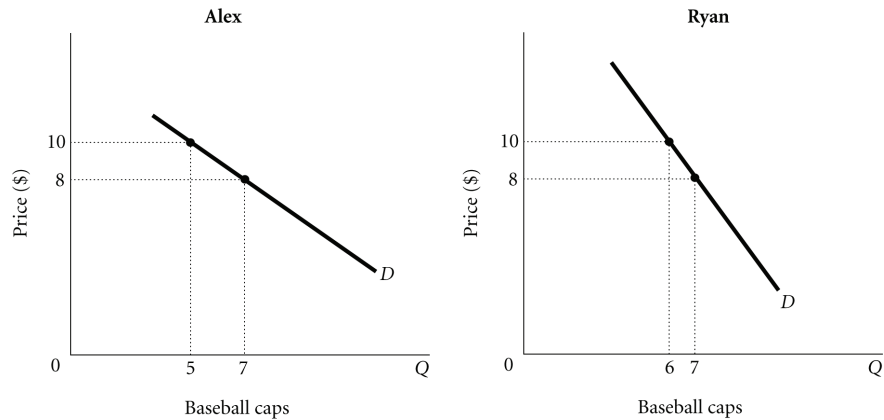


Figure 3.8

34) Refer to Figure 3.8. Assume that there are only two people in the market for baseball caps: Alex and Ryan. Along the \_\_\_\_\_ for baseball caps, at a price of \$10, quantity demanded would be 11.

- A) demand curve for Alex
- B) demand curve for Ryan
- C) market demand curve
- D) none of the above

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

35) Refer to Figure 3.8. Assume there are only two people in the market for baseball caps: Alex and Ryan. Along the \_\_\_\_\_, at a price of \$8, quantity demanded would be 14.

- A) demand curve for Alex
- B) demand curve for Ryan
- C) market demand curve
- D) none of the above

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.9 below to answer the following questions.

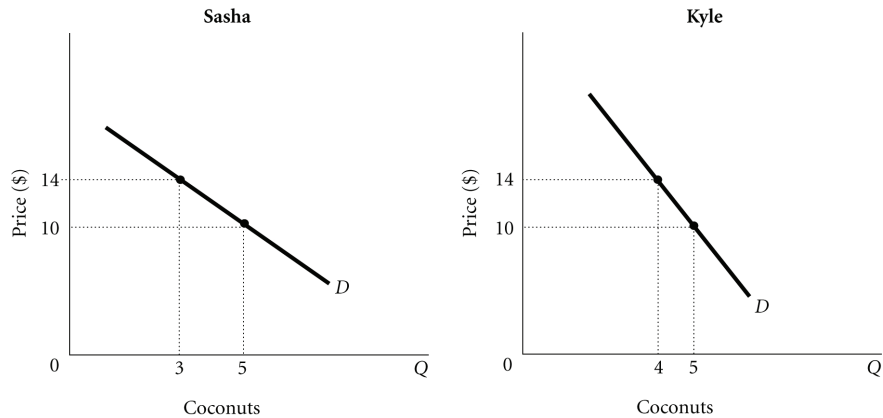


Figure 3.9

- 36) Refer to Figure 3.9. Assume that there are only two people in the market for coconuts: Sasha and Kyle. Along the \_\_\_\_\_ for coconuts, at a price of \$14, quantity demanded would be 7.
- A) demand curve for Sasha  
 B) demand curve for Kyle  
 C) market demand curve  
 D) none of the above

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 3.9. Assume there are only two people in the market for coconuts: Sasha and Kyle. Along the \_\_\_\_\_, at a price of \$10, quantity demanded would be 10.
- A) demand curve for Sasha  
 B) demand curve for Kyle  
 C) market demand curve  
 D) none of the above

Answer: C

Diff: 2

Topic: Demand in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills



*Refer to Scenario 3.1 below to answer the following questions.*

SCENARIO 3.1: Rented DVDs and movies shown in theaters are substitutes. Rented DVDs and plasma TVs are complements. Plasma TVs and movies shown in theaters are normal goods.

- 38) Refer to Scenario 3.1. Most plasma TVs sold in the United States are imported from Japan. If the United States government reduces the number of plasma TVs that can be imported into the United States, *ceteris paribus*, what would happen?
- A) The price of plasma TVs and the rental price of DVDs would increase.
  - B) The price of plasma TVs and the rental price of DVDs would decrease.
  - C) The price of plasma TVs would decrease and the rental price of DVDs would increase.
  - D) The price of plasma TVs would increase and the rental price of DVDs would decrease.

Answer: D

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 39) Refer to Scenario 3.1. In response to complaints from movie theater owners, the government removes an entertainment tax on movie tickets, but there are no additional taxes levied on rented DVDs. This would lead to
- A) a decrease in the price of movie tickets, but no change in the rental price of DVDs.
  - B) a decrease in the price of a movie ticket and an increase in the rental price of DVDs.
  - C) a decrease in the price of movie tickets and the rental price of DVDs.
  - D) no change in the price of a movie ticket and a decrease in the rental price of DVDs.

Answer: C

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 40) Refer to Scenario 3.1. You observe that the rental price for DVDs is higher in the summer than in the winter. This would be explained by the fact that
- A) the quantity demanded of rented DVDs is higher in the summer than in the winter.
  - B) there are more DVDs released into the rental market in the summer than in the winter.
  - C) demand for rented DVDs is higher in the summer than in the winter.
  - D) the supply of rented DVDs is higher in the summer than in the winter.

Answer: C

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 41) Refer to Scenario 3.1. If the number of stores renting DVDs increases by 10%, which of the following would occur?
- A) The rental price of DVDs would increase and the price of plasma TVs and movie tickets would decrease.
  - B) The rental price of DVDs and the price of movie tickets would decrease, but the price of plasma TVs would increase.
  - C) The rental price of DVDs and the price of movie tickets would increase, but the price of plasma TVs would decrease.
  - D) The rental price of DVDs would increase, but the price of plasma TVs and movie tickets would be unaffected.

Answer: B

Diff: 3

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Wealth is a stock measure.

Answer: TRUE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 2) A change in the price of a good or service leads to a change in the demand of the good.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Quantity demanded is determined by how much consumers are willing to pay for the good or service.

Answer: TRUE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) Supply is determined by how much suppliers are willing and able to produce.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 5) Inferior goods are also known as substitute goods.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

- 6) If french fries and ketchup are complements, then an increase in the price of french fries will result in an increase in the demand for ketchup.

Answer: FALSE

Diff: 1

Topic: Demand in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

### 3.4 Supply in Product / Output Markets

#### 1 Multiple Choice

- 1) According to the law of \_\_\_\_\_, there is a positive relationship between price and \_\_\_\_\_.  
A) supply; the change in supply                      B) supply; the quantity supplied  
C) demand; quantity demanded                      D) demand; change in demand

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Definition

- 2) The price of circuit boards used in the manufacturing of LCD televisions has fallen. This will lead to \_\_\_\_\_ LCD televisions.  
A) an increase in the supply of                      B) a decrease in the supply of  
C) an increase in the quantity supplied of                      D) a decrease in the quantity supplied of

Answer: A

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) If the price of spinach decreases, there will be \_\_\_\_\_ of spinach enchiladas.  
A) an increase in the supply                      B) a decrease in the supply  
C) an increase in the quantity supplied                      D) a decrease in the quantity supplied

Answer: A

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) An electronics manufacturer can produce either MP3 players or cell phones. As the result of a decrease in the price of cell phones, the firm produces more MP3 players and fewer cell phones. An economist would explain this by saying
- A) the supply of cell phones increased and the supply of MP3 players decreased.
  - B) there has been an increase in the quantity supplied of cell phones and a decrease in the quantity supplied of MP3 players.
  - C) there has been a decrease in the quantity supplied of cell phones and an increase in the supply of MP3 players.
  - D) the supply of cell phones increased and the quantity supplied of MP3 players decreased.

Answer: C

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.14 below to answer the following questions.

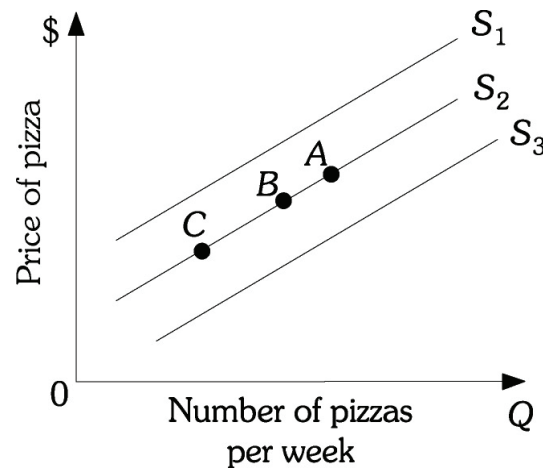


Figure 3.14

- 5) Refer to Figure 3.14. An increase in the wage rate of pizza makers will cause a movement from Point B on supply curve S2 to
- A) Point A on supply curve S2.
  - B) Point B on supply curve S2.
  - C) supply curve S3.
  - D) supply curve S1.

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 3.14. A decrease in supply is represented by the movement from
- A)  $S_2$  to  $S_3$ .
  - B)  $S_2$  to  $S_1$ .
  - C) Point  $B$  to Point  $A$  along supply curve  $S_2$ .
  - D) Point  $B$  to Point  $C$  along supply curve  $S_2$ .

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 3.14. An increase in quantity supplied is represented by a movement from
- A)  $S_2$  to  $S_3$ .
  - B)  $S_2$  to  $S_1$ .
  - C) Point  $B$  to Point  $A$  along supply curve  $S_2$ .
  - D) Point  $B$  to Point  $C$  along supply curve  $S_2$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 3.14. A decrease in the price of pizza sauce will cause a movement from Point  $B$  on supply curve  $S_2$  to
- A) supply curve  $S_3$ .
  - B) supply curve  $S_1$ .
  - C) Point  $A$  on supply curve  $S_2$ .
  - D) Point  $C$  on supply curve  $S_2$ .

Answer: A

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 3.14. A movement from Point  $C$  to Point  $B$  on supply curve  $S_2$  would be caused by a(n)
- A) decrease in the price of pizza.
  - B) decrease in the price of pizza dough.
  - C) increase in the demand for pizza.
  - D) increase in the price of hamburgers, assuming hamburgers are a substitute for pizza.

Answer: C

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.15 below to answer the following questions.

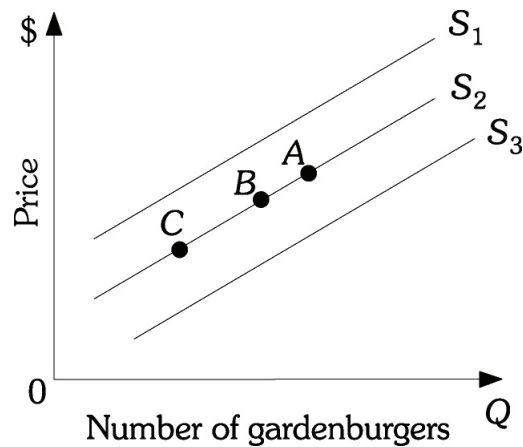


Figure 3.15

- 10) Refer to Figure 3.15. A decrease in the wage rate of gardenburger makers will cause a movement from Point B on supply curve S<sub>2</sub> to
- A) Point A on supply curve S<sub>2</sub>.
  - B) Point B on supply curve S<sub>2</sub>.
  - C) supply curve S<sub>3</sub>.
  - D) supply curve S<sub>1</sub>.

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Figure 3.15. An increase in supply is represented by the movement from
- A) S<sub>2</sub> to S<sub>3</sub>.
  - B) S<sub>2</sub> to S<sub>1</sub>.
  - C) Point B to Point A along supply curve S<sub>2</sub>.
  - D) Point B to Point C along supply curve S<sub>2</sub>.

Answer: A

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 3.15. A decrease in quantity supplied is represented by a movement from
- A) S<sub>2</sub> to S<sub>1</sub>.
  - B) S<sub>2</sub> to S<sub>3</sub>.
  - C) Point B to Point A along supply curve S<sub>2</sub>.
  - D) Point B to Point C along supply curve S<sub>2</sub>.

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

13) Refer to Figure 3.15. An increase in the price of tomatoes (an input for gardenburgers) will cause a movement from Point *B* on supply curve *S*<sub>2</sub> to

- A) supply curve *S*<sub>3</sub>.
- B) supply curve *S*<sub>1</sub>.
- C) Point *A* on supply curve *S*<sub>2</sub>.
- D) Point *C* on supply curve *S*<sub>2</sub>.

Answer: B

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

14) Refer to Figure 3.15. A movement from Point *A* to Point *B* on supply curve *S*<sub>2</sub> would be caused by a(n)

- A) increase in the price of gardenburgers.
- B) decrease in the demand for gardenburgers.
- C) increase in the price of tomatoes.
- D) increase in the price of hamburgers, assuming hamburgers are a substitute for pizza.

Answer: B

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

15) The change in the \_\_\_\_\_ of a good leads to a change in \_\_\_\_\_, which leads to a \_\_\_\_\_.

- A) price; quantity supplied; movement along a supply curve
- B) quantity; supply; change in demand
- C) supply; demand; change in price
- D) demand; quantity demanded; supply

Answer: A

Diff: 3

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.16 below to answer the questions that follow.

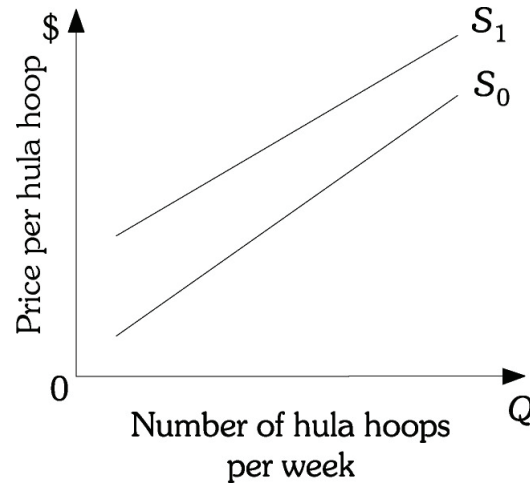


Figure 3.16

- 16) Refer to Figure 3.16. The supply of curve for hula hoops shifts from  $S_1$  to  $S_0$ . This could be caused by
- A) a decrease in the price of hula hoops.
  - B) a decrease in the number of firms selling hula hoops.
  - C) a decrease in the demand for hula hoops.
  - D) a decrease in the cost of producing hula hoops.

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking



Refer to the information provided in Figure 3.11 below to answer the questions that follow.

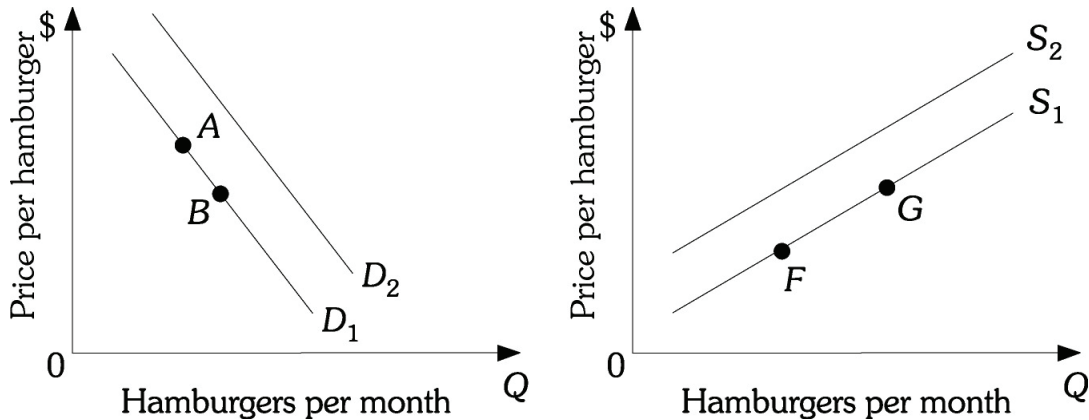


Figure 3.11

- 17) Refer to Figure 3.11. Assume hamburgers are a normal good. A decrease in income will cause a movement from
- A) Point A to Point B.
  - B) Point G to Point F.
  - C)  $D_2$  to  $D_1$ .
  - D)  $S_2$  to  $S_1$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 3.11. Assume hamburgers and hot dogs are substitutes. An increase in the price of hot dogs will cause a movement from
- A) Point B to Point A.
  - B) Point F to Point G.
  - C)  $D_2$  to  $D_1$ .
  - D)  $D_1$  to  $D_2$ .

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 3.11. Assume hamburgers and french fries are complements. An increase in the price of french fries will cause a movement from
- A) Point A to Point B.
  - B) Point B to Point A.
  - C)  $D_2$  to  $D_1$ .
  - D)  $D_1$  to  $D_2$ .

Answer: C

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Figure 3.11. A decrease in the number of cattle ranchers will cause a movement from
- A) Point A to Point B.
  - B) Point G to Point F.
  - C)  $D_2$  to  $D_1$ .
  - D)  $S_1$  to  $S_2$ .

Answer: D

Diff: 2

Topic: Supply in Product / Output Markets

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) A movement along the supply curve is caused by a change in a good's own price.

Answer: TRUE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

- 2) A technological advance in the production of digital video recorders will cause them to become less expensive.

Answer: TRUE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) An increase in the wage rate of diamond cutters will increase the supply of cut diamonds.

Answer: FALSE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) Supply is determined by how much suppliers are willing and able to produce.

Answer: FALSE

Diff: 1

Topic: Supply in Product / Output Markets

Skill: Conceptual

AACSB: Reflective Thinking

## 3.5 Market Equilibrium

### 1 Multiple Choice

- 1) When quantity demanded equals quantity supplied
- A) there must be no government intervention in the market.
  - B) the demand curve must be the same as the supply curve.
  - C) the market is in equilibrium.
  - D) all of the above

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Definition

Refer to the information provided in Table 3.1 below to answer the questions that follow.

**Table 3.1**

Price per Pizza	Quantity Demanded (Pizzas per Month)	Quantity Supplied (Pizzas per Month)
\$3	1,200	600
6	1,000	700
9	800	800
12	600	900
15	400	1,000

- 2) Refer to Table 3.1. This market will be in equilibrium if the quantity of pizzas supplied per month is  
A) 700.                                              B) 750.                                              C) 800.                                              D) 900.

Answer: C

*Diff: 2*

*Topic: Market Equilibrium*

*Skill: Analytic*

*AACSB: Analytic Skills*

- 3) Refer to Table 3.1. If the price per pizza is \$3, the price will  
A) remain constant because the market is in equilibrium.  
B) increase because there is an excess supply in the market.  
C) increase because there is an excess demand in the market.  
D) decrease because there is an excess supply in the market.

Answer: C

*Diff: 2*

*Topic: Market Equilibrium*

*Skill: Analytic*

*AACSB: Analytic Skills*

- 4) Refer to Table 3.1. If the price per pizza is \$6, there is a(n)  
A) excess supply of 1,000 units.                                              B) excess demand of 200 units.  
C) excess demand of 300 units.                                              D) excess supply of 700 units.

Answer: C

*Diff: 2*

*Topic: Market Equilibrium*

*Skill: Analytic*

*AACSB: Analytic Skills*

- 5) Refer to Table 3.1. If the price per pizza is \$12, there is an excess  
A) demand of 400 pizzas.                                              B) demand of 600 pizzas.  
C) supply of 300 pizzas.                                              D) supply of 900 pizzas.

Answer: C

*Diff: 2*

*Topic: Market Equilibrium*

*Skill: Analytic*

*AACSB: Analytic Skills*

- 6) Refer to Table 3.1. In this market there will be an excess demand of 600 pizzas at a price of  
 A) \$3.                                      B) \$6.                                      C) \$12.                                      D) \$15.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Table 3.1. In this market there will be an excess supply of 600 pizzas at a price of  
 A) \$3.                                      B) \$6.                                      C) \$12.                                      D) \$15.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Table 3.1. If the price per pizza is \$9, the price will  
 A) remain constant because the market is in equilibrium.  
 B) increase because there is an excess demand in the market.  
 C) increase because there is an excess supply in the market.  
 D) decrease because there is an excess supply in the market.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 3.2 below to answer the questions that follow.

Table 3.2

Price per Cheeseburger	Quantity Demanded (Cheeseburgers per Month)	Quantity Supplied (Cheeseburgers per Month)
\$5	1,500	500
6	1,200	700
7	900	900
8	600	1,100
9	300	1,300

- 9) Refer to Table 3.2. This market will be in equilibrium if the quantity of gardenburgers demanded is  
 A) 300.                                      B) 600.                                      C) 900.                                      D) 1,200.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Table 3.2. If the price per gardenburger is \$5, the price will
- A) remain constant because the market is in equilibrium.
  - B) decrease because there is an excess demand in the market.
  - C) increase because there is an excess demand in the market.
  - D) decrease because there is an excess supply in the market.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 3.2. If the price per gardenburger is \$6, there is a(n)
- A) market equilibrium.
  - B) excess demand of 1,000 units.
  - C) excess demand of 500 units.
  - D) excess supply of 700 units.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 3.2. If the price per gardenburger is \$8, there is an excess
- A) demand of 600 gardenburgers.
  - B) supply of 500 gardenburgers.
  - C) demand of 300 gardenburgers.
  - D) supply of 1,100 gardenburgers.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 3.2. In this market there will be an excess demand of 500 gardenburgers at a price of
- A) \$5.
  - B) \$6.
  - C) \$7.
  - D) \$8.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Table 3.2. In this market there will be an excess supply of 1,000 gardenburgers at a price of
- A) \$5.
  - B) \$6.
  - C) \$7.
  - D) \$9.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Table 3.2. If the price per gardenburger is \$8, the price will
- A) remain constant because the market is in equilibrium.
  - B) decrease because there is an excess demand in the market.
  - C) increase because there is an excess supply in the market.
  - D) decrease because there is an excess supply in the market.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 16) When there is an excess demand of a product in an unregulated market, the tendency is for
- A) price to rise.
  - B) price to decrease.
  - C) quantity supplied to decrease.
  - D) quantity demanded to increase.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.17 below to answer the questions that follow.

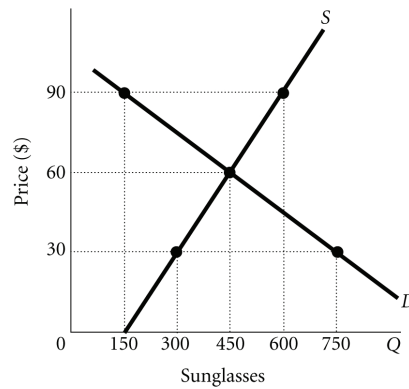


Figure 3.17

- 17) Refer to Figure 3.17. The market for sunglasses \_\_\_\_\_ at a price of \$60 and a quantity of 450 sunglasses.
- A) has a surplus
  - B) has a shortage
  - C) is in equilibrium
  - D) cannot remain in business

Answer: C

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

18) Refer to Figure 3.17. At a quantity demanded of 750, there is an excess

- A) demand of 450 sunglasses if the price is \$60.
- B) demand of 450 sunglasses if the price is \$30.
- C) demand of 300 sunglasses if the price is \$60.
- D) supply of 300 sunglasses if the price is \$30.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

19) Refer to Figure 3.17. If this market is unregulated and the price is currently \$30, you would expect that the price

- A) of sunglasses would remain at \$30, because firms would not want to increase the price.
- B) of sunglasses would rise to \$90, so the firm could meet its excess demand.
- C) of sunglasses would rise to \$60, where quantity demanded equals quantity supplied.
- D) of sunglasses would rise, but the new price is indeterminate from the information provided.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Figure 3.17. At a price of \$60, there is an excess

- A) demand of 150 sunglasses.
- B) supply of 300 sunglasses.
- C) demand of 300 sunglasses.
- D) supply of zero sunglasses.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

21) When there is a surplus of a product in an unregulated market, there is a tendency for

- A) price to rise.
- B) price to fall.
- C) quantity demanded to increase.
- D) quantity supplied to decrease.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 22) If the market for blue tooth headsets is unregulated and is presently characterized by excess demand, you can accurately predict that price will
- A) increase, the quantity demanded will fall, and the quantity supplied will rise.
  - B) increase, the quantity demanded will rise, and the quantity supplied will fall.
  - C) decrease, the quantity demanded will rise, and the quantity supplied will fall.
  - D) decrease, the quantity demanded will fall, and the quantity supplied will rise.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 23) Cell phones and blue tooth headsets are complements. An increase in the price of blue tooth headsets would cause which of the following in the market for cell phones?
- A) The equilibrium price and quantity of cell phones would increase.
  - B) The equilibrium price and quantity of cell phones would decrease.
  - C) The equilibrium price of cell phones would increase and the equilibrium quantity would decrease.
  - D) The equilibrium price of cell phones would decrease and the equilibrium quantity would increase.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 24) Suppose that Palm Pilots are a normal good. If the income of Palm Pilot users decreases, you predict that in the market for Palm Pilots
- A) both equilibrium price and quantity will fall.
  - B) both equilibrium price and quantity will increase.
  - C) equilibrium price will increase and quantity will decrease.
  - D) equilibrium price will fall but quantity will increase.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking



Refer to the information provided in Figure 3.18 below to answer the questions that follow.

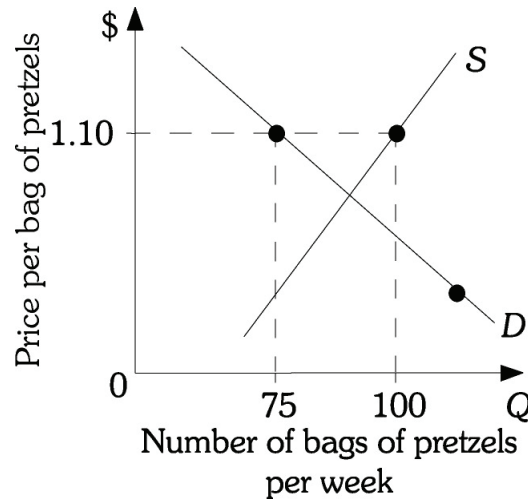


Figure 3.18

- 25) Refer to Figure 3.18. The current quantity of bags of pretzels supplied is 100. You accurately predict that in this market
- A) price tends to remain constant and quantity supplied increases.
  - B) price, quantity demanded, and quantity supplied decrease.
  - C) price and quantity supplied decrease and quantity demanded increases.
  - D) price and quantity demanded increase and quantity supplied decreases.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 26) When Hurricane Katrina hit Louisiana in 2005, approximately half of the sugar cane crop was destroyed. *Ceteris paribus*
- A) the demand for sugar decreased and the price of sugar decreased.
  - B) the supply of sugar decreased and the price of sugar increased.
  - C) the supply of sugar decreased and the price of sugar decreased.
  - D) the demand for sugar increased and the price of sugar increased.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 27) Bacon is used to produce bacon cheeseburgers, and the price of bacon decreases. In the market for bacon cheeseburgers you would expect that
- A) the demand for bacon cheeseburgers would increase and the price of bacon cheeseburgers would increase.
  - B) the demand for bacon cheeseburgers would decrease and the price of bacon cheeseburgers would fall.
  - C) the supply of bacon cheeseburgers would decrease and the price of bacon cheeseburgers would increase.
  - D) the supply of bacon cheeseburgers would increase and the price of bacon cheeseburgers would decrease.

Answer: D

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 28) If increases in government regulations have increased the cost of producing gasoline-powered lawnmowers, you accurately predict that in the market for gasoline-powered lawnmowers, there will be a(n)
- A) decrease in the quantity supplied of gasoline-powered lawnmowers, a reduction in the price, and an increase in the quantity demanded.
  - B) decrease in the supply of gasoline-powered lawnmowers, an increase in the price, and a decrease in the quantity demanded.
  - C) decrease in the supply of gasoline-powered lawnmowers, an increase in the price, and a decrease in the demand.
  - D) increase in the supply of gasoline-powered lawnmowers, an increase in the price, and a decrease in the demand.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 29) Which of the following will definitely occur when there is a simultaneous increase in demand and an increase in supply?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 30) A movement along the demand curve to the right may be caused by a(n)
- A) decrease in income.
  - B) increase in supply.
  - C) fall in the number of substitute goods.
  - D) rise in the price of inputs.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 31) Which of the following will definitely occur when there is a decrease in the supply of and an increase in demand for wireless speakers?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 32) Which of the following will definitely occur when there is a decrease in demand for and an increase in supply of potato chips?
- A) an increase in equilibrium price
  - B) a decrease in equilibrium price
  - C) an increase in equilibrium quantity
  - D) a decrease in equilibrium quantity

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 33) A new fertilizer which greatly improves the corn crop yield is being widely used by corn farmers. You accurately predict that this
- A) will shift the supply curve of corn to the right, the equilibrium price of corn will increase, and the demand for corn will fall.
  - B) will shift the supply curve of corn to the right, the equilibrium price of corn will decrease, and the quantity demanded of corn will increase.
  - C) will shift the supply curve of corn to the left, the equilibrium price of corn will increase, and the quantity demanded of corn will decrease.
  - D) will shift the supply curve of corn to the left, the equilibrium price of corn will increase, and the demand for corn will fall.

Answer: B

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 34) Pineapples and kumquats are substitute goods. A hurricane in Guatemala destroyed a good portion of the pineapple crop. *Ceteris paribus*
- A) the price of both pineapples and kumquats will increase.
  - B) the price of both pineapples and kumquats will fall.
  - C) the price of kumquats will increase and the price of pineapples will fall.
  - D) the price of kumquats will fall and the price of pineapples will increase.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.19 below to answer the questions that follow.

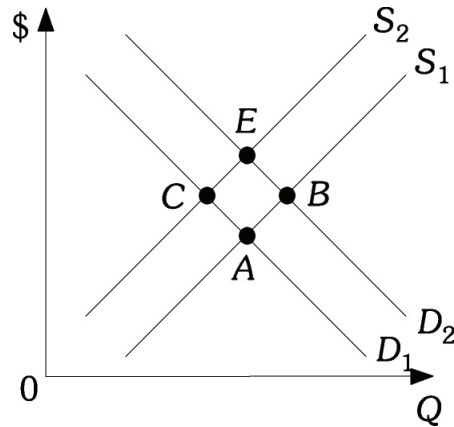


Figure 3.19

- 35) Refer to Figure 3.19. When the economy moves from Point C to Point A, there has been
- A) an increase in demand and an increase in supply.
  - B) an increase in demand and an increase in quantity supplied.
  - C) an increase in quantity demanded and a decrease in supply.
  - D) an increase in quantity demanded and an increase in supply.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 36) Refer to Figure 3.19. When the economy moves from Point C to Point E, there has been
- A) a decrease in supply and a decrease in quantity demanded.
  - B) a decrease in quantity supplied and a decrease in demand.
  - C) an increase in supply and an increase in quantity demanded.
  - D) an increase in demand and an increase in quantity supplied.

Answer: D

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 37) Refer to Figure 3.19. When the economy moves from Point C to Point B, there has been
- A) an increase in demand and an increase in supply.
  - B) a decrease in demand and a decrease in supply.
  - C) an increase in demand and a decrease in supply.
  - D) an increase in quantity demanded and an increase in quantity supplied.

Answer: A

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 38) Refer to Figure 3.19. When the economy moves from Point *B* to Point *A*, there has been
- A) an increase in supply and a decrease in quantity demanded.
  - B) a decrease in both supply and demand.
  - C) a decrease in demand and a decrease in quantity supplied.
  - D) a decrease in supply and an decrease in quantity demanded.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

*Refer to Scenario 3.2 below to answer the questions that follow.*

SCENARIO 3.2: Mustard and mayonnaise are substitutes. Mustard and relish are complements. Mustard is a normal good. During the summer, about 50% of all mustard was recalled by manufacturers and removed from store shelves.

- 39) Refer to Scenario 3.2. As a result of the recall, you would expect that
- A) the supply of mustard would decrease, the price of mustard would increase, and the demand for mustard would decrease.
  - B) the price of mustard would increase, the supply of mustard would increase, and the quantity demanded of mustard would decrease.
  - C) the supply of mustard would decrease, the price of mustard would increase, and the quantity demanded of mustard would decrease.
  - D) the price of mustard would increase and both the quantity of mustard supplied and the quantity of mustard demanded would increase.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 40) Refer to Scenario 3.2. The mustard recall would have caused the equilibrium price of mayonnaise to \_\_\_\_\_ and the equilibrium quantity of mayonnaise to \_\_\_\_\_.
- A) increase; increase
  - B) increase; decrease
  - C) decrease; increase
  - D) decrease; decrease

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 41) Refer to Scenario 3.2. The mustard recall would have caused
- A) an increase in the demand for relish.
  - B) an increase in the quantity demanded of relish.
  - C) a decrease in the demand for relish.
  - D) a decrease in the quantity demanded of relish.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 42) Refer to Scenario 3.2. If at the same time of the mustard recall, consumer income also decreased. Then, *ceteris paribus*, in the market for mustard this would have caused
- A) both the equilibrium price and quantity to decrease.
  - B) the equilibrium price to increase and the equilibrium quantity to decrease.
  - C) the equilibrium price to either increase, decrease, or remain the same and the equilibrium quantity to decrease.
  - D) the equilibrium quantity could have increased, decreased, or remained the same and the equilibrium price to decrease.

Answer: C

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 43) Refer to Scenario 3.2. The government wants to protect consumers from rising food prices. Therefore, price restrictions are imposed on mustard producers, prohibiting them from raising the price of mustard. This will cause
- A) an excess demand for mustard.
  - B) an excess supply of mustard.
  - C) an increase in the demand for mustard.
  - D) a decrease in the supply of mustard.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 3.10 below to answer the questions that follow.

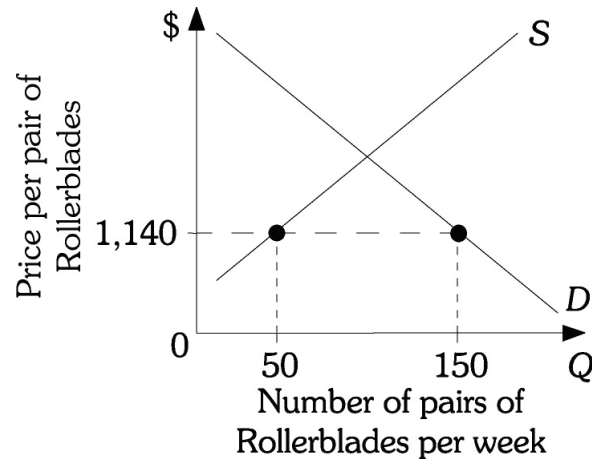


Figure 3.10

- 44) Refer to Figure 3.10. If the current quantity demanded of rollerblades is 150 per week, you accurately predict that in this market
- A) price and quantity supplied will increase and quantity demanded will decrease.
  - B) price and quantity supplied will decrease and quantity demanded will increase.
  - C) price, quantity supplied and quantity demanded will increase.
  - D) price, quantity supplied and quantity demanded will decrease.

Answer: A

Diff: 3

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.12 below to answer the questions that follow.

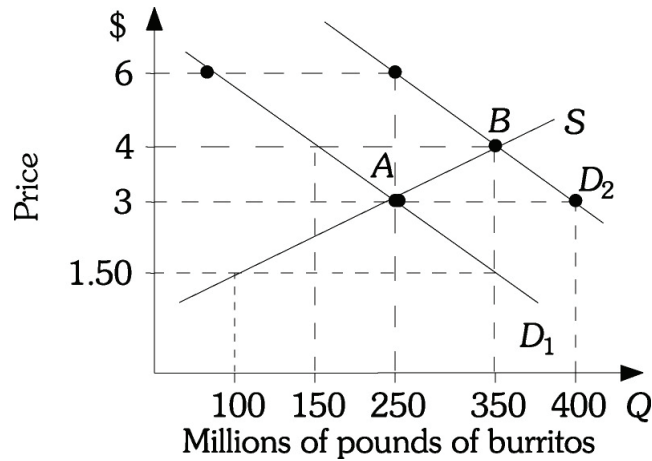


Figure 3.12

- 45) Refer to Figure 3.12. The market is initially in equilibrium at Point A. If demand shifts from  $D_1$  to  $D_2$  and there is an excess demand of 150 million pounds of burritos, the price of burritos would be

A) \$1.50.                      B) \$3.00.                      C) \$4.00.                      D) \$6.00.

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 46) Refer to Figure 3.12. The market is initially in equilibrium at Point B. If demand shifts from  $D_2$  to  $D_1$  and there is an excess supply of 200 million pounds of burritos, the price of burritos would be

A) \$1.50.                      B) \$3.00.                      C) \$4.00.                      D) \$6.00.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

- 47) Refer to Figure 3.12 The market is initially in equilibrium at Point A. If demand shifts from  $D_1$  to  $D_2$ , the equilibrium price will change from \_\_\_\_\_ and the equilibrium quantity will change from \_\_\_\_\_.

A) \$4.00 to \$3.00; 250 to 350                      B) \$4.00 to \$3.00; 350 to 250  
C) \$3.00 to \$4.00; 250 to 350                      D) \$3.00 to \$4.00; 350 to 250

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills



48) Refer to Figure 3.12 The market is initially in equilibrium at Point B. If demand shifts from  $D_2$  to  $D_1$ , the equilibrium price will change from \_\_\_\_\_ and the equilibrium quantity will change from \_\_\_\_\_.

- A) \$4.00 to \$3.00; 250 to 350  
 B) \$4.00 to \$3.00; 350 to 250  
 C) \$3.00 to \$4.00; 250 to 350  
 D) \$3.00 to \$4.00; 350 to 250

Answer: B

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 3.13 below to answer the questions that follow.

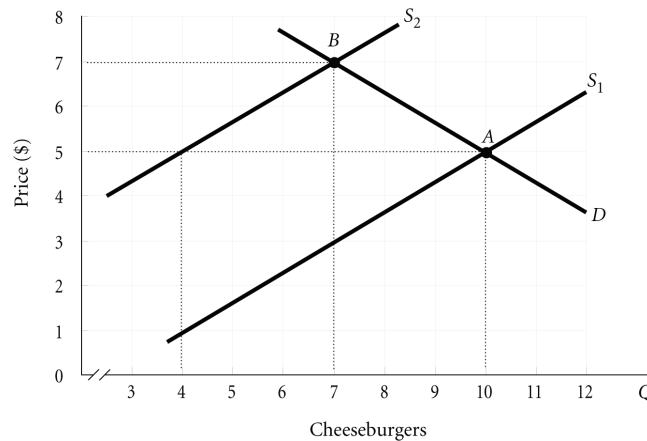


Figure 3.13

49) Refer to Figure 3.13. The market is initially in equilibrium at Point A. If supply shifts from  $S_1$  to  $S_2$  and there is an excess demand of 6 cheeseburgers, the price of cheeseburgers will have

- A) moved from \$5.00 to \$7.00.  
 B) moved from \$7.00 to \$5.00.  
 C) remained constant at \$5.00.  
 D) remained constant at \$7.00.

Answer: C

Diff: 2

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

50) Refer to Figure 3.13. The market is initially in equilibrium at Point A. If supply shifts from  $S_1$  to  $S_2$ , the equilibrium price will change from \_\_\_\_\_ and the equilibrium quantity will change from \_\_\_\_\_.

- A) \$5.00 to \$7.00; 10 to 7.  
 B) \$5.00 to \$7.00; 4 to 7.  
 C) \$7.00 to \$5.00; 7 to 4.  
 D) \$7.00 to \$5.00; 7 to 10.

Answer: A

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

51) Refer to Figure 3.13. The market is initially in equilibrium at Point B. If supply shifts from  $S_2$  to  $S_1$ , the equilibrium price will change from \_\_\_\_\_ and the equilibrium quantity will change from \_\_\_\_\_.

A) \$5.00 to \$7.00; 10 to 7.

B) \$5.00 to \$7.00; 4 to 7.

C) \$7.00 to \$5.00; 7 to 4.

D) \$7.00 to \$5.00; 7 to 10.

Answer: D

Diff: 1

Topic: Market Equilibrium

Skill: Analytic

AACSB: Analytic Skills

52) Related to the *Economics in Practice* on p. 67: The freezing weather in California caused the \_\_\_\_\_ curve for oranges to shift to the \_\_\_\_\_, increasing the equilibrium price and decreasing the equilibrium quantity of oranges.

A) supply; right

B) demand; right

C) supply; left

D) demand; left

Answer: C

Diff: 2

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

53) Related to the *Economics in Practice* on p. 67: The freezing weather in California decreased the supply of oranges. This would \_\_\_\_\_ apple juice, a substitute for orange juice.

A) increase the supply of

B) increase the demand for

C) decrease the supply of

D) decrease the demand for

Answer: B

Diff: 2

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

54) Related to the *Economics in Practice* on p. 69: One explanation for the increase in the price of the Baltimore newspaper is the new, increased regard the citizens of Baltimore have for newspapers. This would cause the \_\_\_\_\_ Baltimore newspapers to \_\_\_\_\_.

A) demand for; increase

B) quantity demanded of; increase

C) demand for; decrease

D) quantity demanded of; decrease

Answer: A

Diff: 2

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

55) Related to the *Economics in Practice* on p. 69: Assuming the demand for Baltimore newspapers increases while the supply of Baltimore newspapers decreases, the equilibrium \_\_\_\_\_ will definitely \_\_\_\_\_.

A) price; increase

B) price; decrease

C) quantity; increase

D) quantity; decrease

Answer: A

Diff: 2

Topic: Market Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) A decrease in demand for a product will cause the price of the product to rise and supply of the product to increase.

Answer: FALSE

Diff: 1

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 2) A simultaneous increase in both the supply of and the demand for vitamin water would cause an increase in the equilibrium quantity of vitamin water.

Answer: TRUE

Diff: 3

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 3) If price is below the equilibrium, then quantity supplied will be less than quantity demanded putting upward pressure on price.

Answer: TRUE

Diff: 1

Topic: Market Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

# Chapter 4 Demand and Supply Applications

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## 4.1 The Price System: Rationing and Allocating Resources

### 1 Multiple Choice

- 1) In the short run, it is necessary to \_\_\_\_\_ a good whenever excess demand exists.
- A) nonprice ration
  - B) price allocate
  - C) discontinue distribution of
  - D) increase production of

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) Issuing coupons, waiting in line and catering to favored customers are all methods of
- A) unbiased favoritism.
  - B) exploiting wealth.
  - C) income distribution.
  - D) nonprice rationing.

Answer: D

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) The \_\_\_\_\_ automatically distributes scarce goods.
- A) price system
  - B) barter system
  - C) laissez faire economy
  - D) command economy

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

- 4) Attempts to bypass price rationing in the market
- A) are costly.
  - B) are easily administered.
  - C) are efficient.
  - D) are an effective tool for aiding low-income households.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) During periods of \_\_\_\_\_, favored customers receive special treatment from dealers.
- A) excess supply
  - B) excess demand
  - C) price above equilibrium
  - D) equilibrium

Answer: B

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 6) A situation where illegal trading at market prices takes place is known in economics as a
- A) smuggler's market.
  - B) pirate market.
  - C) black market.
  - D) command market.

Answer: C

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 7) When supply is \_\_\_\_\_ or the product is \_\_\_\_\_, then price is demand determined.
- A) fixed; unique
  - B) variable; standardized
  - C) fixed; standardized
  - D) variable; unique

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) A government-imposed maximum price will have no economic impact if
- A) it is below the equilibrium price.
  - B) it is at or below the equilibrium price.
  - C) it is above the equilibrium price.
  - D) there is a fixed supply of the good.

Answer: C

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) If Leonardo is scalping tickets for a World Cup game, he will be successful at selling the tickets for a profit
- A) when prices are too high.
  - B) only when there is excess supply.
  - C) any time teams in the World Cup game are popular.
  - D) when the price set by the World Cup organizers is less than the market equilibrium price.

Answer: D

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 10) If Andrew is scalping tickets for the Stanley Cup, he will be successful at selling the tickets for a profit
- A) when the price set by the National Hockey League is less than the market equilibrium price.
  - B) when prices are too high.
  - C) any time the Stanley Cup is popular.
  - D) only when there is excess supply.

Answer: A

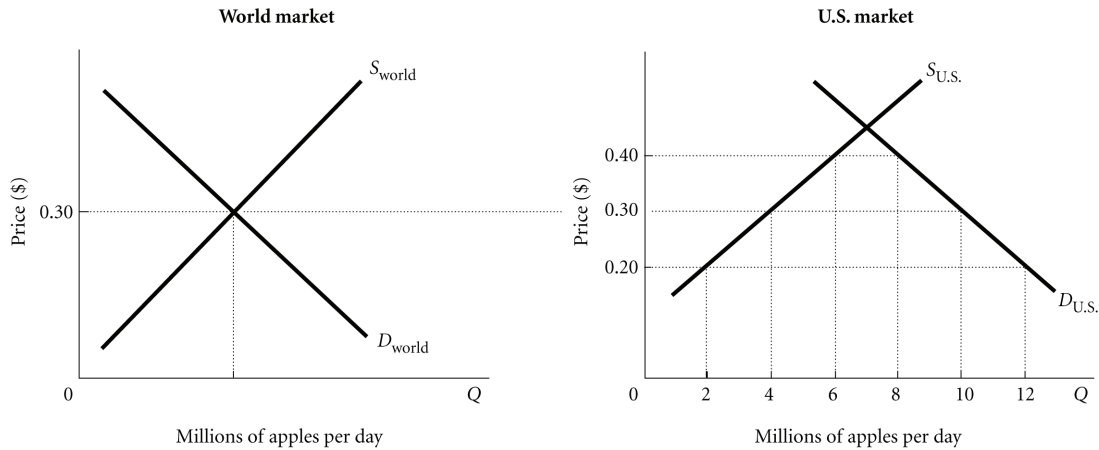
Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Figure 4.1 below to answer the questions that follow.



**Figure 4.1**

- 11) Refer to Figure 4.1. At the world price of 30 cents per apple the United States imports \_\_\_\_\_ million apples per day.

A) 2                                      B) 4                                      C) 6                                      D) 10

Answer: C

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Figure 4.1. The United States will import 2 million apples per day if a per-apple tax of \_\_\_\_\_ is levied on imported apples.

A) 10 cents                              B) 20 cents                              C) 30 cents                              D) 40 cents

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Figure 4.1. The United States will import 6 million apples per day if a per-apple tax of \_\_\_\_\_ is levied on imported apples.

A) 0 cents                              B) 10 cents                              C) 20 cents                              D) 30 cents

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 14) Refer to Figure 4.1. Assume that initially there is free trade. The price of apples in the United States will increase to 40 cents per apple if a \_\_\_\_\_ per apple tax is imposed.
- A) 10 cents                      B) 20 cents                      C) 30 cents                      D) 40 cents

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 15) Refer to Figure 4.1. Assume that initially there is free trade. The quantity demanded of apples will be reduced by 2 million per day if the United States imposes a tax of \_\_\_\_\_ per apple.
- A) 10 cents                      B) 20 cents                      C) 30 cents                      D) 40 cents

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 4.2 below to answer the questions that follow.

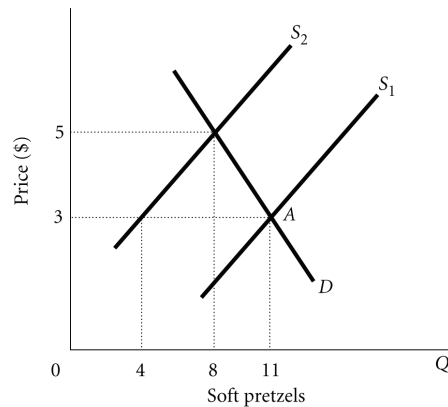


Figure 4.2

- 16) Refer to Figure 4.2. The market is initially in equilibrium at the intersection of  $S_2$  and  $D$ , and supply shifts from  $S_2$  to  $S_1$ . Which of the following statements is *true*?
- A) Price will still serve as a rationing device causing quantity demanded to rise from 8 to 11 soft pretzels.
- B) There is no need for price to serve as a rationing device in this case because the new equilibrium quantity is lower than the original equilibrium quantity.
- C) Price will still serve as a rationing device causing quantity supplied to fall from 8 to 4 soft pretzels.
- D) The market cannot move to a new equilibrium until there is also a change in supply.

Answer: A

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 17) An example of an effective price ceiling would be the government setting the price of wheat at \_\_\_\_\_ per bushel when the market price is at \$4.25 per bushel.
- A) \$3.75                      B) \$5.00                      C) \$7.75                      D) \$12.00

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 18) If the equilibrium price of gasoline is \$3.00 per gallon and the government will not allow oil companies to charge more than \$2.00 per gallon of gasoline, which of the following will happen?
- A) The market will be in equilibrium at a price of \$2.00.  
B) Supply must eventually increase so that the market will come into equilibrium at a price of \$2.00.  
C) Demand must eventually decrease so that the market will come into equilibrium at a price of \$2.00.  
D) A nonprice rationing system such as ration coupons must be used to ration the available supply of gasoline.

Answer: D

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 19) An example of a \_\_\_\_\_ would be the government setting the price of coffee below the equilibrium price.
- A) non-income tax                                              B) rational expenditure  
C) black market                                              D) price ceiling

Answer: D

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 20) If the market price of green tea is \$20.00 per pound but the government will not allow green tea growers to charge more than \$15.00 per pound of green tea, which of the following will happen?
- A) Demand must eventually decrease so that the market will come into equilibrium at a price of \$17.50.  
B) There will be a shortage of green tea.  
C) Supply must eventually increase so that the market will come into equilibrium at a price of \$17.50.  
D) There will be a surplus of green tea.

Answer: B

Diff: 3

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking



- 21) In the short run, whenever excess demand exists, it is necessary to
- A) ration the good.
  - B) put the good on sale.
  - C) increase the supply of the good.
  - D) impose a price ceiling on the good.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 22) The rationing mechanism in market economies is the adjustment of
- A) supply.
  - B) demand.
  - C) quantity.
  - D) price.

Answer: D

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 23) An effective price ceiling must be set
- A) above the equilibrium price.
  - B) below the equilibrium price.
  - C) at the equilibrium price.
  - D) either at or above the equilibrium price.

Answer: B

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 24) An effective price floor must be set
- A) above the equilibrium price.
  - B) below the equilibrium price.
  - C) at the equilibrium price.
  - D) either at or below the equilibrium price.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

- 25) For a particular product, an effective price ceiling results in
- A) quantity demanded greater than quantity supplied.
  - B) quantity supplied greater than quantity demanded.
  - C) quantity demanded equal to quantity supplied.
  - D) demand equal to supply.

Answer: A

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) For a particular product, an effective price floor results in
- A) quantity demanded greater than quantity supplied.
  - B) quantity supplied greater than quantity demanded.
  - C) quantity demanded equal to quantity supplied.
  - D) demand equal to supply.

Answer: B

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 4.3 below to answer the questions that follow.

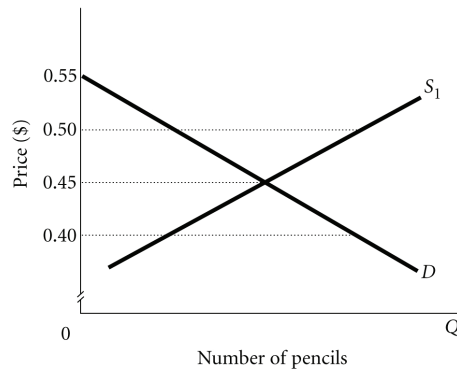


Figure 4.3

- 27) Refer to Figure 4.3. The government setting the price of pencils at \$0.40 would be an example of an effective
- A) price floor.
  - B) price ceiling.
  - C) market equilibrium.
  - D) price surplus.

Answer: B

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Figure 4.3. The government setting the price of pencils at \$0.50 would be an example of an effective
- A) price floor.
  - B) price ceiling.
  - C) market equilibrium.
  - D) price shortage.

Answer: A

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Figure 4.3. In the market for pencils, the quantity demanded will be greater than the quantity supplied if the government imposes an effective
- A) price floor.
  - B) price ceiling.
  - C) market equilibrium price.
  - D) price surplus.

Answer: B

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 30) Refer to Figure 4.3. A non-price rationing system such as queuing must be used to ration the available supply of pencils if the government will not allow retailers to charge more than \_\_\_\_\_ for a pencil.
- A) \$0.40
  - B) \$0.45
  - C) \$0.50
  - D) \$0.55

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 31) Refer to Figure 4.3. Retailers will have an excess supply of pencils if the government will not allow retailers to charge less than \_\_\_\_\_ for a pencil.
- A) \$0.50
  - B) \$0.45
  - C) \$0.40
  - D) the equilibrium price

Answer: A

Diff: 1

Topic: The Price System: Rationing and Allocating Resources

Skill: Analytic

AACSB: Analytic Skills

- 32) A shortage will occur if a \_\_\_\_\_ is set \_\_\_\_\_ the equilibrium price.
- A) price floor; below
  - B) price floor; above
  - C) price ceiling; above
  - D) price ceiling; below

Answer: D

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

- 33) The market will be in equilibrium if \_\_\_\_\_ is set \_\_\_\_\_ the equilibrium price.
- A) a price floor; below
  - B) a price ceiling; below
  - C) actual price; above
  - D) actual price; below

Answer: A

Diff: 2

Topic: The Price System: Rationing and Allocating Resources

Skill: Conceptual

AACSB: Reflective Thinking

34) Quantity demanded will equal quantity supplied if a \_\_\_\_\_ is set \_\_\_\_\_ the equilibrium price.

- A) price ceiling; above
- B) price ceiling; below
- C) price floor; above
- D) price ceiling, at or below

Answer: A

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

35) A surplus will occur if a \_\_\_\_\_ is set \_\_\_\_\_ the equilibrium price.

- A) price floor; below
- B) price floor; above
- C) price ceiling; above
- D) price ceiling; below

Answer: B

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

36) The government imposes a maximum price on apartments that is BELOW the equilibrium price. You accurately predict that

- A) the law will have no economic impact.
- B) the law will create a surplus of apartments.
- C) renters will find that landlords start offering to furnish the apartments.
- D) landlords are less likely to do routine maintenance work in the apartments.

Answer: D

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

37) The type of non-price rationing that most closely approaches the market outcome is

- A) favored customer rationing.
- B) first-come, first-served basis or queuing.
- C) coupon rationing with coupons that can be resold.
- D) coupon rationing with coupons that cannot be resold.

Answer: C

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 38) The government imposes a price ceiling on heating oil that is below the market price. The rationing scheme that will minimize the misallocation of resources would be
- A) using rationing coupons that cannot be resold.
  - B) using rationing coupons that can be resold.
  - C) using rationing on a first-come, first-served basis.
  - D) using rationing only on weekdays.

Answer: B

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 39) The government imposes a price floor on wheat that is below the market price. You are asked to suggest a rationing scheme that will minimize the misallocation of resources. You suggest
- A) using rationing coupons that cannot be resold.
  - B) using rationing coupons that can be resold.
  - C) using a queuing system to compensate for the excess demand.
  - D) that no rationing system will be necessary.

Answer: D

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 40) Laura is scalping tickets for a Laker's game. She can sell her tickets for at least a normal profit
- A) when prices are too high.
  - B) any time the Lakers are popular.
  - C) when the price set by the Lakers is less than the market equilibrium price.
  - D) only when there is excess supply.

Answer: C

Diff: 3

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 41) Related to the *Economics in Practice* on p. 79: The true cost of the *Shakespeare in the Park* tickets is
- A) zero.
  - B) \$0 plus the opportunity cost of the time spent in line.
  - C) the cost to put on the performance.
  - D) the additional cost to the city of extra security.

Answer: B

Diff: 2

Topic: *The Price System: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 42) Related to the *Economics in Practice* on p. 79: The initial price of \$0 for the *Shakespeare in the Park* tickets is akin to the city of New York \_\_\_\_\_ the tickets.
- A) issuing a price floor on  
C) issuing ration coupons for
- B) issuing a price ceiling on  
D) assigning favored customer status for

Answer: B

Diff: 2

Topic: *The Price System: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Goods are allocated in a market system by nonprice rationing.

Answer: FALSE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

- 2) In the short run, nonprice rationing will happen whenever there is excess demand in a market.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) When supply is fixed, price is demand determined.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) With nonprice rationing those who are both able and willing to pay for a product necessarily get the product.

Answer: FALSE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Establishing a list of favored customers is an alternative rationing mechanism to price rationing.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

- 6) A surplus exists when there is excess demand in a market.

Answer: FALSE

Diff: 1

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

7) In a "black market", goods are traded at the same prices as they would be in a normal market.

Answer: FALSE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Conceptual*

8) Queuing is a system of nonprice rationing.

Answer: TRUE

Diff: 2

Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

9) Ration coupons are tickets or coupons that give someone a right to purchase a certain amount of a product during a specific period of time.

Answer: TRUE

Diff: 2

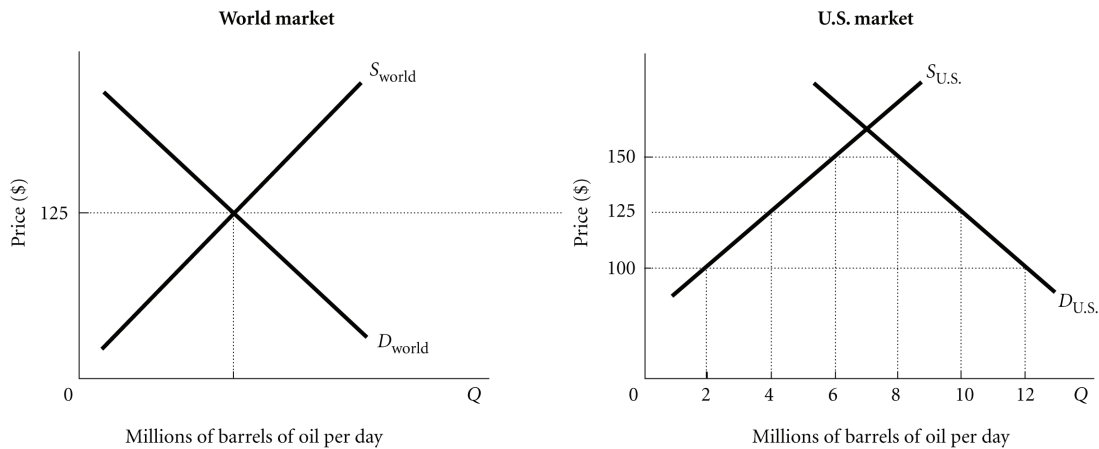
Topic: *The Price System: Rationing and Allocating Resources*

Skill: *Definition*

## 4.2 Supply and Demand Analysis

### 1 Multiple Choice

Refer to the information provided in Figure 4.4 below to answer the questions that follow.



**Figure 4.4**

1) Refer to Figure 4.4. At the world price of \_\_\_\_\_ per barrel of oil, the United States imports 6 million barrels of oil per day.

A) \$100

B) \$125

C) \$150

D) >\$150

Answer: B

Diff: 2

Topic: *Supply and Demand Analysis*

Skill: *Analytic*

AACSB: *Analytic Skills*

2) Refer to Figure 4.4. The United States will import 2 million barrels of oil per day if a \_\_\_\_\_ per barrel tax is levied on imported oil.

- A) \$25                      B) \$50                      C) \$100                      D) \$150

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

3) Refer to Figure 4.4. The price of oil in the United States would be \$125 per barrel, and the United States would import 6 million barrels of oil per day if the United States levies \_\_\_\_\_ per barrel tax on imported oil.

- A) no                      B) a \$25                      C) a \$50                      D) a \$100

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

4) Refer to Figure 4.4. Assume that initially there is free trade. The price of oil in the United States will increase to \$150 per barrel if the United States then imposes \_\_\_\_\_ tax per barrel of imported oil.

- A) no                      B) a \$25                      C) a \$50                      D) a \$100

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

5) Refer to Figure 4.4. Assume that initially there is free trade. Tax revenue of \$ 50 million per day will be generated if the United States imposes a \_\_\_\_\_ tax per barrel on imported oil.

- A) \$25                      B) \$50                      C) \$100                      D) \$150

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

6) Refer to Figure 4.4. Assume that initially there is free trade. If the United States allowed drilling for more oil in the Gulf of Mexico, it could

- A) reduce U.S. oil imports without a tax.                      B) decrease the demand for domestic oil.  
C) reduce the supply of domestic oil.                      D) increase the domestic price of oil.

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking



Refer to the information provided in Figure 4.5 below to answer the questions that follow.

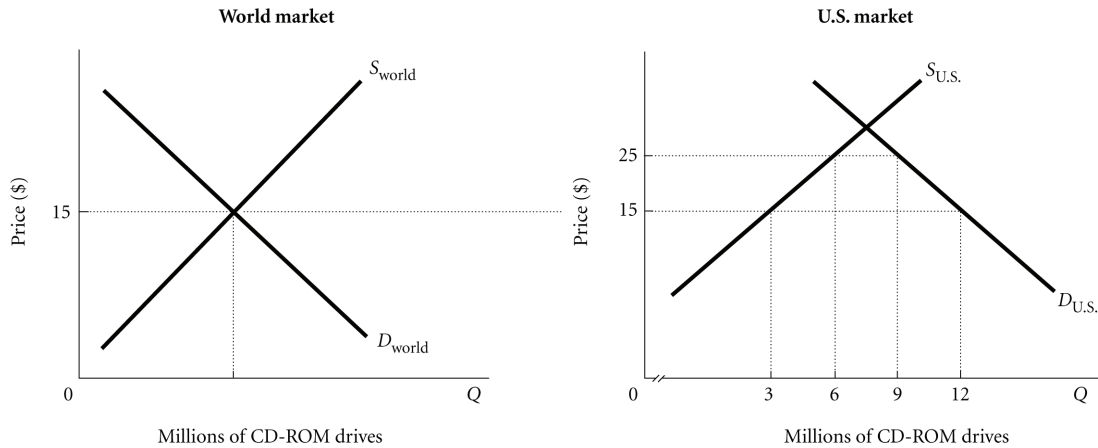


Figure 4.5

7) Refer to Figure 4.5. The United States imports 9 million CD-Rom drives at a world price of \_\_\_\_\_ per CD-Rom drive.

- A) \$15  
 B) \$25  
 C) between \$15 and \$25  
 D) >\$25

Answer: A

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

8) Refer to Figure 4.5. The United States will import 3 million CD-Rom drives if \_\_\_\_\_ tax per CD-Rom drive is levied on imported CD-Rom drives.

- A) no  
 B) a \$10  
 C) a \$15  
 D) a \$25

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

9) Refer to Figure 4.5. The price of CD-Rom drives in the United States would be \$15 per CD-Rom drive, and the United States would import 9 million CD-Rom drives if the United States imposed \_\_\_\_\_ tax per CD-Rom drive on imported CD-Rom drives.

- A) no  
 B) a \$10  
 C) a \$15  
 D) a \$25

Answer: A

Diff: 1

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

10) Refer to Figure 4.5. Assume that initially there is free trade. The quantity demanded of CD-Rom drives will be reduced by 3 million CD-Rom drives if the United States imposes \_\_\_\_\_ tax per CD-Rom drive on imported CD-Rom drives.

- A) no                      B) a \$10                      C) a \$15                      D) a \$25

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

11) Refer to Figure 4.5. Assume that initially there is free trade. The quantity of CD-Rom drives supplied by U.S. firms will increase by 3 million CD-Rom drives if the United States then imposes \_\_\_\_\_ tax per CD-Rom drive on imported CD-Rom drives.

- A) no                      B) a \$10                      C) a \$15                      D) a \$25

Answer: B

Diff: 2

Topic: Supply and Demand Analysis

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

1) A U.S. import fee on steel would reduce imports and lower the price of U.S. steel products.

Answer: FALSE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

2) A U.S. import fee on steel would increase the domestic quantity demanded of steel.

Answer: FALSE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking

3) A U.S. import fee on steel would increase the domestic quantity supplied of steel.

Answer: TRUE

Diff: 2

Topic: Supply and Demand Analysis

Skill: Conceptual

AACSB: Reflective Thinking



Refer to the information provided in Figure 4.6 below to answer the questions that follow.  
Equilibrium in this market occurs at the intersection of curves S and D.

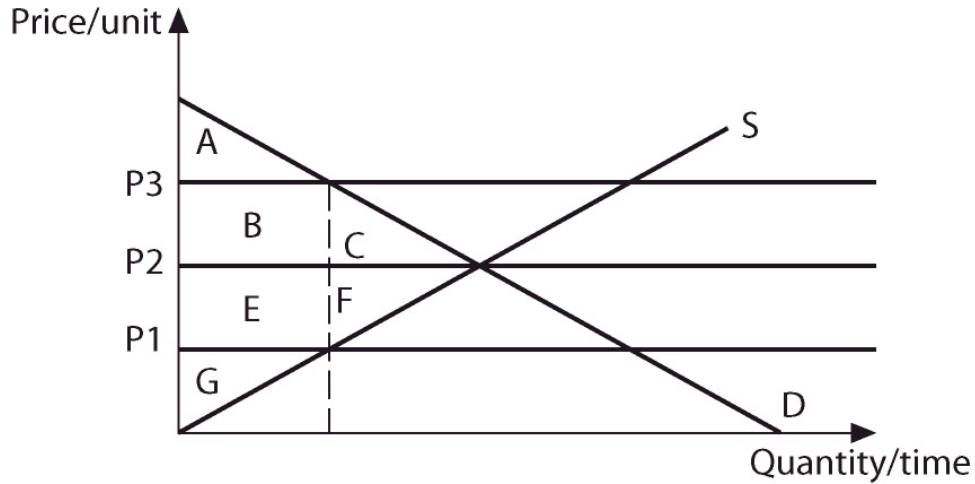


Figure 4.6

- 5) In figure 4.6 the area of [A + B + C] represents
- producer surplus.
  - consumer surplus.
  - consumer surplus plus producer surplus.
  - consumer surplus minus producer surplus.

Answer: B

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 6) In figure 4.6 the area of [E + F + G] represents
- producer surplus.
  - consumer surplus.
  - consumer surplus plus producer surplus.
  - consumer surplus minus producer surplus.

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 7) In figure 4.6, consumer surplus is area [A + B + E] if price is
- P1.
  - P2.
  - P3.
  - above P3.

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 8) In figure 4.6, producer surplus is area G if price is  
A) below P1.                      B) P1.                      C) P2.                      D) P3.

Answer: B

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 9) In figure 4.6 the deadweight loss due to under production is area [C + F] if price is  
A) P1.                      B) P2.                      C) P3.                      D) > P3.

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 10) In figure 4.6 producer surplus changes by the area [E + F] if price goes from equilibrium to  
A) P1.                      B) P3.                      C) < P1.                      D) > P3.

Answer: A

Diff: 3

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 11) In figure 4.6 consumer surplus changes by the area [E - C] if price goes from equilibrium to  
A) P1.                      B) P3.                      C) < P1.                      D) > P3.

Answer: A

Diff: 3

Topic: Supply and Demand and Market Efficiency

Skill: Analytic

AACSB: Analytic Skills

- 12) The total of consumer plus producer surplus is \_\_\_\_\_ at the market equilibrium.  
A) greatest                      B) smallest                      C) zero                      D) negative

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Conceptual

AACSB: Reflective Thinking

- 13) A deadweight loss occurs \_\_\_\_\_ in a market.  
A) only when there is overproduction  
B) only when there is underproduction  
C) when there is efficient production  
D) when there is underproduction or overproduction

Answer: A

Diff: 2

Topic: Supply and Demand and Market Efficiency

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Producer surplus is the difference between the most a person is willing to pay and market price.

Answer: FALSE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Definition*

- 2) Producer surplus describes a situation in which there is excess quantity demanded.

Answer: FALSE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Definition*

- 3) If someone is willing to pay \$800 to go to the World Cup but can buy a ticket for \$500, they will get \$300 in consumer surplus.

Answer: TRUE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 4) A firm that sells a motorcycle for \$15,000 also gets producer surplus of \$15,000.

Answer: FALSE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) The total of consumer plus producer surplus is at a minimum at the market equilibrium.

Answer: FALSE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) The total of producer and consumer surplus is maximized when there is overproduction.

Answer: FALSE

Diff: 2

Topic: *Supply and Demand and Market Efficiency*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

# Chapter 5 Elasticity

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## 5.1 Price Elasticity of Demand

### 1 Multiple Choice

Refer to the information provided in Figure 5.1 below to answer the questions that follow.

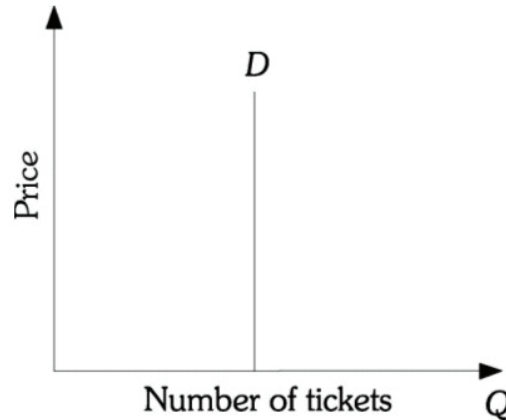


Figure 5.1

1) Refer to Figure 5.1. The demand for tickets is

- A) perfectly price elastic.
- C) unit price elastic.

- B) perfectly price inelastic.
- D) perfectly income inelastic.

Answer: B

Diff: 1

Topic: Price Elasticity of Demand

Skill: Fact

2) Demand determines price entirely when

- A) demand is downward sloping.
- C) supply is perfectly inelastic.

- B) demand is perfectly inelastic.
- D) supply is perfectly elastic.

Answer: C

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

3) For perfectly price inelastic supply

- A) supply determines price solely.
- B) demand determines price solely.
- C) only a government can set the price.
- D) either supply or demand may set the price.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Definition





- 10) When the price of coffee increases 5%, quantity demanded decreases 10%. The price elasticity of demand for coffee is \_\_\_\_\_ and total revenue from coffee sales will \_\_\_\_\_ .
- A) inelastic; increase  
B) inelastic; decrease  
C) elastic; increase  
D) elastic; decrease

Answer: D

Diff: 2

Topic: Price Elasticity of Demand

Skill: Definition

- 11) The ABC Computer Company wants to increase the quantity of computers it sells by 5%. If the price elasticity of demand is -2.5, the company must
- A) increase price by 2.0%.  
B) decrease price by 2.0%.  
C) increase price by 0.5%.  
D) decrease price by 0.5%.

Answer: B

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

- 12) A government wants to reduce electricity consumption by 10%. The price elasticity of demand for electricity is -5. The government must \_\_\_\_\_ the price of electricity by \_\_\_\_\_.
- A) raise; 2.0%  
B) raise; 0.5%  
C) raise; 1.25%  
D) lower; 0.5%

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

- 13) A government wants to reduce electricity consumption by 5%. The price elasticity of demand for electricity is -0.5. The government must \_\_\_\_\_ the price of electricity by \_\_\_\_\_.
- A) raise; 10.0%  
B) raise; 1.0%  
C) raise; 0.1%  
D) lower; 0.5%

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

- 14) The price elasticity of demand for bottled water in Texas is -2, and the price elasticity of demand for bottled water in California is -0.5. In other words, demand in Texas is \_\_\_\_\_ and demand in California is \_\_\_\_\_.
- A) elastic; inelastic  
B) inelastic; elastic  
C) elastic; unit elastic  
D) inelastic; unit inelastic

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Conceptual

- 15) An increase in demand caused no change in the equilibrium price. Thus, supply must be
- A) perfectly inelastic.  
B) inelastic.  
C) elastic.  
D) perfectly elastic.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 16) The price elasticity of demand for heart transplants is perfectly inelastic. Thus, the price elasticity demand for heart transplants is  
 A) 0.0.                      B) 1.0.                      C) -1.0.                      D) -100.0.

Answer: A

Diff: 2

Topic: Price Elasticity of Demand

Skill: Analytic

- 17) If the supply of oranges is unit elastic, the price elasticity of supply of oranges is  
 A) 0.0.                      B) 1.0.                      C) -1.0.                      D) -100.0.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

## 5.2 Calculating Elasticities

### 1 Multiple Choice

Refer to the information provided in Figure 5.2 below to answer the questions that follow.

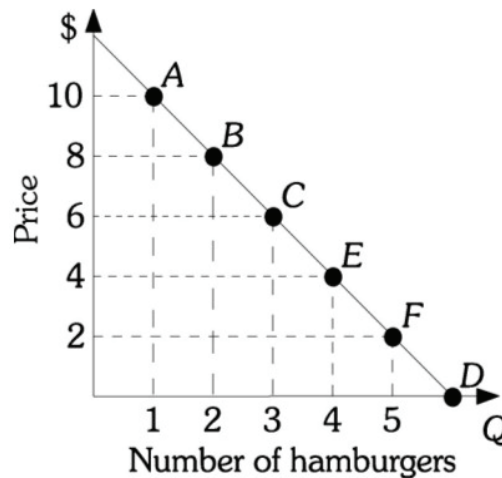


Figure 5.2

- 1) Refer to Figure 5.2. If the price of a hamburger is increased from \$8 to \$10, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.  
 A) -0.33                      B) -3.0                      C) -30.                      D) -300

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

2) Refer to Figure 5.2. If the price of a hamburger is increased from \$6 to \$8, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.

- A) -0.24                      B) -1.0                      C) -1.4                      D) -2.0

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

3) Refer to Figure 5.2. If the price of a hamburger is increased from \$2 to \$4, the price elasticity of demand equals \_\_\_\_\_. Use the midpoint formula.

- A) -0.33                      B) -2.0                      C) -3.0                      D) -5.0

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

4) Refer to Figure 5.2. At Point C the price elasticity of demand is -1. Along line segment EC of the demand curve, the demand is

- A) elastic.  
B) unit elastic.  
C) inelastic.  
D) either elastic or inelastic, depending on whether price increases or decreases.

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

5) Refer to Figure 5.2. At Point C the price elasticity of demand is -1. Along line segment AB of the demand curve, the demand is

- A) elastic.  
B) unit elastic.  
C) inelastic.  
D) either elastic or inelastic, depending on whether price increases or decreases.

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

Refer to the information provided in Figure 5.3 below to answer the questions that follow.

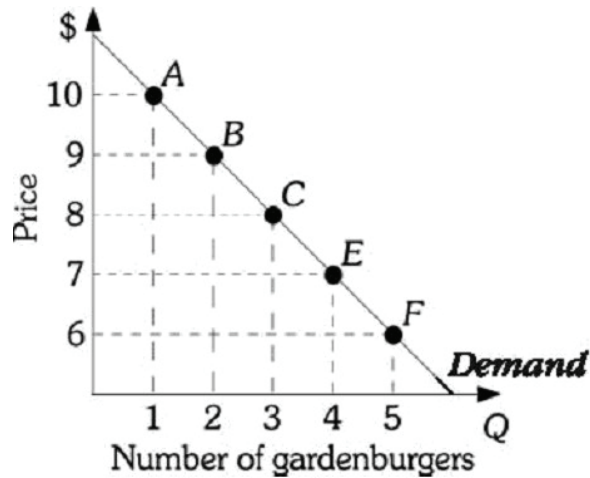


Figure 5.3

- 6) Refer to Figure 5.3. Use the midpoint formula. If the price of a gardenburger is increased from \$8 to \$10, the price elasticity of demand equals \_\_\_\_\_ and demand is \_\_\_\_\_ .
- A) 4.5; elastic      B) -0.5; inelastic      C) -4.5; elastic      D) -9.0; inelastic

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

- 7) Refer to Figure 5.3. Use the midpoint formula. If the price of a gardenburger is increased from \$6 to \$8, the price elasticity of demand equals \_\_\_\_\_ and demand is \_\_\_\_\_ .
- A) -0.57; inelastic      B) -1.75; elastic      C) -1.9; inelastic      D) -2.0; elastic

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

- 8) Refer to Figure 5.3. Using the midpoint formula, if the price of a gardenburger is decreased from \$7 to \$6, the price elasticity of demand equals \_\_\_\_\_ and the decrease results in a(n) \_\_\_\_\_ in total revenue.
- A) -.13; decrease      B) -.69; increase      C) -1.44; increase      D) -13; increase

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

9) The owner of a local hot dog stand has estimated that if he lowers the price of hot dogs from \$2.00 to \$1.50, he will increase sales from 400 to 500 hot dogs per day. Using the midpoint formula, the demand for hot dogs is

- A) elastic.
- B) inelastic.
- C) unit elastic.
- D) perfectly elastic.

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

10) At a price of \$11, quantity demanded is 90; and at a price of \$9, quantity demanded is 110. Since total revenue \_\_\_\_\_ by the price decrease, demand must be \_\_\_\_\_.

- A) is increased; elastic
- B) is decreased; inelastic
- C) is unchanged; unit elastic
- D) is unchanged; elastic

Answer: C

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

11) At a price of \$20, a store can sell 24 picture frames a day. At a price of \$18 the store can sell 33 picture frames a day. Since total revenue \_\_\_\_\_ by the price decrease, demand must be \_\_\_\_\_.

- A) is increased; elastic
- B) is increased; inelastic
- C) is increased; unit elastic
- D) is decreased; elastic

Answer: A

Diff: 2

Topic: Calculating Elasticities

Skill: Analytic

12) Price and total revenue move in inverse directions when demand is

- A) price elastic.
- B) price inelastic.
- C) unit price elastic.
- D) perfectly price inelastic.

Answer: A

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

13) Price and total revenue are directly related when demand is

- A) price elastic.
- B) price inelastic.
- C) unit price elastic.
- D) perfectly price elastic.

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

14) Total revenue decreases if price \_\_\_\_\_ and demand is \_\_\_\_\_.

- A) falls; elastic
- B) falls; inelastic
- C) rises; inelastic
- D) rises; unit elastic

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

- 15) Total revenue increases if price \_\_\_\_\_ and demand is \_\_\_\_\_.
- |                     |                        |
|---------------------|------------------------|
| A) falls; inelastic | B) falls; elastic      |
| C) rises; elastic   | D) rises; unit elastic |

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

Refer to the information provided in Figure 5.4 below to answer the questions that follow.

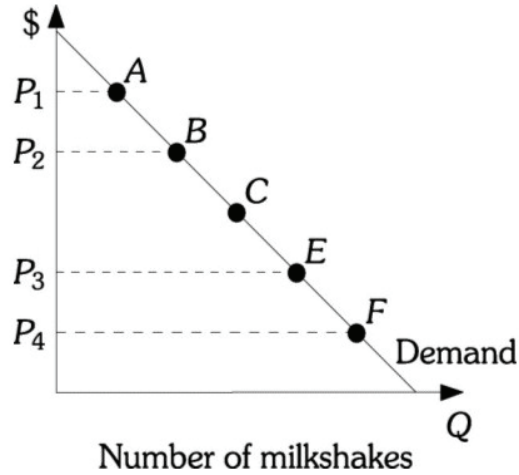


Figure 5.4

- 16) Refer to Figure 5.4. The demand for milkshakes is unit elastic at Point C. If a store reduces the price of a milkshake from  $P_3$  to  $P_4$ , its total revenue will
- |                     |                                 |
|---------------------|---------------------------------|
| A) increase.        | B) decrease.                    |
| C) remain constant. | D) either increase or decrease. |

Answer: B

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

- 17) Refer to Figure 5.4. The demand for milkshakes is unit elastic at Point C. If the milkshake price falls from  $P_1$  to  $P_2$ , total revenue will
- |                     |                                 |
|---------------------|---------------------------------|
| A) increase.        | B) decrease.                    |
| C) remain constant. | D) either increase or decrease. |

Answer: A

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

- 18) Refer to Figure 5.4. Along the given demand curve, which of the following is true?
- A) Demand is less elastic along the segment AB than the segment EF.
  - B) Demand is less elastic along the segment EF than the segment AB.
  - C) Since the demand curve is linear, the price elasticity of demand between each of the points (e.g. segment AB, segment BC, etc.) is the same.
  - D) It is impossible to tell with the given diagram.

Answer: B

Diff: 2

Topic: Calculating Elasticities

Skill: Fact

- 19) A firm is currently producing in the inelastic portion of its demand curve. What course of action do you recommend for it assuming it wants to raise revenue?
- A) Continue producing at the current output level, because it maximizes its total revenue by producing in the inelastic portion of its demand curve.
  - B) Reduce price, because if it reduces price and demand is inelastic, total revenue will increase.
  - C) Increase price, because if it increases price and demand is inelastic, total revenue will increase.
  - D) Continue selling at the same price, but increase the amount it produces.

Answer: C

Diff: 3

Topic: Calculating Elasticities

Skill: Conceptual

- 20) A firm is currently producing in the elastic portion of its demand curve. What course of action do you recommend for it assuming it wants to raise revenue?
- A) Continue producing at the current output level, because it maximizes its total revenue by producing in the elastic portion of its demand curve.
  - B) Reduce price, because if it reduces price and demand is elastic, total revenue will increase.
  - C) Increase price, because if it increases price and demand is elastic, total revenue will increase.
  - D) Continue selling at the same price, but increase the amount it produces.

Answer: B

Diff: 3

Topic: Calculating Elasticities

Skill: Conceptual

## 2 True/False

- 1) When the slope of a demand curve is constant, price elasticity of demand is constant as well.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

- 2) A demand curve with continuously changing slope over all quantity values can have a constant price elasticity of demand.  
Answer: TRUE  
Diff: 2  
Topic: *Calculating Elasticities*  
Skill: *Fact*
- 3) A demand curve with constant slope over all quantity values can have a continuously changing price elasticity of demand.  
Answer: TRUE  
Diff: 2  
Topic: *Calculating Elasticities*  
Skill: *Fact*
- 4) Price elasticity of demand is calculated using the change in quantity demanded and the change in price.  
Answer: FALSE  
Diff: 2  
Topic: *Price Elasticity of Demand*  
Skill: *Definition*
- 5) The price elasticity of demand is generally negative to reflect the indirect relationship between the quantity demanded of a good and its price.  
Answer: TRUE  
Diff: 2  
Topic: *Price Elasticity of Demand*  
Skill: *Definition*
- 6) Perfectly inelastic demand is graphed as a vertical line.  
Answer: TRUE  
Diff: 1  
Topic: *Price Elasticity of Demand*  
Skill: *Fact*
- 7) Perfectly elastic demand is graphed as a horizontal line.  
Answer: TRUE  
Diff: 1  
Topic: *Price Elasticity of Demand*  
Skill: *Fact*
- 8) A tax on a good whose demand is price elastic will be effective in discouraging consumption of that good.  
Answer: TRUE  
Diff: 1  
Topic: *Calculating Elasticities*  
Skill: *Fact*



9) If government officials are mainly interested in generating tax revenue, then they should tax goods for which demand is price elastic.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

10) How total revenue changes when a price changes can be predicted using price elasticity of demand.

Answer: TRUE

Diff: 2

Topic: Calculating Elasticities

Skill: Definition

11) When demand is elastic, an increase in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

12) When demand is elastic, a decrease in price will result in an increase in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

13) When demand is inelastic, an increase in price will result in an increase in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

14) When demand is inelastic, a decrease in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

15) When demand is unit elastic, an increase in price will result in an increase in total revenue.

Answer: FALSE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

16) When demand is unit elastic, a decrease in price will result in no change in total revenue.

Answer: TRUE

Diff: 1

Topic: Calculating Elasticities

Skill: Fact

## 5.3 The Determinants of Demand Elasticity

### 1 Multiple Choice

- 1) When there are more substitutes for a product, the \_\_\_\_\_ for the product is \_\_\_\_\_.  
A) demand; less price elastic  
B) demand; more price elastic  
C) income elasticity; greater  
D) income elasticity; smaller

Answer: B

Diff: 1

Topic: Determinants of Demand Elasticity

Skill: Fact

- 2) The more time that elapses, the  
A) less price elastic is the demand for the product.  
B) more price elastic is the demand for the product.  
C) greater the income elasticity of demand for a product.  
D) smaller the income elasticity of demand for the product.

Answer: B

Diff: 1

Topic: Determinants of Demand Elasticity

Skill: Fact

- 3) The determinants of elasticity include  
A) availability of substitutes.  
B) price relative to income.  
C) time.  
D) all of the above

Answer: D

Diff: 2

Topic: Determinants of Demand Elasticity

Skill: Definition

## 5.4 Other Important Elasticities

### 1 Multiple Choice

- 1) The income elasticity of demand  
A) measures the change in income necessary for a given change in quantity demanded.  
B) measures the responsiveness of income to changes in quantity demanded.  
C) measures the responsiveness of quantity demanded to changes in income.  
D) is the ratio of the percentage change in income to the percentage change in quantity demanded.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Definition

- 2) If income increases by 10% and, in response, the quantity of housing demanded increases by 7%, then the income elasticity of demand for housing is  
A) -0.7  
B) -1  
C) 0.7  
D) 1.43

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 3) The income elasticity of demand for education is 3.5. Thus, a 4% increase in income will
- A) decrease the quantity of education demanded by 3.5%.
  - B) decrease the quantity of education demanded by 14%.
  - C) increase the quantity of education demanded by 4%.
  - D) increase the quantity of education demanded by 14%.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 4) The income elasticity of demand for low-quality beef is -2. Thus, an 8% decrease in the quantity of low-quality beef demanded
- A) is the result of a decrease in income of 4%.
  - B) is the result of an increase in income of 0.25%.
  - C) is the result of an increase in income of 4%.
  - D) is unrelated to any change in income.

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 5) Assume you earn \$20,000 a year and your favorite sports magazine costs you \$100 a year. Your demand for the sports magazine is likely to be
- A) elastic.
  - B) inelastic.
  - C) perfectly elastic.
  - D) perfectly inelastic.

Answer: A

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

- 6) Assume you earn \$75,000 a year and your favorite entertainment magazine costs you \$25 a year. Your demand for the entertainment magazine is likely to be
- A) elastic.
  - B) inelastic.
  - C) perfectly elastic.
  - D) perfectly inelastic.

Answer: B

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

- 7) The ABC Computer Company spends a lot of money for advertising designed to convince you that their personal computers are superior to all other personal computers. If the ABC Company is successful, the demand for ABC personal computers
- A) and the demand for other firms' personal computers will become less price elastic.
  - B) and the demand for other firms' personal computers will become more price elastic.
  - C) will become more price elastic but the demand for other firms' personal computers will become less price elastic.
  - D) will become less price elastic but the demand for other firms' personal computers will become more price elastic.

Answer: D

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

- 8) A government is considering levying an alcohol tax to raise revenue to finance health care benefits. People for the tax argue that alcohol demand is price inelastic. Which of the following statements is TRUE?
- A) The alcohol tax may not raise as much revenue as anticipated in the years to come because alcohol demand is likely to become more elastic over time.
  - B) This is a very good way to raise revenue both in the short term and in the long term because there are no close substitutes for alcohol.
  - C) This tax will not raise much revenue either in the short term or the long term because demand is price inelastic.
  - D) No tax revenue can be raised in this way because alcohol sellers will just lower their price by the amount of the tax and therefore the consumer price of alcohol will not change.

Answer: A

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

- 9) In order to discourage consumers from eating unhealthy fast food, the government is considering placing a tax on all fast food sales. Which of the following statements is TRUE?
- A) Given the numerous alternatives, consumers' demand for fast food is relatively elastic and the tax will likely work to discourage fast food consumption.
  - B) The tax on fast food will likely raise considerable revenue, but will be unlikely to reduce the consumption of fast food by consumers.
  - C) The tax on fast food will likely increase the demand for homecooked meals.
  - D) Both (A) and (C) are true.

Answer: D

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

- 10) Suppose an increase of 10% in the price of steak reduces the consumption of steak by 30%. Such a price rise will induce households to spend
- A) less of their income on steak.
  - B) more of their income on steak.
  - C) the same amount on steak as before.
  - D) more on products that are complementary with steak.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 11) Cross-price elasticity of demand measures the response in the
- A) price of a good to a change in the quantity of another good demanded.
  - B) income of consumers to the change in the price of goods.
  - C) quantity of one good demanded when the quantity demanded of another good changes.
  - D) quantity of one good demanded to a change in the price of another good.

Answer: D

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 12) If the quantity demanded of tea increases by 2% when the price of coffee increases by 6%, the cross-price elasticity of demand between tea and coffee is
- A) -3.                      B) 0.33.                      C) 3.                      D) 12.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 13) If the quantity demanded of bagels decreases by 8% when the price of croissants decreases by 16%, the cross-price elasticity of demand between bagels and croissants is
- A) 0.5.                      B) -5.                      C) -2.                      D) 2.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 14) If the quantity demanded of peanut butter increases by 4% when the price of jelly decreases by 2%, the cross-price elasticity of demand between peanut butter and jelly is
- A) -4.                      B) -2.                      C) -0.5.                      D) 2.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 15) If the cross-price elasticity of demand between fish and chicken is 2, then a 2% increase in the price of fish will result in a \_\_\_\_\_ in the quantity of chicken demanded.
- A) 1% increase                      B) 4% increase                      C) 10% increase                      D) 20% decrease

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

- 16) The cross-price elasticity of demand between good X and good Y is -3. Given this information, which of the following statements is TRUE?

- A) The demand for goods X and Y is elastic.  
B) Goods X and Y are substitutes.  
C) Goods X and Y are complements.  
D) The demand for goods X and Y is income elastic.

Answer: C

Diff: 2

Topic: Other Important Elasticities

Skill: Conceptual

- 17) The cross-price elasticity of demand between good X and good Y is 0.5. Given this information, which of the following statements is TRUE?
- A) The demand for goods X and Y is inelastic.
  - B) Goods X and Y are substitutes.
  - C) Goods X and Y are complements.
  - D) The demand for goods X and Y is income inelastic.

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Conceptual

Refer to the information provided in Figure 5.5 below to answer the question that follows.

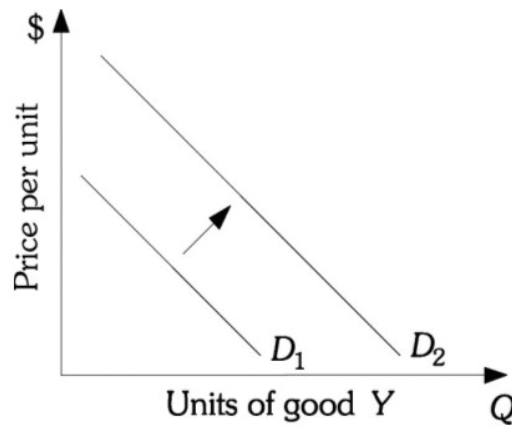


Figure 5.5

- 18) Refer to Figure 5.5. As the price of W increased, the demand for Y shifted from  $D_1$  to  $D_2$ . The cross-price elasticity of demand between W and Y is
- A) positive.
  - B) negative.
  - C) zero.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

- 19) In output markets, the elasticity of supply tends to be
- A) negative.
  - B) zero.
  - C) positive.
  - D) decreasing at an increasing rate.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

- 20) If the elasticity of labor supply is positive, the labor-supply curve would be
- A) horizontal.
  - B) vertical.
  - C) downward sloping.
  - D) upward sloping.

Answer: D

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

Refer to the information provided in Figure 5.6 below to answer the question that follows.

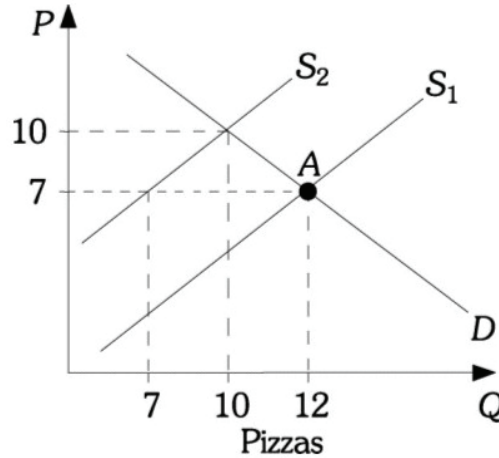


Figure 5.6

- 21) Refer to Figure 5.6. The market is initially in equilibrium at Point A (where price = \$7 and quantity = 12 thousand pizzas) and supply shifts from  $S_1$  to  $S_2$ . Which of the following statements is TRUE?
- A) Price will still serve as a rationing device causing quantity supplied to exceed 12 thousand pizzas.
  - B) There is no need for price to serve as a rationing device in this case because the new equilibrium quantity exceeds the original equilibrium quantity.
  - C) Price will still serve as a rationing device causing quantity demanded to fall from 12 to 10 thousand pizzas.
  - D) The market cannot move to a new equilibrium until there is also a change in supply.

Answer: C

Diff: 1

Topic: Other Important Elasticities

Skill: Fact

- 22) At a price of \$4, quantity supplied is 100; and at a price of \$6, quantity supplied is 120. Using the midpoint formula, the price elasticity of supply is \_\_\_\_\_ and supply is \_\_\_\_\_.
- A) 0.1; inelastic
  - B) 0.45; inelastic
  - C) 2.2; elastic
  - D) 10; elastic

Answer: B

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

23) A mass transit authority charges bus fares of \$1.25 during morning rush hours but only \$1.00 during late morning non-rush hours. Economists explain the fare difference by the fact that the demand for bus rides during the morning rush hours is \_\_\_\_\_ but during the late morning it is \_\_\_\_\_.

- A) more elastic; more inelastic  
C) more inelastic; more elastic

- B) perfectly elastic; perfectly inelastic  
D) unit elastic; relatively inelastic

Answer: C

Diff: 3

Topic: Other Important Elasticities

Skill: Conceptual

## 2 True/False

1) A positive cross-price elasticity between two goods implies that the two goods are substitutes.

Answer: TRUE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

2) A positive cross-price elasticity between two goods implies that the two goods are compliments.

Answer: FALSE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition

3) Inferior goods will experience increasing demand when incomes increase.

Answer: FALSE

Diff: 2

Topic: Other Important Elasticities

Skill: Analytic

4) If a group has a negative elasticity of labor supply (above some income level), then continued increases in wages will result in decreases in the quantity of labor supplied.

Answer: TRUE

Diff: 2

Topic: Other Important Elasticities

Skill: Definition



# Chapter 6 Household Behavior and Consumer Choice

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## 6.1 Household Choice in Open Market

### 1 Multiple Choice

- 1) Jane has \$500 a week to spend on clothing and food. The price of clothing is \$25 and the price of food is \$10. The clothing and food pairs in Jane's choice set include \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 50; 50                      B) 20; 50                      C) 15; 25                      D) 8; 30

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 2) Jane has \$500 a week to spend on clothing and food. The price of clothing is \$25 and the price of food is \$10. Jane spends her entire income when she purchases \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 10; 10                      B) 25; 5                      C) 12; 20                      D) 16; 8

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 3) Jim has \$600 a week to spend on clothing and food. The price of clothing is \$30 and the price of food is \$5. The clothing and food pairs in Jim's choice set include \_\_\_\_\_ units of clothing and \_\_\_\_\_ units of food.

A) 20; 50                      B) 15; 70                      C) 10; 60                      D) 0; 200

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 4) Jane has \$500 a week to spend on clothing ( $c$ ) and food ( $f$ ). The price of clothing is \$25 and the price of food is \$10. What is the equation for Jane's budget constraint?

A) Clothing + Food < \$500                      B)  $25 \times \text{Clothing} + 10 \times \text{Food} \geq 500$   
C)  $(25 \times \text{Clothing}) / (10 \times \text{Food}) = 500$                       D)  $25 \times \text{Clothing} + 10 \times \text{Food} = 500$

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 5) Ted has \$600 a week to spend on clothing ( $c$ ) and food ( $f$ ). The price of clothing is \$30 and the price of food is \$5. What is the equation for Ted's budget constraint?

A) Clothing + Food < \$600                      B)  $30 \times \text{Clothing} + 5 \times \text{Food} \leq 600$   
C)  $30 \times \text{Clothing} + 5 \times \text{Food} > 600$                       D)  $30 \times \text{Clothing} + 5 \times \text{Food} = 600$

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

Refer to the information provided in Figure 6.1 below to answer the questions that follow.

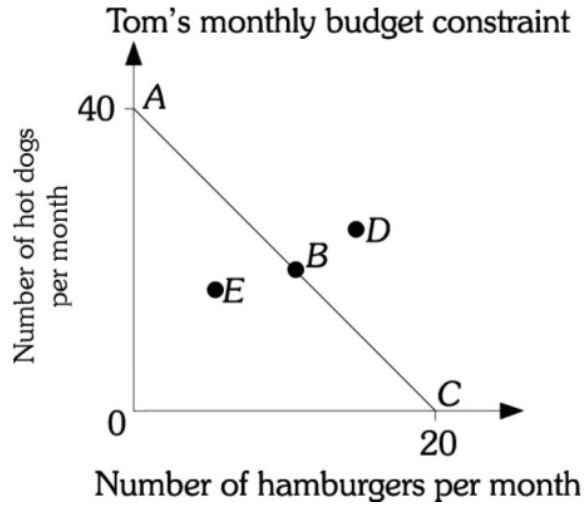


Figure 6.1

- 6) Refer to Figure 6.1. Assume Tom is on budget constraint  $AC$  and the price of a hamburger is \$4.00. Tom's monthly income is
- A) \$20.                      B) \$60.                      C) \$80.                      D) \$100.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 7) Refer to Figure 6.1. Assume Tom is on budget constraint  $AC$  and the price of a hot dog is \$2.00. Tom's monthly income is
- A) \$40.                      B) \$60.                      C) \$80.                      D) \$100.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 8) Refer to Figure 6.1. The slope of budget constraint  $AC$  is
- A) -5.0.  
B) -2.0.  
C) -0.5.  
D) indeterminate from this information because prices are not given.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

9) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . He does not spend his entire income at point

- A)  $A$ .                                      B)  $B$ .                                      C)  $D$ .                                      D)  $E$ .

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

10) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . Given his current monthly income he cannot purchase the bundle of goods at point

- A)  $A$ .                                      B)  $B$ .                                      C)  $E$ .                                      D)  $D$ .

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

11) Refer to Figure 6.1. Assume Tom's budget constraint is  $AC$ . At which point does Tom consume only hot dogs?

- A)  $A$ .                                      B)  $B$ .                                      C)  $E$ .                                      D)  $D$ .

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

12) Refer to Figure 6.1. Along budget constraint  $AC$ , the opportunity cost of one hamburger

- A) is  $1/4$  of a hot dog.  
B) is  $1/2$  of a hot dog.  
C) is 2 hot dogs.  
D) changes as you move down along the budget constraint.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

13) Refer to Figure 6.1. Along budget constraint  $AC$ , the opportunity cost of one hot dog

- A) is  $1/4$  of a hamburger.  
B) is  $1/2$  of a hamburger.  
C) is 2 hamburgers.  
D) changes as you move down along the budget constraint.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

14) Refer to Figure 6.1. Tom's budget constraint is  $AC$ . His choice set includes all points

- A) to the right of budget constraint  $AC$ .                                      B) bounded by the area  $OAC$ .  
C) along budget constraint  $AC$ .                                      D) along the vertical and horizontal axes.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 15) Refer to Figure 6.1.  $AC$  represents Tom's budget constraint. Point  $D$  then represents a point that is
- A) an available option, as Tom is just spending all of his income.
  - B) available, but at which he does not spend all his income.
  - C) not available because it represents a combination of hamburgers and hot dogs that he cannot purchase with his income.
  - D) in his opportunity set but not on his budget constraint.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

Refer to the information provided in Figure 6.2 below to answer the questions that follow.

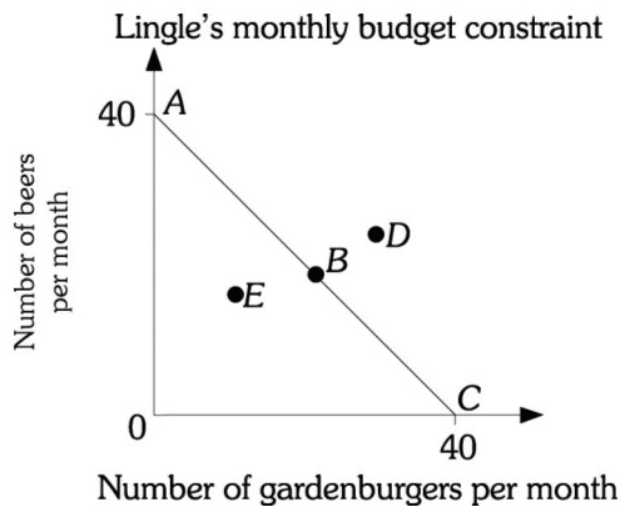


Figure 6.2

- 16) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint  $AC$ . If the price of a gardenburger is \$6, Mr. Lingle's monthly income is
- A) \$24.
  - B) \$60.
  - C) \$200.
  - D) \$240.
- 17) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint  $AC$ . If the price of a beer is \$5, Mr. Lingle's monthly income is
- A) \$40.
  - B) \$80.
  - C) \$100.
  - D) \$200.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 18) Refer to Figure 6.2. The slope of budget constraint  $AC$  is
- A)  $-1/2$ .
  - B)  $-1$ .
  - C)  $-2$ .
  - D) indeterminate from this information because prices are not given.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 19) Refer to Figure 6.2. Assume Mr. Lingle's budget constraint is  $AC$ . He will not spend his entire income at point
- A) A.
  - B) B.
  - C) D.
  - D) E.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 20) Refer to Figure 6.2. Assume Mr. Lingle's budget is  $AC$ . Given his current monthly income he cannot purchase the quantities of the two goods at point
- A) A.
  - B) B.
  - C) D.
  - D) E.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 21) Refer to Figure 6.2. Assume Mr. Lingle's budget is  $AC$ . At which point does Mr. Lingle spend exactly his income?
- A) A.
  - B) D.
  - C) E.
  - D) The answer cannot be determined with the given information.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 22) Refer to Figure 6.2. Along budget constraint  $AC$ , the opportunity cost of one gardenburger is
- A)  $1/4$  of a beer.
  - B) a beer.
  - C) 2 beers.
  - D) changing as Mr. Lingle moves down his budget constraint.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 23) Refer to Figure 6.2. Along budget constraint *AC*, the opportunity cost of one beer is
- A) 1/4 of a gardenburger.
  - B) 1 gardenburger.
  - C) 2 gardenburgers.
  - D) changing as Mr. Lingle moves down his budget constraint.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 24) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. His choice set is all points
- A) in the area bounded by *OAC*.
  - B) to the right of budget constraint *AC*.
  - C) along budget constraint *AC*.
  - D) along the vertical and horizontal axes.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 25) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. Point *E* is
- A) an available option and Mr. Lingle exactly spends all of his income.
  - B) an available option and Mr. Lingle does not spend all of his income.
  - C) not in Mr. Lingle's opportunity set but is on his budget constraint.
  - D) not available because it represents a combination of gardenburgers and beer that Mr. Lingle cannot purchase with his current income.

Answer: B

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

- 26) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. Point *C* is
- A) an available option and Mr. Lingle exactly spends all of his income.
  - B) an available option and Mr. Lingle does not spend all of his income.
  - C) not in Mr. Lingle's opportunity set but is on his budget constraint.
  - D) not available because it represents a combination of gardenburgers and beer that Mr. Lingle cannot purchase with his current income.

Answer: A

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

Refer to the information provided in Figure 6.3 below to answer the questions that follow.

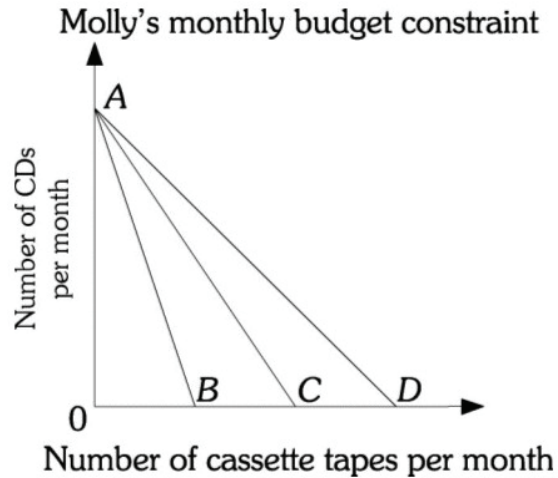


Figure 6.3

- 27) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . It would swivel to  $AD$  if the price of
- A) cassette tapes increased.
  - B) cassette tapes decreased.
  - C) CDs increased.
  - D) CDs decreased.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 28) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . It would swivel to  $AB$  if the price of
- A) cassette tapes increased.
  - B) cassette tapes decreased.
  - C) CDs increased.
  - D) CDs decreased.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 29) Refer to Figure 6.3. Molly's budget constraint is  $AC$ . Molly can purchase
- A) none of the points along  $AD$ .
  - B) all of the points along  $AB$ .
  - C) all of the points along  $BD$ .
  - D) None of the above.

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

Refer to the information provided in Figure 6.4 below to answer the questions that follow.

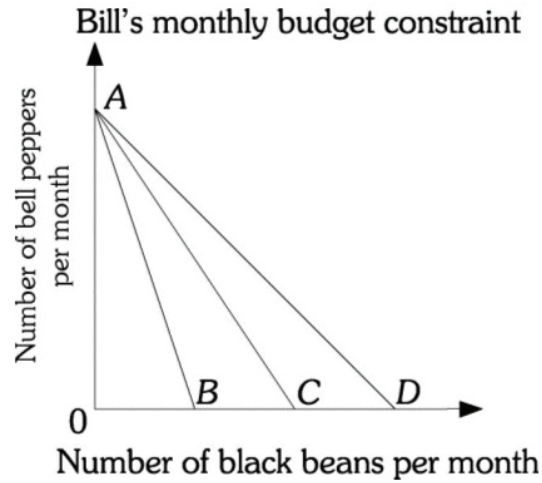


Figure 6.4

- 30) Refer to Figure 6.4. Bill's budget constraint is AC. If the black bean price decreases, Bill's budget constraint will be
- A) AO.                      B) AB.                      C) AC.                      D) AD.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 31) Refer to Figure 6.4. Bill's budget constraint is AC. If the bell peppers price increases, Bill's budget constraint will be
- A) AB.  
B) AC.  
C) AD.  
D) The budget constraint is not depicted on the diagram.

Answer: D

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 32) Refer to Figure 6.4. Bill's budget constraint is AC. His budget constraint would shift to AB if the price of
- A) black beans increased.                      B) black beans decreased.  
C) bell peppers increased.                      D) bell peppers decreased.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic



- 33) If a household's income doubles, its budget constraint will
- A) shift out parallel to the old one.                      B) pivot at the Y-intercept.  
 C) shift in parallel to the old one.                      D) be unaffected.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

- 34) If a household's income falls by 10%, its budget constraint will
- A) shift out parallel to the old one.                      B) pivot at the Y-intercept.  
 C) shift in parallel to the old one.                      D) be unaffected.

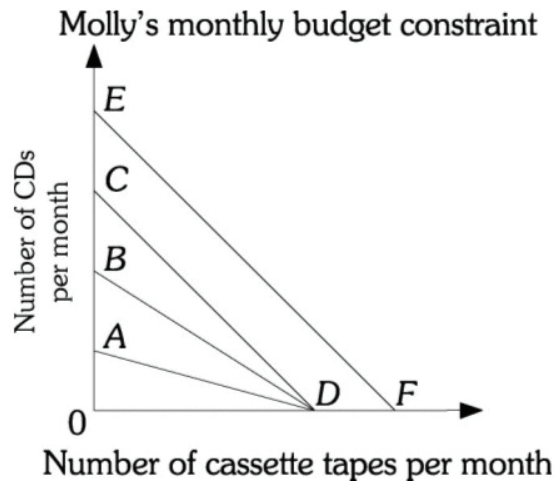
Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

Refer to the information provided in Figure 6.5 below to answer the questions that follow.



**Figure 6.5**

- 35) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . If the price of CDs decreases, her new budget constraint becomes
- A)  $AD$ .                      B)  $AO$ .                      C)  $CD$ .                      D)  $EF$ .

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 36) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . If the price of CDs increases, her new budget constraint becomes
- A)  $AD$ .                      B)  $AO$ .                      C)  $CD$ .                      D)  $EF$ .

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 37) Refer to Figure 6.5. Molly's budget constraint is  $CD$ . If her income increases, her new budget constraint is
- A)  $AD$ .
  - B)  $BD$ .
  - C)  $EF$ .
  - D) not shown on this graph.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 38) Refer to Figure 6.5. Molly's budget constraint is  $EF$ . If her income decreases while the price of the goods are unchanged, her new budget constraint is
- A)  $AD$ .
  - B)  $BD$ .
  - C)  $CD$ .
  - D) not shown on this graph.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 39) Refer to Figure 6.5. Molly's budget constraint is  $EF$ . If her income decreases and the price of CDs increases, her new budget constraint is
- A)  $CD$ .
  - B)  $BD$ .
  - C)  $AD$ .
  - D) Both (B) or (C) are correct.

Answer: D

Diff: 3

Topic: Household Choices in Output Markets

Skill: Analytic

- 40) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . Molly's income is \$400, the price of a cassette tape is \$15 and the price of a CD is \$20. At point  $B$  the consumer is buying \_\_\_\_\_ cassette tapes and \_\_\_\_\_ CDs.
- A) 0;20
  - B) 20;0
  - C) 20; 15
  - D) 40; 30

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

- 41) Refer to Figure 6.5. Molly's budget constraint is  $BD$ . Molly's income is \$375, the price of a cassette tape is \$15 and the price of a CD is \$25. At point  $D$  the consumer is buying \_\_\_\_\_ cassette tapes and \_\_\_\_\_ CDs.
- A) 0;15
  - B) 25;0
  - C) 25; 15
  - D) 50; 30

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

Refer to the information provided in Figure 6.6 below to answer the questions that follow.

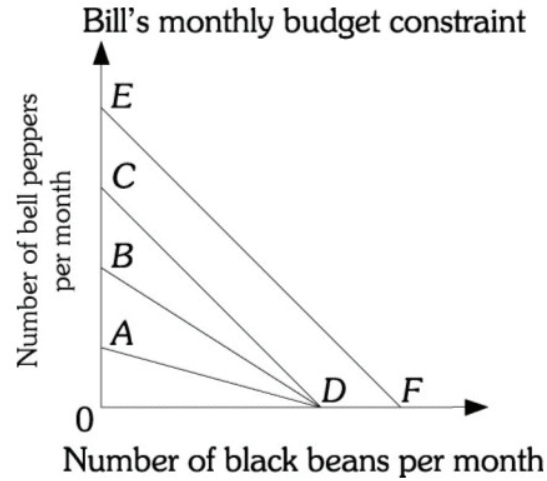


Figure 6.6

- 42) Refer to Figure 6.6. Bill's budget constraint was originally  $CD$ . If his new budget constraint is  $EF$ , then his income
- A) increased.
  - B) decreased.
  - C) did not change but the price of black beans decreased.
  - D) did not change but the price of black beans increased.

Answer: A

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

- 43) Refer to Figure 6.6. Bill's budget constraint was originally  $AD$ . If his new budget constraint is  $EF$ , then his income
- A) increased.
  - B) decreased.
  - C) increased and the price of bell peppers decreased.
  - D) decreased and the price of bell peppers increased.

Answer: C

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

- 44) Refer to Figure 6.6. Bill's budget constraint is  $BD$ . If the price of bell peppers increases, Bill's new budget constraint is
- A)  $AD$ .
  - B)  $AO$ .
  - C)  $CD$ .
  - D)  $EF$ .

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

45) Refer to Figure 6.6. Bill's budget constraint is  $BD$ . Bill's income is \$800, the price of a bell pepper is \$1, and the price of a bag of black beans is \$1. At point B Bill is buying \_\_\_\_\_ bell peppers and \_\_\_\_\_ bags of black beans.

- A) 0; 800                      B) 800; 0                      C) 400; 400                      D) 600; 200

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

46) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and so does Michael's money income, we can deduce that Michael's budget constraint will

- A) shift in but remain parallel to the old one.  
B) shift out but remain parallel to the old one.  
C) swivel in so that the slope of the budget constraint is doubled.  
D) remain unchanged.

Answer: D

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

47) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and Michael's money income triples, we can deduce that Michael's budget constraint will

- A) shift in but remain parallel to the old one.  
B) shift out but remain parallel to the old one.  
C) swivel in so that the slope of the budget constraint is doubled.  
D) remain unchanged.

Answer: B

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

48) Price decreases will \_\_\_\_\_ a household's choice set.

- A) increase  
B) decrease  
C) not change  
D) sometimes increase and other times decrease

Answer: A

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

49) A car's real cost is its opportunity cost. Opportunity cost is determined by

- A) the price of the car.  
B) relative prices.  
C) wealth.  
D) the prices of the goods that are compliments to a car.

Answer: B

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

Refer to the information provided in Figure 6.7 below to answer the questions that follow.

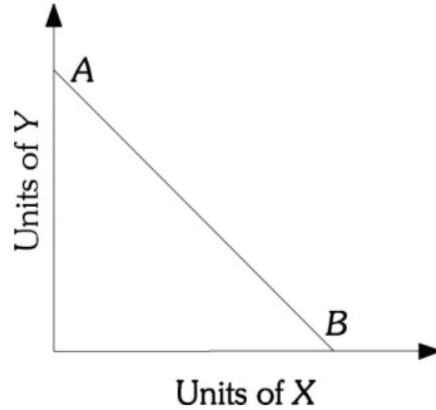


Figure 6.7

- 50) Refer to Figure 6.7. Along budget constraint  $AB$ , the price of good  $X$  is \$10 and the price of good  $Y$  is \$12. If the price of  $X$  increases to \$15, the budget constraint will
- A) pivot in at point  $B$ .
  - B) pivot out at point  $A$ .
  - C) shift in parallel to  $AB$ .
  - D) pivot in at point  $A$ .

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Analytic

## 2 True/False

- 1) When the price of a good increases, the budget constraint does not change.

Answer: FALSE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 2) When the price of a good decreases, the budget constraint shifts out parallel to the original budget constraint.

Answer: FALSE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

- 3) Assuming a perfectly competitive market implies that households have perfect knowledge of quantities and prices of everything available in the market.

Answer: TRUE

Diff: 1

Topic: Household Choices in Output Markets

Skill: Fact

4) Homogeneous products are distinguishable from each other.

Answer: FALSE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Definition

5) Price increases cause a decrease in a household's choice set.

Answer: TRUE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Fact

6) Income increases cause an increase in a household's choice set.

Answer: TRUE

Diff: 2

Topic: Household Choices in Output Markets

Skill: Fact

## 6.2 The Basis of Choice: Utility

### 1 Multiple Choice

1) Marginal utility is the \_\_\_\_\_ satisfaction gained by consuming \_\_\_\_\_ of a good.

A) total; all units

B) total; one more unit

C) additional; all units

D) additional; one more unit

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Definition

2) Kathy eats five slices of pizza on a Saturday night but admits each slice of pizza doesn't taste as good as the previous one. This suggests that for Kathy the

A) marginal utility of a slice of pizza is positive but decreasing.

B) marginal utility of a slice of pizza is negative.

C) total utility of slices of pizza is declining.

D) total utility of slices of pizza is increasing by larger and larger increments.

Answer: A

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Conceptual

Refer to the information provided in Figure 6.8 below to answer the questions that follow.

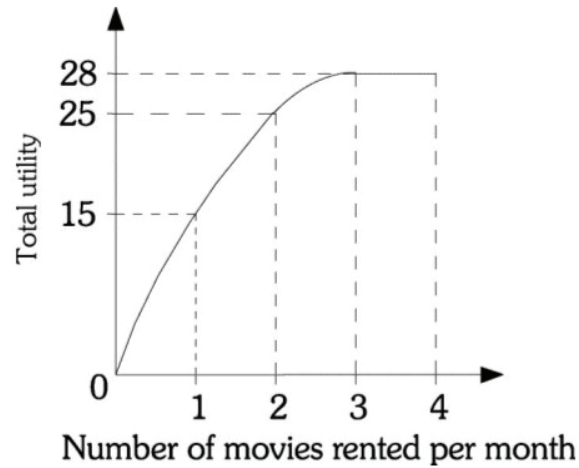


Figure 6.8

3) Refer to Figure 6.8. The marginal utility of the first movie rental is

- A) 0.                      B) 15.                      C) 25.                      D) 40.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

4) Refer to Figure 6.8. The marginal utility of the fourth movie rental is

- A) 0.                      B) 3.                      C) 25.                      D) 28.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

5) Refer to Figure 6.8. The \_\_\_\_\_ movie rental has a marginal utility of zero.

- A) first                      B) second                      C) third                      D) fourth

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

6) Refer to Figure 6.8. The total utility of the third movie is \_\_\_\_\_ and its marginal utility is \_\_\_\_\_.

- A) 15; 0                      B) 25; 10                      C) 28; 3                      D) 28; 0

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 7) The law of diminishing marginal utility is effective when marginal utility is  
 A) positive and increasing.                      B) positive and decreasing.  
 C) initially zero and then increasing.        D) initially zero and then decreasing.

Answer: B

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Analytic

Refer to the information provided in Figure 6.9 below to answer the questions that follow.

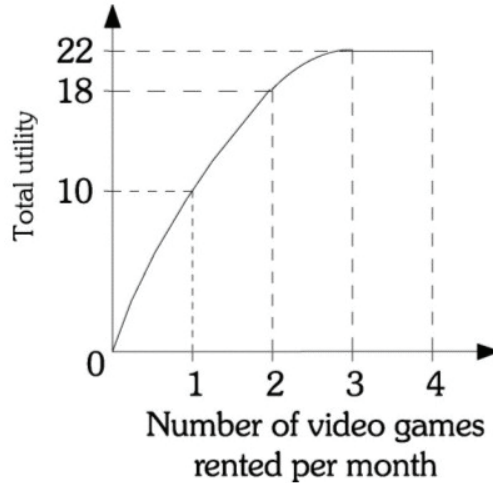


Figure 6.9

- 8) Refer to Figure 6.9. The marginal utility of the second video game rental is  
 A) 8.                      B) 10.                      C) 25.                      D) 40.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 9) Refer to Figure 6.9. The marginal utility of the fourth video game rental is  
 A) 0.                      B) 4.                      C) 8.                      D) 22.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 10) Refer to Figure 6.9. The \_\_\_\_\_ video game rental has a marginal utility of zero.  
 A) first                      B) second                      C) third                      D) fourth

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic



Refer to the information provided in Table 6.1 below to answer the questions that follow.

Table 6.1

Number of Hamburgers per Day	Total Utility	Marginal Utility
1	30	
2	52	
3	67	
4	76	
5		4
Number of Sodas per Day	Total Utility	Marginal Utility
1	20	
2	35	
3	47	
4	57	
5		7

- 11) Refer to Table 6.1. The marginal utility of the second hamburger per day is  
 A) 10.                                      B) 15.                                      C) 22.                                      D) 52.

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 12) Refer to Table 6.1. The marginal utility of the third hamburger per day is  
 A) 5.                                              B) 15.                                              C) 22.                                              D) 67.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 13) Refer to Table 6.1. Diminishing marginal utility sets in after the \_\_\_\_\_ soda per day.  
 A) first                                              B) second                                              C) third                                              D) fourth

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 14) Refer to Table 6.1. The total utility of five hamburgers per day is  
 A) 76.                                              B) 80.  
 C) 96.                                              D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 15) Refer to Table 6.1. The total utility of five sodas per day is
- A) 35.
  - B) 64.
  - C) 92.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

- 16) Refer to Table 6.1. If the price of a soda is \$2, the price of a hamburger is \$6, and George has \$14 of income, George's utility maximizing combination of sodas and hamburgers per day is
- A) 1 soda and 2 hamburgers.
  - B) 4 sodas and 1 hamburger.
  - C) 3 sodas and 1.5 hamburgers.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

- 17) Refer to Table 6.1. Assume that a store is giving hamburgers and sodas away for free. Consumers can have as many sodas and hamburgers as they want, but the food has to be consumed one unit at a time. If George has already had one soda and two hamburgers, then George should
- A) next consume a soda to maximize his utility.
  - B) next consume a hamburger to maximize his utility.
  - C) be indifferent between consuming the second soda or the third hamburger.
  - D) consume neither another soda nor another hamburger to maximize his utility.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

Refer to the information provided in Table 6.2 below to answer the questions that follow.

Table 6.2

Number of Candy Bars per Day	Total Utility	Marginal Utility
1	40	
2	75	
3	100	
4	115	
5		5
Number of Hot Dogs per Day	Total Utility	Marginal Utility
1	30	
2	54	
3	72	
4	84	
5		6

- 18) Refer to Table 6.2. The marginal utility of the second candy bar per day is  
 A) 10.                                      B) 15.                                      C) 35.                                      D) 55.

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 19) Refer to Table 6.2. Diminishing marginal utility sets in after the \_\_\_\_\_ candy bar per day.  
 A) first                                      B) second                                      C) third                                      D) fourth

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 20) Refer to Table 6.2. The total utility of five candy bars per day is  
 A) 115.                                      B) 120.  
 C) 130.                                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 21) Refer to Table 6.2. If the price of a candy bar is \$1, the price of a hot dog is \$2, and Aaron has \$6 of income, Aaron's utility maximizing combination of sodas and hamburgers per day is  
 A) 1 candy bar and 2 hot dogs.                                      B) 4 candy bars and 1 hot dog.  
 C) 2 candy bars and 1.5 hot dogs.                                      D) indeterminate from this information.

Answer: B

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Analytic

- 22) Richard is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 6$  and  $MU_y/P_y = 10$ . To maximize utility, he should
- A) continue to consume the same amount of X and Y since he is already maximizing utility.
  - B) consume less of both X and Y.
  - C) consume more X and less Y.
  - D) consume less X and more Y.

Answer: D

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 23) Jon is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 8$  and  $MU_y/P_y = 4$ . To maximize utility, he should consume
- A) the same amount of X and Y since he is already maximizing utility.
  - B) less of both X and Y.
  - C) more X and less Y.
  - D) less X and more Y.

Answer: C

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 24) Jon is consuming X and Y so that he is spending his entire income and  $MU_x/P_x = 4$  and  $MU_y/P_y = 4$ . To maximize utility, he should consume
- A) the same amount of X and Y since he is already maximizing utility.
  - B) less of both X and Y.
  - C) more X and less Y.
  - D) less X and more Y.

Answer: A

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Analytic

- 25) If  $MU_x/P_x < MU_y/P_y$ , then
- A) spending a dollar less on Y and a dollar more on X increases utility.
  - B) spending a dollar less on X and a dollar more on Y increases utility.
  - C) X is more expensive than Y.
  - D) Y is more expensive than X.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Definition

- 26) Sue is maximizing her utility. Her  $MU_x/P_x=10$  and  $MU_y=40$ . Then the price of Y must be
- A) \$1.
  - B) \$4.
  - C) \$10.
  - D) \$40.

Answer: B

Diff: 2

Topic: The Basis of Choice: Utility

Skill: Conceptual

- 27) Ellen is spending her entire income on goods X and Y. Her marginal utility from the last units of X and Y that she consumes is 25. Ellen's utility is only maximized if
- A) the prices of X and Y are the same.
  - B) the price of good X is twice that of good Y.
  - C) the price of good Y is twice that of good X.
  - D) We cannot determine whether Ellen is maximizing her utility.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 28) Ellie is spending her entire income on goods X and Y. Her marginal utility from the last unit of X is 100 and the marginal utility from the last unit of Y that she consumes is 50. Ellie's utility is only maximized if
- A) the prices of X and Y are the same.
  - B) the price of good X is twice that of good Y.
  - C) the price of good Y is twice that of good X.
  - D) We cannot determine whether Ellie is maximizing her utility.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

Refer to the information provided in Figure 6.10 below to answer the questions that follow.

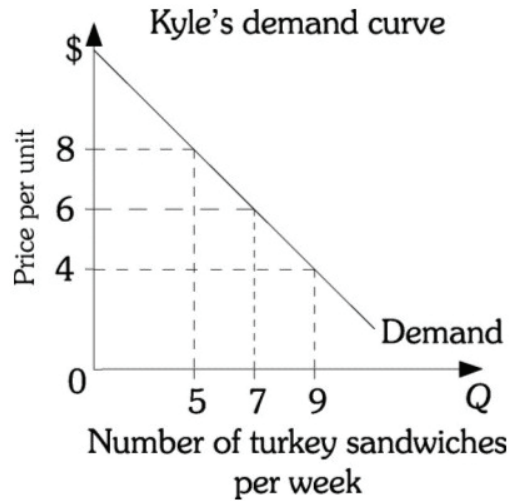


Figure 6.10

- 29) Refer to Figure 6.10. The current price of a turkey sandwich is \$6. If Kyle is currently buying five turkey sandwiches a week, he \_\_\_\_\_ maximizing utility because the marginal utility \_\_\_\_\_ than its price.
- A) is; from the fifth sandwich is greater
  - B) is; from the fifth sandwich is less
  - C) is not; gained from the fifth sandwich is less
  - D) is not; gained from the fifth sandwich is greater

Answer: D

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Conceptual

- 30) Refer to Figure 6.10. The current price of a turkey sandwich is \$6. If Kyle is currently buying nine turkey sandwiches a week, he \_\_\_\_\_ maximizing utility because the marginal utility \_\_\_\_\_ than its price.
- A) is; from the ninth sandwich is greater
  - B) is; from the ninth sandwich is less
  - C) is not; gained from the ninth sandwich is less
  - D) is not; gained from the ninth sandwich is greater

Answer: C

Diff: 3

Topic: The Basis of Choice: Utility

Skill: Conceptual

- 31) Refer to Figure 6.10. Kyle would increase his consumption of turkey sandwiches from 7 to 9 per week if their price fell from \$6 to \$4. This illustrates the idea of
- A) consumer surplus.
  - B) the law of diminishing marginal utility.
  - C) cross-price elasticity of demand.
  - D) technical efficiency.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 32) The marginal utility of the first cup of coffee that Tom drinks in the morning is worth \$2.00. The marginal utility of the 9th cup of coffee he drinks is positive while the marginal utility of the 10th cup of coffee he drinks in the morning is worth \$0. This implies that at a price of \$0, Tom would drink
- A) zero cups of coffee per morning.
  - B) at most 10 cups of coffee per morning.
  - C) more than 10 cups of coffee per morning, but the actual number is indeterminate from this information.
  - D) an infinite number of cups of coffee each morning.

Answer: B

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 33) For Matthew, the marginal utility of the 9th soda in a day is positive and the marginal utility of the 10th soda in a day is zero. This
- A) implies that Matthew's demand curve for sodas per day will become upward sloping at 10 sodas per day.
  - B) is impossible because each additional unit of consumption of any good must provide positive marginal utility.
  - C) implies that at a zero price Matthew's demand curve will intersect the quantity axis at 10.
  - D) implies that Matthew maximizes utility by consuming 9 sodas per day.

Answer: C

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 34) Total utility is
- A) the total amount of satisfaction yielded by the consumption of a good or service.
  - B) the additional satisfaction gained by consuming one more unit of something.
  - C) used to compare different people's likes and dislikes.
  - D) relatively easy to measure.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 35) The law of diminishing marginal utility refers to
- A) a consumer's decrease in total satisfaction as she consumes more units of a good.
  - B) a consumer's decrease in additional satisfaction as she consumes more and more units of a good.
  - C) the idea that total utility is negative.
  - D) the idea that marginal utility is negative.

Answer: B

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 36) We can state the utility-maximizing rule in words in the following way: A person maximizes utility when she equalizes the \_\_\_\_\_ across products.
- A) total utility
  - B) total utility per dollar spent
  - C) marginal utility
  - D) marginal utility per dollar spent

Answer: D

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 37) A utility-maximizing consumer buys so as to make \_\_\_\_\_ for all pairs of goods.
- A)  $P_x(MU_x) = P_y(MU_y)$
  - B)  $TU_x/P_x = TU_y/P_y$
  - C)  $MU_x/MU_y = P_x/P_y$
  - D)  $MU_x = MU_y$

Answer: C

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Analytic*

- 38) The ratio of the marginal utility of coffee to the marginal utility of donuts is four for an individual maximizing utility. This implies that
- A) a donut is four times more valuable than a cup of coffee.
  - B) the coffee to donuts price ratio is one to four.
  - C) the coffee to donuts price ratio is four to one.
  - D) this person always eats donuts with coffee.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*

- 39) Kathleen likes avocado and crab dip. After eating avocado and crab dip with four crackers, she switches to cheese with crackers. We can conclude that
- A) the avocado and crab dip cannot have tasted that good.
  - B) the avocado and crab dip with crackers now has a marginal utility of zero.
  - C) at this point cheese and crackers have a higher marginal utility per dollar spent than that of avocado and crab dip with crackers.
  - D) Kathleen is no longer maximizing her utility.

Answer: C

Diff: 3

Topic: *The Basis of Choice: Utility*

Skill: *Conceptual*



- 40) The law of diminishing marginal utility implies that
- A) demand curves always slope downward and to the right.
  - B) supply curves always slope upward and to the right.
  - C) a consumer will always buy positive amounts of all goods.
  - D) total utility will always increase by an increasing amount as consumption increases.

Answer: A

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

- 41) The diamond/water paradox states that things with the \_\_\_\_\_ value in use frequently have \_\_\_\_\_ value in exchange.
- A) least; the least
  - B) least; little or no
  - C) greatest; little or no
  - D) greatest; the greatest

Answer: C

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Definition*

## 2 True/False

- 1) The law of diminishing marginal utility implies that as a household consumes more of a product, its total utility will increase by smaller amounts -assuming marginal utility remains positive.

Answer: TRUE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

- 2) The law of diminishing marginal utility implies that total utility never reaches a maximum.

Answer: FALSE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

- 3) When consumers maximize utility, they are equating the ratio of marginal utility to price across all goods consumed.

Answer: TRUE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

- 4) A negative marginal utility implies negative total utility.

Answer: FALSE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

5) If  $MU_x/P_x$  exceeds  $MU_y/P_y$ , then a household can increase its utility by spending more on X and less on Y.

Answer: TRUE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

6) Assuming well-defined indifference curves, when marginal utility is zero, total utility is at a minimum.

Answer: FALSE

Diff: 2

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

7) The diamond/water paradox helps to illustrate the concept of marginal value.

Answer: TRUE

Diff: 1

Topic: *The Basis of Choice: Utility*

Skill: *Fact*

## 6.3 Income and Substitution Effects

### 1 Multiple Choice

1) A rise in the price of Pepsi that causes a household to shift its purchasing pattern toward Coke and away from Pepsi is the \_\_\_\_\_ effect of a price change.

A) income

B) substitution

C) complementary

D) diminishing marginal utility

Answer: B

Diff: 1

Topic: *Income and Substitution Effects*

Skill: *Fact*

2) For normal goods, the substitution and income effects of a price decrease will

A) both decrease the quantity of the good demanded.

B) both increase the quantity of the good demanded.

C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.

D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: B

Diff: 2

Topic: *Income and Substitution Effects*

Skill: *Definition*

- 3) For inferior goods, the substitution and income effects of a price increase will
- A) both decrease the quantity of the good demanded.
  - B) both increase the quantity of the good demanded.
  - C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.
  - D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: D

Diff: 2

Topic: *Income and Substitution Effects*

Skill: *Definition*

- 4) A price change would have the largest income effect on a
- A) magazine.
  - B) desktop computer.
  - C) piece of clothing.
  - D) car.

Answer: D

Diff: 3

Topic: *Income and Substitution Effects*

Skill: *Conceptual*

- 5) Assuming that charitable giving is a normal good, the income effect of a decrease in personal tax rates would lead to
- A) less giving because giving to charity would become more expensive relative to other goods.
  - B) more giving because giving to charity would become less expensive relative to other goods.
  - C) more giving because households would have more disposable income.
  - D) less giving because households would spend that money on luxury goods.

Answer: C

Diff: 3

Topic: *Income and Substitution Effects*

Skill: *Conceptual*

- 6) Related to the *Economics in Practice* on p.118 : Suppose Store ABC runs an ad claiming to have "low prices everyday". They even demonstrate that the total expenditure for a basket of groceries is less at their store than at any of their competitors. Which of the following statements is NOT true?
- A) You would clearly be better off shopping at Store ABC.
  - B) Your preferences may not be consistent with the basket used by Store ABC (in their example), thus it is not clear whether or not you would be better off shopping at Store ABC or not.
  - C) Even if your preferences are generally consistent with the basket used by Store ABC, it may still be possible for you to substitute other similar goods for those in the basket used by Store ABC (in their example) and thus spend less at another store.
  - D) All of the above statements are true.

Answer: A

Diff: 2

Topic: *Household Choice in Input Markets: Economics in Practice*

Skill: *Conceptual*

## 2 True/False

1) Ignoring income effects, an increase in the wage rate will cause an increase in labor supply.

Answer: TRUE

Diff: 1

Topic: Income and Substitution Effects

Skill: Fact

## 6.4 Household Choice in Input Markets

### 1 Multiple Choice

Refer to the information provided in Figure 6.11 below to answer the question that follows.

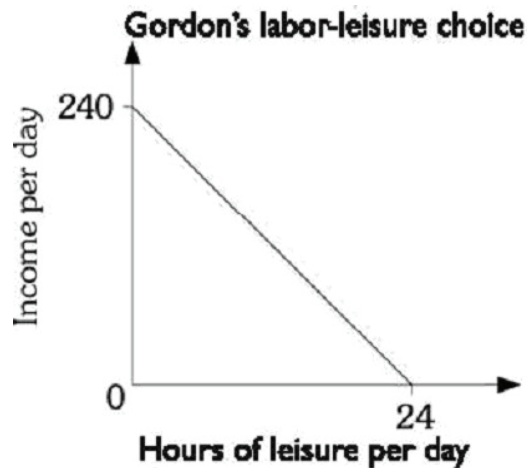


Figure 6.11

1) Refer to Figure 6.11. Gordon's opportunity cost of one hour of leisure is

A) \$10.

B) \$24.

C) \$240.

D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Analytic

2) Assume leisure is a normal good. The substitution effect of a wage decrease implies a \_\_\_\_\_ demand for leisure and a \_\_\_\_\_ labor supply.

A) lower; higher

B) higher; lower

C) higher; higher

D) lower; lower

Answer: B

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

- 3) If the substitution effect of a wage change outweighs the income effect of a wage change, the labor-supply curve is
- A) upward sloping.
  - B) horizontal.
  - C) vertical.
  - D) backward bending.

Answer: A

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

- 4) Assume leisure is an inferior good instead of a normal good. The income effect of a wage increase will lead to a \_\_\_\_\_ demand for leisure and a \_\_\_\_\_ labor supply.
- A) higher; higher
  - B) higher; lower
  - C) lower; higher
  - D) lower; lower

Answer: C

Diff: 3

Topic: Household Choice in Input Markets

Skill: Conceptual

- 5) Assuming that leisure is a normal good, if an individual's labor supply curve is backward bending, then the
- A) income effect outweighs the substitution effect at higher wages.
  - B) substitution effect outweighs the income effect at higher wages.
  - C) income effect and the substitution effects are equal.
  - D) income effect is zero.

Answer: A

Diff: 2

Topic: Household Choice in Input Markets

Skill: Fact

- 6) Related to the *Economics in Practice* on p. 121: By offering a broad range of high quality services for employees on-site, Google has
- A) made going to work less attractive to its employees.
  - B) decreased the marginal utility of work to its employees.
  - C) decreased the marginal utility of leisure to its employees.
  - D) had no impact on the labor-leisure choice of its employees.

Answer: A

Diff: 1

Topic: Household Choice in Input Markets: Economics in Practice

Skill: Fact

## 6.5 Appendix

### 1 Multiple Choice

- 1) Harry tells you that he prefers Pepsi to Coke, Coke to 7-UP, and 7-UP to Pepsi. This violates what assumption made when analyzing consumer preferences?
- A) That more is better.
  - B) That there is a diminishing marginal rate of substitution.
  - C) That consumers are rational.
  - D) That consumers are able to choose among all the combinations of goods and services available.

Answer: C

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

- 2) A consumer satisfies the condition \_\_\_\_\_ when her indifference curve is just tangent to her budget constraint.
- A)  $MU_x = MU_y$
  - B)  $TU_x = TU_y$
  - C)  $MU_x/P_x = MU_y/P_y$
  - D)  $TU_x/P_x = TU_y/P_y$

Answer: C

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Fact

- 3) Assume Sally is initially in equilibrium and that X and Y are normal goods for her. Then the price of X rises. For Sally to move to a new equilibrium point her consumption of
- A) X must remain constant, but her consumption of Y must increase.
  - B) X must decrease.
  - C) X must increase.
  - D) both X and Y must increase.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

- 4) An assumption underlying indifference curve analysis is that  $MU_x/MU_y$  \_\_\_\_\_ as more of X and less of Y is consumed.
- A) increases
  - B) decreases
  - C) remains constant
  - D) always equals one

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

Refer to the information provided in Figure 6.13 below to answer the question that follows.

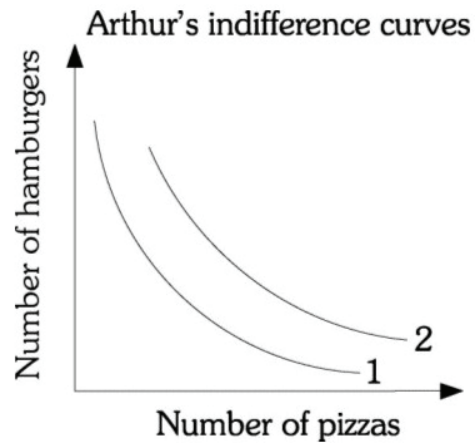


Figure 6.13

- 5) Refer to Figure 6.13. If Arthur moves from indifference curve 1 to indifference curve 2, then Arthur's
- A) marginal utility increases.
  - B) total utility increases.
  - C) total income decreases.
  - D) prices of the goods increase.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Definition

Refer to the information provided in Figure 6.14 below to answer the questions that follow.

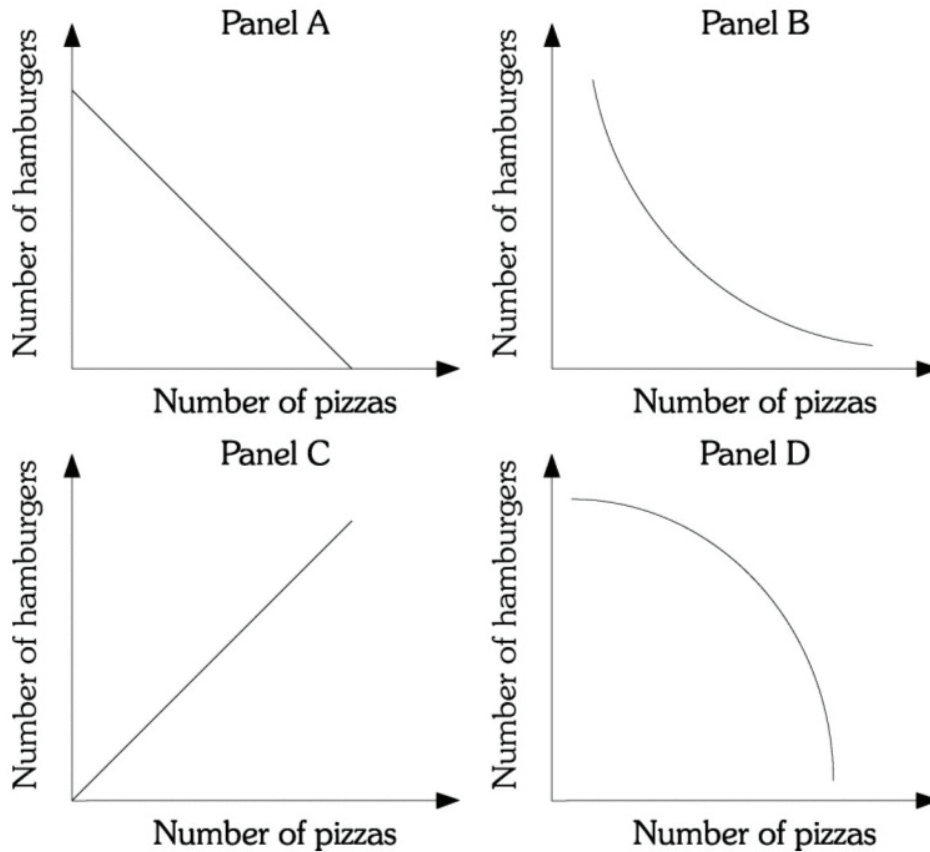


Figure 6.14

- 6) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen is always willing to trade one pizza for one hamburger regardless of how many pizzas and hamburgers she has. The curve in Panel \_\_\_\_\_ represents her indifference curve.  
 A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

- 7) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen must be compensated with more pizzas as she gives up more burgers. The curve in Panel \_\_\_\_\_ represents her indifference curve.  
 A) A                      B) B                      C) C                      D) D

Answer: B

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual



- 8) As you move up an indifference curve, the absolute value of the slope
- A) increases.
  - B) decreases.
  - C) remains constant.
  - D) initially increases and then decreases.

Answer: A

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Fact

Refer to the information provided in Figure 6.15 below to answer the questions that follow.

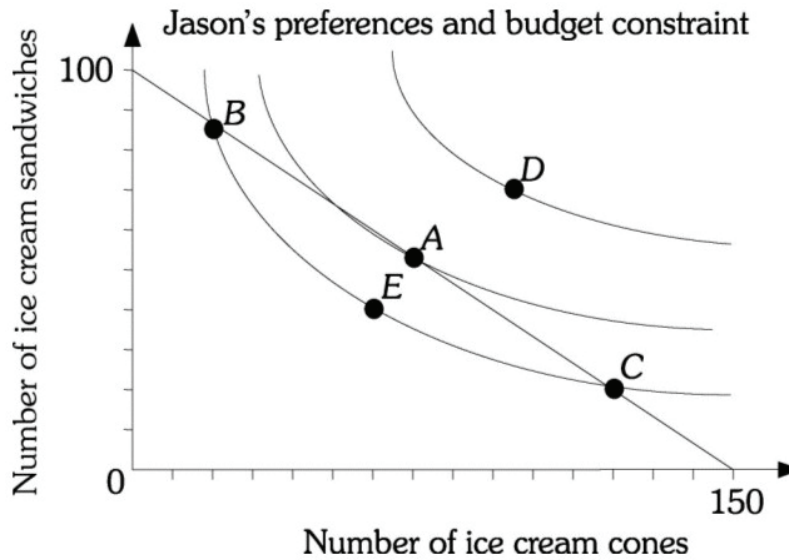


Figure 6.15

- 9) Refer to Figure 6.15. If the price of an ice cream cone is \$2, Jason's income is
- A) \$75.
  - B) \$250.
  - C) \$300.
  - D) indeterminate because the price of ice cream sandwiches is not given.

Answer: C

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

- 10) Refer to Figure 6.15. Jason maximizes utility at point
- A) A.
  - B) B.
  - C) C.
  - D) D.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

- 11) Refer to Figure 6.15. The slope of the indifference curve is the ratio of the
- A) marginal utility of ice cream cones to the marginal utility of ice cream sandwiches.
  - B) marginal utility of ice cream sandwiches to the marginal utility of ice cream cones.
  - C) total utility of ice cream cones to the total utility of ice cream sandwiches.
  - D) total utility of ice cream sandwiches to the total utility of ice cream cones.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Definition

- 12) Refer to Figure 6.15. At point A, the slope of the indifference curve is
- A) -0.67.
  - B) -1.5.
  - C) -3.0.
  - D) indeterminate because the marginal utilities are unknown.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

- 13) Refer to Figure 6.15. If the price of an ice cream cone is \$2, the price of ice cream sandwiches is
- A) \$2.
  - B) \$3.
  - C) \$50.
  - D) \$100.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

Refer to the information provided in Figure 6.16 below to answer the question that follows.

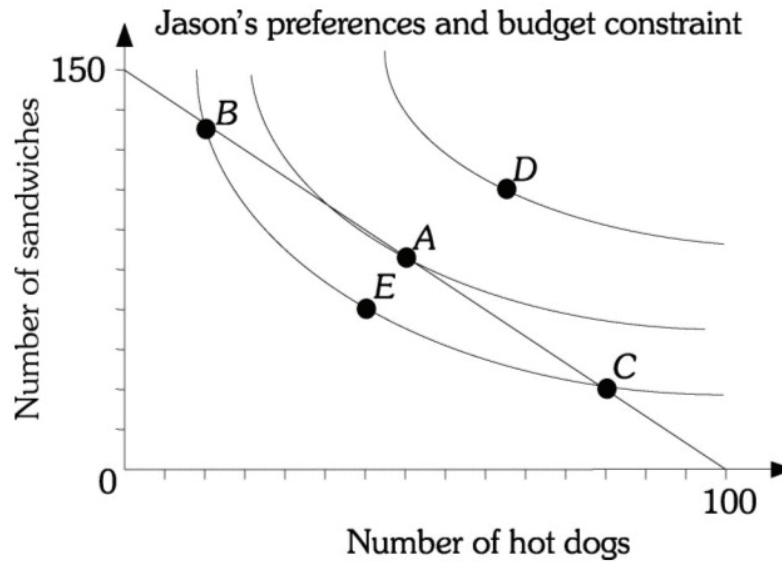


Figure 6.16

- 14) Refer to Figure 6.16. If the price of a hot dog is \$2, Jason's income is
- A) \$25.
  - B) \$200.
  - C) \$300.
  - D) indeterminate because the price of sandwiches is not given.

Answer: B

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Analytic

- 15) Refer to Figure 6.16. Why was Jason NOT maximizing his utility at point C?
- A) He is not spending his entire budget.
  - B) His marginal utility per dollar spent on the last sandwich is greater than his marginal utility per dollar spent on his last hot dog.
  - C) His marginal utility per dollar spent on the last sandwich is less than his marginal utility per dollar spent on his last hot dog.
  - D) He is maximizing his utility at point C.

Answer: B

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

- 16) Refer to Figure 6.16. The highest indifference curve depicted is the one on which point D lies. Why is Jason NOT maximizing his utility at point D?
- A) He cannot afford point D.
  - B) His marginal utility per dollar spent on the last sandwich is greater than his marginal utility per dollar spent on his last hot dog.
  - C) His marginal utility per dollar spent on the last sandwich is less than his marginal utility per dollar spent on his last hot dog.
  - D) He is maximizing his utility at point C.

Answer: A

Diff: 2

Topic: Appendix: Indifference Curves

Skill: Conceptual

- 17) We derive the demand curve for X from indifference curves and a budget constraint by changing the
- A) level of income.
  - B) price of X.
  - C) price of Y.
  - D) consumers' preferences.

Answer: B

Diff: 3

Topic: Appendix: Indifference Curves

Skill: Conceptual

## 2 True/False

- 1) Assuming the properties of normal indifference curves, a consumer will maximize his utility where his indifference curve is just tangent to his budget constraint.

Answer: TRUE

Diff: 1

Topic: Appendix: Indifference Curves

Skill: Fact

# Chapter 7 The Production Process: The Behavior of Profit-Maximizing Firms

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## 7.1 The Behavior of Profit Maximizing Firms

### 1 Multiple Choice

- 1) Total revenue minus total cost equals
- |                        |                      |
|------------------------|----------------------|
| A) the rate of return. | B) marginal revenue. |
| C) profit.             | D) net cost.         |

Answer: C

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

Refer to the information provided in Figure 7.1 below to answer the following questions.

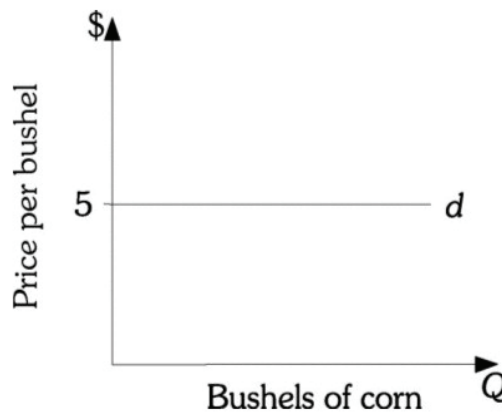


Figure 7.1

- 2) Refer to Figure 7.1. A corn producer produces 80 bushels of corn and sells each bushel at \$5. The cost of producing each unit bushel is \$2. This corn producer's total revenue is \_\_\_\_\_ and profit if \_\_\_\_\_.
- |               |                |                 |                 |
|---------------|----------------|-----------------|-----------------|
| A) \$160; \$0 | B) \$240; \$80 | C) \$400; \$240 | D) \$400; \$160 |
|---------------|----------------|-----------------|-----------------|

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 3) Refer to Figure 7.1. A corn producer's total revenue is \$1,000. If she sells each bushel of corn for \$5, she must be selling \_\_\_\_\_ bushels of corn.
- |        |        |        |          |
|--------|--------|--------|----------|
| A) 200 | B) 450 | C) 900 | D) 4,500 |
|--------|--------|--------|----------|

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 4) Refer to Figure 7.1. A corn producer's profit is \$1500 and it is producing 500 bushels of output. Then he must have a cost per bushel of
- A) 1                                      B) 2                                      C) 3                                      D) 4

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 5) The Wax Works sells 500 candles at a price of \$10 per candle. The Wax Works' total economic costs for producing 500 candles are \$2,000. The Wax Works' economic profit is
- A) \$2,000.                                      B) \$3,000.  
C) \$5,000.                                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 6) The Wax Works sells 500 candles at a price of \$5 per candle. The Wax Works' total economic costs for producing 500 candles are \$3,000. The Wax Works' economic profit is
- A) -\$3,000.                                      B) -\$500.                                      C) \$2,500.                                      D) \$3000

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 7) Firms must make all of the following decisions EXCEPT
- A) how much output to supply.                                      B) which production technology to use.  
C) how much of each input to demand.                                      D) what price to charge for its output.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 8) Economic costs include
- A) both a normal rate of return on investment and the opportunity cost of each factor of production.  
B) the direct costs of hiring all factors of production.  
C) the opportunity cost of each factor of production minus any interest charges paid on borrowed funds.  
D) total revenue minus accounting profit.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 9) The Sweet Success Bakery sells 500 cakes at a price of \$10 per cake. Its total economic costs for producing 500 cakes are \$500. The Sweet Success Bakery's economic profits are
- A) \$100.
  - B) \$3,500.
  - C) \$4,500.
  - D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 10) The Oh So Humble Bakery sells 300 muffins at a price of \$1 per muffin. Its explicit costs for producing 300 muffins are \$250. The Oh So Humble Bakery's economic profits are
- A) \$35.
  - B) \$50.
  - C) \$250.
  - D) indeterminate from this information.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 11) The Oh So Humble Bakery sells 300 muffins at a price of \$1 per muffin. Its explicit costs for producing 300 muffins are \$250. If the bakery is earning a normal rate of return, then its implicit costs must be
- A) \$100.
  - B) \$200.
  - C) \$300.
  - D) \$400

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 12) A firm \_\_\_\_\_ if it earns zero economic profit.
- A) earns a negative rate of return
  - B) will leave the industry
  - C) earns a positive but below normal rate of return
  - D) earns exactly a normal rate of return

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

- 13) You own a building that has four possible uses: a cafe, a craft store, a hardware store, and a bookstore. The building's value in each use is \$2,000; \$3,000; \$4,000; and \$5,000, respectively. You decide to open a hardware store. The opportunity cost of using this building for a hardware store is
- A) \$2,000, the value if the building is used as a cafe.
  - B) \$3,000, the value if the building is used as a craft store.
  - C) \$10,000, the sum of the values if the building is used for a cafe, a craft store, or a bookstore.
  - D) \$1,000, the difference in value if the building were used as a bookstore and its actual use.

Answer: D

Diff: 3

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

*Refer to Scenario 7.1 below to answer the questions that follow.*

SCENARIO 7.1: You own and are the only employee of a company that writes computer software that gamblers use to collect sports data. Last year your total revenue was \$90,000. Your costs for equipment, rent, and supplies were \$50,000. To start this business you invested an amount of your own capital that could pay you a \$40,000 a year return.

- 14) Refer to Scenario 7.1. During the year your economic costs were  
A) \$40,000.                      B) \$60,000.                      C) \$90,000.                      D) \$100,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 15) Refer to Scenario 7.1. A yearly normal rate of return for your computer software firm would be  
A) \$20,000.                      B) \$40,000.                      C) \$60,000.                      D) \$100,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 16) Refer to Scenario 7.1. Your accounting profit last year was  
A) \$10,000.                      B) \$30,000.                      C) \$40,000.                      D) \$60,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 17) Refer to Scenario 7.1. Your economic profit last year was  
A) -\$40,000.                      B) -\$10,000.                      C) \$0.                                      D) \$10,000.

Answer: C

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

*Refer to Scenario 7.2 below to answer the questions that follow.*

SCENARIO 7.2: You own and are the only employee of a company that sets odds for sporting events. Last year your total revenue was \$60,000. Your costs for rent and supplies were \$50,000. To start this business you invested an amount of your own capital that could pay you a \$20,000 a year return.

- 18) Refer to Scenario 7.2. During the year your economic costs were  
A) \$70,000.                      B) \$60,000.                      C) \$50,000.                      D) \$20,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic



- 19) Refer to Scenario 7.2. A yearly normal profit for your company is  
A) \$20,000.                      B) \$40,000.                      C) \$60,000.                      D) \$100,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 20) Refer to Scenario 7.2. Your accounting profit last year was  
A) \$10,000.                      B) \$30,000.                      C) \$50,000.                      D) \$60,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 21) Refer to Scenario 7.2. Your economic profit last year was  
A) -\$40,000.                      B) -\$10,000.                      C) \$10,000.                      D) \$30,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

**Refer to Scenario 7.3 below to answer the questions that follow.**

SCENARIO 7.3: Upon graduating with an accounting degree, you open your own accounting firm of which you and your assistant are the only employees. To start the firm you passed on a job offer with a large accounting firm that offered you a salary of \$50,000 annually. Last year you earned a total revenue of \$120,000. Rent and supplies last year were \$50,000. Your assistant's salary is \$30,000 annually.

- 22) Refer to Scenario 7.3. Your annual economic costs are  
A) \$50,000.                      B) \$80,000.                      C) \$100,000.                      D) \$130,000.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 23) Refer to Scenario 7.3. Your annual economic profit is  
A) -\$10,000.                      B) \$20,000.                      C) \$40,000.                      D) \$70,000.

Answer: A

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

- 24) Refer to Scenario 7.3. Your annual operating profit is  
A) -\$10,000.                      B) \$40,000.                      C) \$70,000.                      D) \$80,000.

Answer: B

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Analytic

25) An economist is studying the pricing behavior of Atlanta's 100 dog kennels. She says she will limit her analysis to a time period that allows for neither new kennels to enter the market nor existing ones to leave it. The economist is referring to the \_\_\_\_\_ time period.

- A) market                      B) industry                      C) long run                      D) short run

Answer: D

Diff: 3

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

26) In the long run, a firm

- A) can shut down, but it cannot exit the industry.  
B) has no fixed factors of production.  
C) can vary all inputs, but it cannot change the mix of inputs it uses.  
D) must make positive economic profits.

Answer: B

Diff: 3

Topic: Behavior of Profit-Maximizing Firms

Skill: Conceptual

27) In the short run, a firm

- A) has at least one fixed factor of production.  
B) cannot enter an industry where positive profits are being earned.  
C) can exit an industry and all of its factors of production are variable.  
D) both (A) and (B) are correct.

Answer: D

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

## 2 True/False

1) If Harold runs a grocery store and earns a normal rate of return, we can infer that he also makes a positive economic profit.

Answer: FALSE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

2) If a firm makes a positive economic profit, it is making at least a normal rate of return.

Answer: TRUE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

3) In the short run, firms can enter an industry but not exit it.

Answer: FALSE

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

4) Economists consider the short run as a period less than one year.

Answer: FALSE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

5) For economic analysis, the long run is any period in which all inputs are variable (regardless of the length of time involved).

Answer: TRUE

Diff: 2

Topic: Behavior of Profit-Maximizing Firms

Skill: Definition

6) Deciding to invest in capital is a short-run decision.

Answer: FALSE

Diff: 1

Topic: Behavior of Profit-Maximizing Firms

Skill: Fact

## 7.2 The Production Process

### 1 Multiple Choice

1) To determine the optimal method of production for a good or service, a firm needs to know

- A) the market price of output.
- B) the technologies of production that are available to the firm.
- C) the prices of inputs.
- D) All of the above are correct.

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

2) The optimal production method

- A) maximizes output regardless of cost.
- B) maximizes inputs.
- C) minimizes cost.
- D) minimizes the normal rate of return.

Answer: C

Diff: 3

Topic: The Production Process

Skill: Conceptual

3) Which of the following demonstrates an act of production, as economists use the term?

- A) A worker places money in a pension fund.
- B) A local nonprofessional theater company performs a play.
- C) An individual buys municipal bonds to avoid taxes.
- D) all of the above

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

Use the information provided in Table 7.1 below to answer the questions that follow.

**Table 7.1**  
**Inputs Required to Produce a Product Using Alternative Technologies**

Technology	Units of Capital	Number of Employees
A	4	18
B	6	12
C	8	8
D	12	6

- 4) Refer to Table 7.1 above. Which technology is the most labor intensive?  
A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

- 5) Refer to Table 7.1 above. Which technology is the most capital intensive?  
A) A                      B) B                      C) C                      D) D

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

- 6) Refer to Table 7.1. If the hourly price of capital is \$10 and the hourly wage rate is \$7, which production technology should be selected?  
A) A                      B) B                      C) C                      D) D

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 7) Refer to Table 7.1. If the hourly price of capital is \$20 and the hourly wage rate is \$5, which production technology should be selected?  
A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

Use the information provided in Table 7.2 below to answer the questions that follow.

**Table 7.2**  
**Inputs Required to Produce a Product Using Alternative Technologies**

Technology	Units of Capital	Number of Employees
A	16	8
B	12	12
C	8	20
D	6	24

8) Refer to Table 7.2. Which technology is the most capital intensive?

- A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

9) Refer to Table 7.2. If the hourly price of capital is \$50 and the hourly wage rate is \$10, which production technology should be selected?

- A) A                      B) B                      C) C                      D) D

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

10) Refer to Table 7.2. If the hourly price of capital is \$1 and the hourly price of labor is \$10, which production technology should be selected?

- A) A                      B) B                      C) C                      D) D

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

11) Refer to Table 7.2. Which technology is the most labor intensive?

- A) A                      B) B                      C) C                      D) D

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

Use the information provided in Figure 7.2 below to answer the questions that follow.

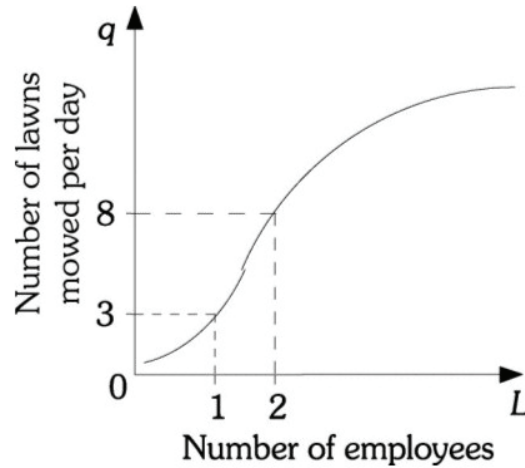


Figure 7.2

- 12) Refer to Figure 7.2. The marginal product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 4                                      B) 5                                      C) 5.5                                      D) 11

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 13) Refer to Figure 7.2. The average product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 4                                      B) 5                                      C) 5.5                                      D) 11

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

Refer to Scenario 7.4 below to answer the questions that follow.

SCENARIO 7.4: A lawn service company has the following production possibilities. With one, two, three, and four workers, the company can mow 4, 9, 12, and 14 lawns per day, respectively.

- 14) Refer to Scenario 7.4. The marginal product of the second worker is \_\_\_\_\_ lawns moved.  
 A) 3                                      B) 4                                      C) 5                                      D) 9

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 15) Refer to Scenario 7.4. The marginal product of the third worker is \_\_\_\_\_ lawns moved.  
 A) 2                                      B) 3                                      C) 4                                      D) 12

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 16) Refer to Scenario 7.4. The marginal product of the fourth worker is  
A) 2                                      B) 3                                      C) 12                                      D) 14

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

- 17) Refer to Scenario 7.4. Diminishing returns to labor set in with the \_\_\_\_\_ worker.  
A) first                                      B) second                                      C) third                                      D) fourth

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 18) Refer to Scenario 7.4. The average product of labor with three workers is  
A) 3                                      B) 3.5                                      C) 4                                      D) 12

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 19) Refer to Scenario 7.4. The average product of labor with four workers is  
A) 3                                      B) 3.5                                      C) 4                                      D) 14

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

Use the information provided in Figure 7.3 below to answer the questions that follow.

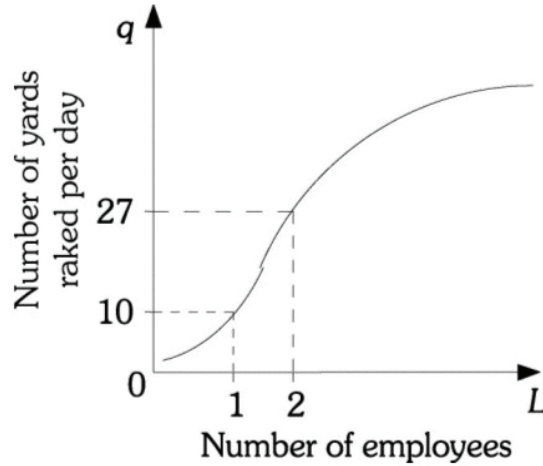


Figure 7.3

- 20) Refer to Figure 7.3. The marginal product of the second worker is \_\_\_\_\_ yards raked.  
 A) 2                                      B) 13.5                                      C) 17                                      D) 27

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 21) Refer to Figure 7.3. The average product of the second worker is \_\_\_\_\_ yards raked.  
 A) 4                                      B) 13.5                                      C) 14                                      D) 27

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 22) When Burger Barn hires one worker, 10 customers can be served in an hour. When Burger Barn hires two workers, 25 customers can be served in an hour. The marginal product of the second worker is \_\_\_\_\_ customers served per hour.

- A) 15                                      B) 30                                      C) 40                                      D) 67.5

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

- 23) The marginal products of the first, second, and third workers are 50, 34, and 22, respectively. If four workers can produce 116 units of output, then the marginal product of the fourth worker is \_\_\_\_\_.

- A) 10                                      B) 12                                      C) 22                                      D) 116

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic



24) At the Pampered Pet Salon the marginal products of the first, second, and third workers are 50, 36, and 25 dogs washed, respectively. The total product (number of dogs washed) of the two worker is

- A) 11.                      B) 50.                      C) 86.                      D) 111.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

25) At the Pampered Pet Salon the marginal products of the first, second, and third workers are 50, 36, and 25 dogs washed, respectively. The total product (number of dogs washed) of the three workers is

- A) 50.                      B) 86.                      C) 107.                      D) 111.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

26) At the Larson Bakery the marginal products of the first, second, and third salesclerks are 30, 27, and 21 customers served, respectively. The total product (number of customers served) of the two salesclerks is

- A) 6.                      B) 17.                      C) 57.                      D) 78.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

27) At the Larson Bakery the marginal products of the first, second, and third salesclerks are 30, 27, and 21 customers served, respectively. The total product (number of customers served) of the three salesclerks is

- A) 30.                      B) 57.                      C) 78.                      D) 109.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

Use the information provided in Figure 7.4 below to answer the questions that follow.

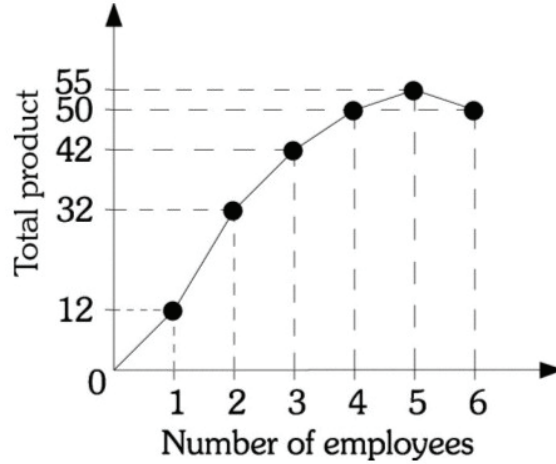


Figure 7.4

- 28) Refer to Figure 7.4. The marginal product of the second worker is  
A) 10.                      B) 16.                      C) 20.                      D) 32.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 29) Refer to Figure 7.4. The marginal product of the fourth worker is  
A) 5.                      B) 8.                      C) 50.                      D) 55.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 30) Refer to Figure 7.4. The marginal product of the sixth worker is  
A) -50.                      B) -5.                      C) 5.                      D) 8.33.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 31) Refer to Figure 7.4. The average product of the third worker is  
A) 10.                      B) 14.                      C) 21.                      D) 25.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 32) Refer to Figure 7.4. The average product of the fifth worker is  
A) 1.                                      B) 2.5.                                      C) 5.                                      D) 11.  
Answer: D  
Diff: 2  
Topic: *The Production Process*  
Skill: *Analytic*
- 33) Refer to Figure 7.4. The average product of the sixth worker is  
A) -8.33.                                      B) -5.                                      C) 5.                                      D) 8.33.  
Answer: D  
Diff: 2  
Topic: *The Production Process*  
Skill: *Analytic*
- 34) Refer to Figure 7.4. Diminishing marginal returns begin when the \_\_\_\_\_ worker is hired.  
A) first                                      B) second                                      C) third                                      D) fifth  
Answer: C  
Diff: 3  
Topic: *The Production Process*  
Skill: *Analytic*
- 35) If diminishing marginal returns have already set in for The Picture Perfect Framing Store and the marginal product of the fifth picture framer is 25, then the marginal product of the sixth picture framer must be  
A) negative.                                      B) zero.  
C) less than 25.                                      D) greater than 25.  
Answer: C  
Diff: 2  
Topic: *The Production Process*  
Skill: *Definition*
- 36) If labor is a variable input in production, the law of diminishing marginal returns implies that in the short run  
A) labor's marginal product is constant.  
B) labor's marginal product decreases after a certain point.  
C) total product is negative.  
D) total product is negative after a certain point has been reached.  
Answer: B  
Diff: 2  
Topic: *The Production Process*  
Skill: *Analytic*

Use the information provided in Figure 7.5 below to answer the question that follows.

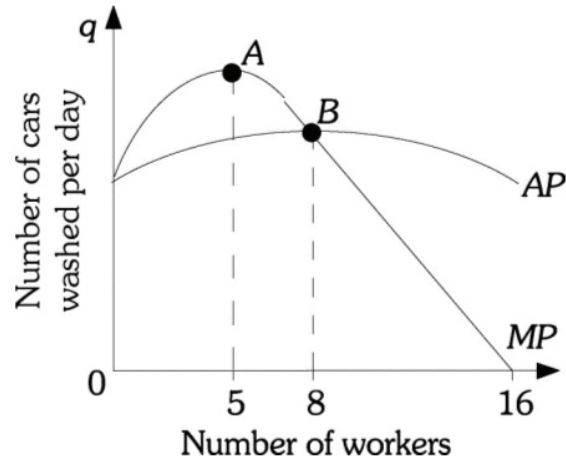


Figure 7.5

- 37) Refer to Figure 7.5. Diminishing marginal returns set in after the \_\_\_\_\_ worker is hired.  
 A) first                      B) fifth                      C) eighth                      D) sixteenth

Answer: B

Diff: 2

Topic: The Production Process

Skill: Definition

- 38) If the marginal product of labor is less than the average product of labor, then the  
 A) marginal product must be increasing.                      B) average product must be decreasing.  
 C) marginal product must be decreasing.                      D) both B and C

Answer: D

Diff: 2

Topic: The Production Process

Skill: Definition

- 39) The version of the law of diminishing returns that applies to production  
 A) implies that as we add more workers our production decreases.  
 B) applies only in the short run.  
 C) is true only when all inputs are variable.  
 D) applies in the short and long run.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

Refer to the information provided in Table 7.3 below to answer the question that follows.

Table 7.3

L	0	1	2	3	4	5
Q	0	10	20	30	40	50

- 40) Suppose output varies, *ceteris paribus*, with labor input in the manner displayed in the table above. After how many units of labor do diminishing returns set in?
- A) 3  
B) 4  
C) 5  
D) They do not set in.

Answer: D

Diff: 1

Topic: The Production Process

Skill: Fact

- 41) When a firm maximizes total product in the short run, marginal product
- A) and average product are zero.  
B) is positive but average product is zero.  
C) is zero but average product is positive.  
D) and average product are positive.

Answer: C

Diff: 1

Topic: The Production Process

Skill: Fact

- 42) At the point where total product is maximized, marginal product
- A) is zero, but average product is still positive.  
B) and average product are negative.  
C) is positive, but average product is negative.  
D) and average product are positive.

Answer: A

Diff: 1

Topic: The Production Process

Skill: Fact

- 43) If marginal product is greater than average product, then
- A) average product must be decreasing.  
B) marginal product must be decreasing.  
C) marginal product must be increasing.  
D) marginal product could either be increasing or decreasing.

Answer: D

Diff: 1

Topic: The Production Process

Skill: Fact

- 44) If we assume that labor is the only variable input, the slope of the short run total product curve
- A) has no economic significance.
  - B) measures the average product of labor.
  - C) measures the marginal product of labor.
  - D) measures the marginal and average product of labor depending on where on the total product curve we are.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Fact

- 45) You own a business that answers telephone calls for physicians after their offices close. You have an incentive to substitute capital for labor if the
- A) price of capital increases.
  - B) price of labor decreases.
  - C) price of labor increases.
  - D) marginal product of labor increases.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Definition

- 46) Firms have an incentive to substitute labor for capital as the
- A) price of labor decreases.
  - B) price of capital decreases.
  - C) price of labor increases.
  - D) marginal product of labor decreases.

Answer: A

Diff: 1

Topic: The Production Process

Skill: Fact

- 47) The specific technology chosen by a profit-maximizing clothing manufacturer depends on
- A) input prices.
  - B) output prices.
  - C) demand for the output.
  - D) supply of the output.

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

Refer to the information provided in Figure 7.6 below to answer the questions that follow.

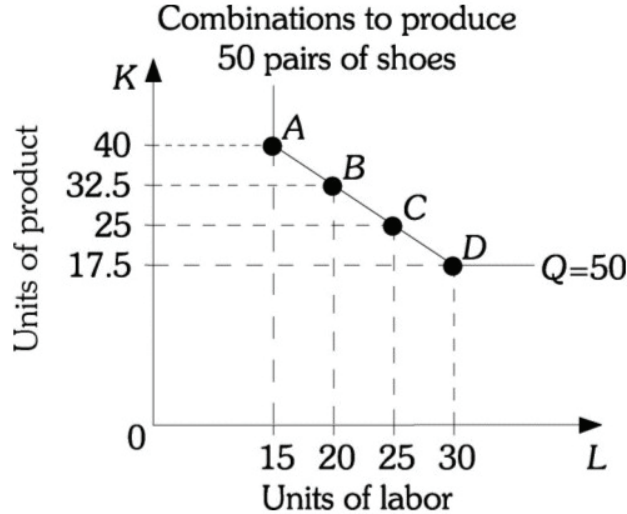


Figure 7.6

- 48) Refer to Figure 7.6. If this shoe manufacturer increases labor from 15 to 20 (moving along the given isoquant with  $Q=50$ ), the marginal product of the 20th worker
- A) is zero, as the total number of shoes produced remains at 50.
  - B) is 8.5, as capital can be reduced by 8.5 units when the 20th worker is hired.
  - C) cannot be determined because output remains constant.
  - D) cannot be determined because both capital and labor have been increased.

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 49) Refer to Figure 7.6. If the price of capital is \$20 and the price of labor is \$10, the optimal product technique is
- A) A.
  - B) B.
  - C) C.
  - D) D.

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 50) Assume the prices of labor and capital remain the same, but the average educational level of workers increases and therefore labor productivity increases. This would lead a firm to
- A) use a more capital-intensive production technology.
  - B) use a more labor-intensive technology.
  - C) not change its production technology, but produce fewer units of output.
  - D) use only labor to produce the product.

Answer: B

Diff: 1

Topic: The Production Process

Skill: Fact

- 51) Assume that capital and labor are complementary inputs. If the firm increases the amount of capital it employs, this would
- A) cause the firm to move down along the  $MP$  schedule for labor.
  - B) cause the firm to move up along its  $MP$  schedule for labor.
  - C) shift the firm's  $MP$  schedule for labor to the left.
  - D) shift the firm's  $MP$  schedule for labor to the right.

Answer: D

Diff: 2

Topic: The Production Process

Skill: Definition

- 52) We can write the cost minimizing equilibrium condition as
- A)  $MPL = MPK$ .
  - B)  $PL = PK$ .
  - C)  $(MPL)(PL) = (MPK)(PK)$ .
  - D)  $MPL/PL = MPK/PK$ .

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 53) A firm is operating such that the marginal product of labor is 10 and the marginal product of capital is 40. The firm is minimizing its costs only if
- A) the wage is one fourth the rental rate.
  - B) the rental rate is one fourth the wage.
  - C) since capital is more productive than labor, the firm must be minimizing cost.
  - D) Given this information the firm can't be minimizing cost under any circumstances.

Answer: A

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 54) A firm produces 15 units of output from the last dollar it spends on labor and 10 units from the last dollar spent on capital. The firm should
- A) employ more labor and less capital.
  - B) employ more capital and less labor.
  - C) employ more capital and labor.
  - D) employ less capital and labor.

Answer: A

Diff: 2

Topic: The Production Process

Skill: Conceptual

- 55) If the product derived from the last dollar spent on labor is greater than the product derived from the last dollar spent on capital, then the firm should
- A) make no changes since it is minimizing costs.
  - B) use more labor and less capital to minimize costs.
  - C) use less labor and more capital to minimize costs.
  - D) increase the price paid to labor and decrease the price paid to capital to minimize costs.

Answer: B

Diff: 3

Topic: The Production Process

Skill: Conceptual



56) If the product derived from the last dollar spent on labor is less than the product derived from the last dollar spent on capital, then the firm should \_\_\_\_\_ costs.

- A) make no changes since it is minimizing
- B) use more labor and less capital to minimize
- C) use less labor and more capital to minimize
- D) increase the price paid to labor and decrease the price paid to capital to minimize

Answer: C

Diff: 3

Topic: The Production Process

Skill: Conceptual

57) If Microsoft is earning a rate of return greater than the return necessary for the business to continue operations in the long run, then

- A) total costs exceed total revenue.
- B) total costs exceed a normal rate of return.
- C) the firm's normal rate of return is zero.
- D) the firm is earning an economic profit.

Answer: D

Diff: 3

Topic: The Production Process

Skill: Conceptual

58) If Pets.com earns a rate of return less than necessary for it to continue operations, then its

- A) total revenue exceeds its economic costs.
- B) economic costs exceed its total revenue.
- C) normal profit is zero.
- D) economic profit is zero.

Answer: B

Diff: 1

Topic: The Production Process

Skill: Fact

59) You are certain that the computer industry's normal rate of return is 18%. You would expect a(n) \_\_\_\_\_ normal rate of return for a computer software industry that people consider much riskier than the computer industry.

- A) 18%
- B) less than 18%
- C) above 18%
- D) riskfree (the rate on government bonds)

Answer: C

Diff: 1

Topic: The Production Process

Skill: Fact

60) The formula for the marginal product of labor is

- A)  $L/q$ .
- B)  $(\Delta L)(\Delta q)$ .
- C)  $q/L$ .
- D)  $\Delta q/\Delta L$ .

Answer: D

Diff: 2

Topic: The Production Process

Skill: Analytic

- 61) Assume the total product of two workers is 100 and the total product of three workers is 150. The third worker's average product is \_\_\_\_\_ while her marginal product is \_\_\_\_\_.  
A) 40; 20                      B) 20; 40                      C) 50; 50                      D) 150; 100

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 62) Assume the total product of two workers is 110 and the total product of three workers is 120. The third worker's average product is \_\_\_\_\_ while her marginal product is \_\_\_\_\_.  
A) 40; 10                      B) 40; 20                      C) 50; 10                      D) 120; 110

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

- 63) Assume the total product of two workers is 80 and the total product of three workers is 90. The third worker's average product is \_\_\_\_\_ while her marginal product is \_\_\_\_\_.  
A) 10; 30                      B) 30; 10                      C) 10; 13.33                      D) 160; 270

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 64) Assume the total product of three workers is 120 and the total product of four workers is 160. The fourth worker's average product is \_\_\_\_\_ while her marginal product is \_\_\_\_\_.  
A) 10; 30                      B) 30; 10                      C) 40; 40                      D) 160; 40

Answer: C

Diff: 2

Topic: The Production Process

Skill: Analytic

- 65) Burning Bob's Salsa House serves 30 customers in an hour when it hires one worker. It serves 60 customers in an hour when it hires two workers. The marginal product of the second worker is \_\_\_\_\_ customers served per hour.  
A) 20                      B) 30                      C) 50                      D) 67.5

Answer: B

Diff: 1

Topic: The Production Process

Skill: Fact

- 66) The formula for the average product of labor is  
A)  $\Delta q/\Delta L$ .                      B)  $\Delta L/\Delta q$ .                      C)  $q/L$ .                      D)  $L/q$ .

Answer: C

Diff: 2

Topic: The Production Process

Skill: Definition

- 67) When the marginal product of labor equals the average product of labor, then
- A) the average product is maximized.
  - B) the marginal product is maximized.
  - C) the marginal product is still increasing.
  - D) the average product is still increasing.

Answer: A

Diff: 3

Topic: The Production Process

Skill: Conceptual

- 68) As a firm's total cost for capital and labor increases, its isocost line
- A) shifts parallel outward from the original isocost line.
  - B) shifts parallel inward from the original isocost line.
  - C) rotates outward on the Y-intercept.
  - D) rotates outward on the X-intercept.

Answer: A

Diff: 2

Topic: The Production Process

Skill: Analytic

- 69) As a firm's total cost for capital and labor decreases, its isocost line
- A) shifts parallel outward from the original isocost line.
  - B) shifts parallel inward from the original isocost line.
  - C) rotates outward on the Y-intercept.
  - D) rotates outward on the X-intercept.

Answer: B

Diff: 2

Topic: The Production Process

Skill: Analytic

- 70) Related to the *Economics in Practice* on page 144: UPS is adjusting its production process by
- A) increasing the labor intensity of its production.
  - B) increasing the capital intensity of its production.
  - C) decreasing the capital intensity of its production.
  - D) UPS is already using the optimal capital to labor ratio in its production and no modifications are currently planned.

Answer: B

Diff: 2

Topic: The Production Process: Economics in Practice

Skill: Fact

## 2 True/False

- 1) If the first worker produces five custom picture frames a day, and the second worker produces five additional custom picture frames a day, then diminishing marginal returns have not yet set in.

Answer: TRUE

Diff: 1

Topic: The Production Process

Skill: Fact

- 2) One worker produces 5 rocking chairs. If diminishing returns have already set in, a firm will need to hire more than two workers to produce 10 rocking chairs.

Answer: TRUE

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 3) A production function shows the least amount that a firm will produce given the amount of labor input.

Answer: FALSE

Diff: 1

Topic: *The Production Process*

Skill: *Fact*

- 4) If the marginal product of labor is less than the average product of labor, then the average product of labor is increasing.

Answer: FALSE

Diff: 2

Topic: *The Production Process*

Skill: *Conceptual*

## 7.3 Choice of Technology

### 1 Multiple Choice

- 1) Costs of production are determined
- A) only by the technologies that are available.
  - B) only by the input prices that are available.
  - C) by the technologies that are available and by input prices.
  - D) by the technologies that are available and by the demand for the output.

Answer: C

Diff: 1

Topic: *Choice of Technology*

Skill: *Fact*

- 2) Related to the *Economics in Practice* on page 146: If you own a truck and use it to deliver merchandise to retailers and hire a driver to such deliveries. The speed at which you instruct the driver to drive depends on
- A) the driver's wage only.
  - B) the price of gasoline only.
  - C) the driver's wage and the price of gasoline.
  - D) neither the driver's wage nor the price of gasoline.

Answer: C

Diff: 1

Topic: *Choice of Technology; Economics in Practice*

Skill: *Fact*

- 3) Related to the *Economics in Practice* on page 146: Suppose you own a truck and use it to deliver merchandise to retailers and hire a driver to such deliveries. At higher rates of speed the truck gets fewer miles per gallon of gas. Holding all else constant, as the price of gasoline continues to rise
- A) you will instruct your driver to drive faster.
  - B) you will instruct your driver to drive slower.
  - C) you will ask your driver to change their driving in any way.
  - D) you will make more deliveries to cover the increasing cost of fuel.

Answer: B

Diff: 1

Topic: Choice of Technology: Economics in Practice

Skill: Conceptual

## 7.4 Appendix

### 1 Multiple Choice

- 1) A graph showing all combinations of capital and labor that a firm can use to produce a given amount of output is a(n)
- A) indifference curve.
  - B) isoquant.
  - C) isocost line.
  - D) production function.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

Use the information provided in the Figure 7.7 below to answer the question that follows.

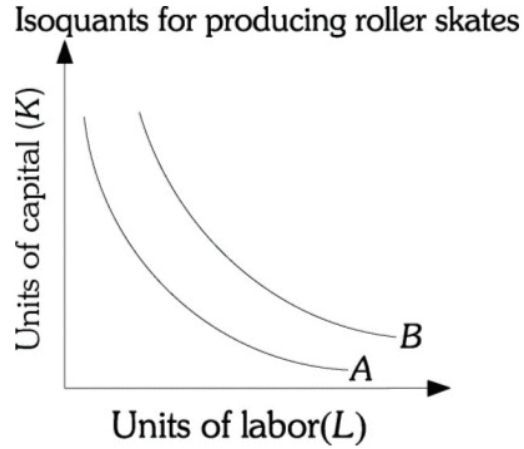


Figure 7.7

- 2) Refer to Figure 7.7 above. If Roller Skates Unlimited moves from isoquant *B* to isoquant *A*, the number of roller skates produced
- A) decreases.
  - B) increases.
  - C) remains constant, but Roller Skates Unlimited uses more capital and more labor.
  - D) remains constant, but input prices have risen.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

Use the information provided in the Figure 7.8 below to answer the question that follows.

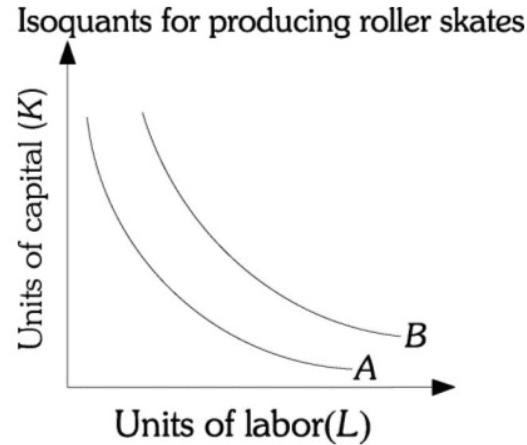


Figure 7.8

- 3) Refer to Figure 7.8 above. If Roller Skates Unlimited moves from isoquant B to isoquant A, the number of roller skates produced
- A) decreases.
  - B) increases.
  - C) remains constant, but Roller Skates Unlimited uses more capital and more labor.
  - D) remains constant, but input prices have risen.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Definition

- 4) Isoquants slope downward because as a firm uses more
- A) units of an input to produce a product, total cost increases.
  - B) units of an input to produce a product, the input's marginal productivity increases.
  - C) of one input, then to keep output constant it needs less of the other input.
  - D) both B and C

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 5) A(n) \_\_\_\_\_ shows all combinations of capital and labor that yield a given total cost.
- A) isocost line
  - B) isoquant
  - C) budget constraint
  - D) expenditure set

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

Refer to the information provided in Figure 7.9 below to answer the questions that follow.

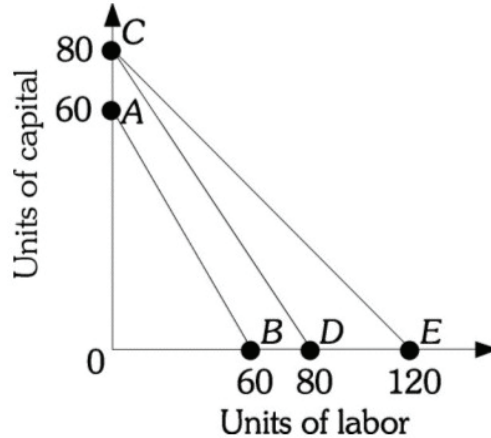


Figure 7.9

- 6) Refer to Figure 7.9. If the price of capital is \$25, then along isocost line  $AB$  total cost is
- A) \$1200.
  - B) \$1500.
  - C) \$2000.
  - D) indeterminate from this information since the price of labor is not given.

Answer: B

Diff: 3

Topic: Appendix: Isoquants and Isocosts

Skill: Conceptual

- 7) Refer to Figure 7.9. The firm is currently along isocost  $CD$ . If the price of capital is \$25, then the price of labor is
- A) \$1.
  - B) \$25.
  - C) \$80.
  - D) indeterminate from the information given.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 8) Refer to Figure 7.9. The firm is currently along isocost  $CE$ . If the price of capital is \$24, then the price of labor is
- A) \$16.
  - B) \$24.
  - C) \$80.
  - D) \$120.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic



- 9) Refer to Figure 7.9. The firm's isocost line would shift from  $CD$  to  $CE$  if
- A) the price of capital fell.
  - B) the price of labor fell.
  - C) the firm's total expenditure on inputs increased.
  - D) either the price of labor fell or the firm's total expenditure on inputs increased.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 10) Refer to Figure 7.9. The slope of isocost  $AB$  is
- A) -1.
  - B) 0.
  - C) 1.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 11) Refer to Figure 7.9. The slope of isocost  $CD$  is
- A) -1.
  - B)  $-2/3$ .
  - C) 0.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 12) Refer to Figure 7.9. The slope of isocost  $CE$  is
- A) -1.
  - B)  $-2/3$ .
  - C) 0.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 13) Refer to Figure 7.9. The firm's isocost line could shift from  $CD$  to  $AB$  if the
- A) price of capital increased.
  - B) firm's total expenditures increased by 25%.
  - C) price of capital and labor each increased by 25%.
  - D) firm's total expenditures decreased by 25% or the price of capital and labor each increased by 33%.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 14) Refer to Figure 7.9 The firm's isocost line could shift from  $AB$  to  $CD$  if
- A) the price of capital decreased.
  - B) the firm's total expenditures decreased by 33%.
  - C) the price of capital and labor each decreased by 25%.
  - D) the firm's total expenditures increased by 33% or the price of capital and labor each decreased by 33%.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 15) Refer to Figure 7.9. The general formula for the slope of any of the isocost lines is
- A)  $-PK/PL$ .
  - B)  $-PL/PK$ .
  - C)  $TC/PL$ .
  - D)  $TC/PK$ .

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 16) Refer to Figure 7.9. If the price of capital is \$30, then along isocost line  $AB$  total cost is
- A) \$1,200.
  - B) \$1,800.
  - C) \$2,400.
  - D) indeterminate from this information, as the price of labor is not given.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

Refer to the information provided in Figure 7.10 below to answer the questions that follow.

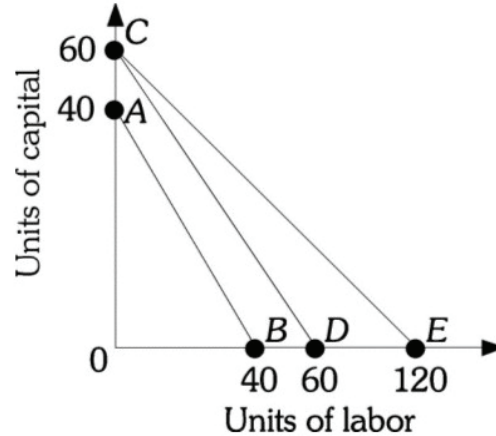


Figure 7.10

- 17) Refer to Figure 7.10. The firm is currently along isocost  $CD$ . If the price of capital is \$30, then the price of labor is
- A) \$4.
  - B) \$30.
  - C) \$180.
  - D) indeterminate from this information.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 18) Refer to Figure 7.10. The firm's isocost line would shift from  $CE$  to  $CD$  if
- A) the price of capital rises.
  - B) the price of labor rises.
  - C) the firm's total expenditure on inputs decreases.
  - D) either the price of labor falls or the firm's total expenditure on inputs decreases.

Answer: B

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 19) Refer to Figure 7.10. The slope of isocost  $AB$  is
- A) -1.
  - B) 0.
  - C) 1.
  - D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

20) Refer to Figure 7.10. The slope of isocost  $CD$  is

- A) -1.
- B) 0.
- C) 1.
- D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

21) Refer to Figure 7.10. The slope of isocost  $CE$  is

- A)  $-1/2$ .
- B) -1.
- C) -2.
- D) indeterminate from this information, as the prices of capital and labor are not given.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

22) Refer to Figure 7.11. The firm's isocost line could shift from  $AB$  to  $CD$  if

- A) the price of capital decreased.
- B) the firm's total expenditures increased by 50%.
- C) the price of capital and labor each decreased by 50%.
- D) either B or C

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

Refer to the information provided in Figure 7.11 below to answer the questions that follow.

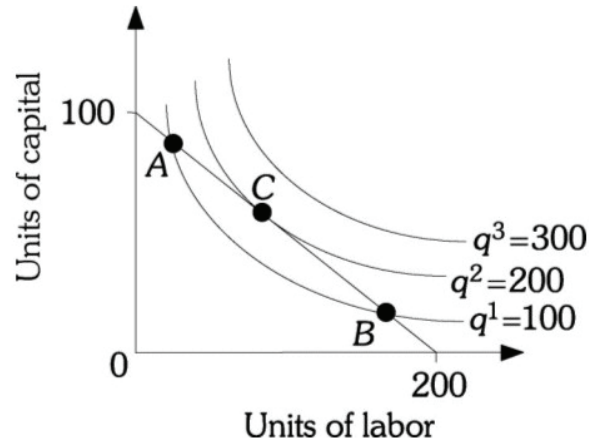


Figure 7.11

- 23) Refer to Figure 7.11. If this firm's cost of capital is \$10 per unit and its cost of labor is \$5 per unit, the isocost line represents a total cost of
- A) \$1,000.                      B) \$2,000.                      C) \$3,000.                      D) \$4,000.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 24) Refer to Figure 7.11. The slope of the isocost line is
- A) -2.                                  B) -1/2.                              C) 1/2.                                  D) 2.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 25) Refer to Figure 7.11. At Point C the slope of the  $q_2 = 200$  isoquant is
- A) -2.                                      B) -1/2.  
C) -1.                                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 26) Refer to Figure 7.11. At Point A the absolute value of the slope of the  $q_1 = 100$  isoquant is
- A) less than 2.                              B) exactly equal to 2.  
C) greater than 2.                              D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 27) Refer to Figure 7.11. If the given isocost line represents the firm's level of total cost, the \_\_\_\_\_ point represents the firm's optimal combination of capital and labor.
- A) A  
B) B  
C) C  
D) 50 units of capital and 50 of labor

Answer: C

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 28) Refer to Figure 7.11. The given isocost line represents the firm's level of total cost. At the firm's optimal combination of capital and labor, the firm produces \_\_\_\_\_ units of output.
- A) 100  
B) 200  
C) 300  
D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

Refer to the information provided in Figure 7.12 below to answer the questions that follow.

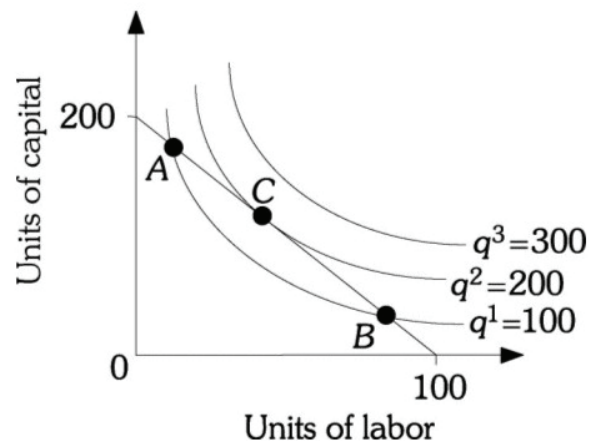


Figure 7.12

- 29) Refer to Figure 7.12. If the firm's cost of capital is \$15 per unit and its cost of labor is \$30 per unit, the isocost line represents a total cost of
- A) \$2,000.  
B) \$3,000.  
C) \$6,000.  
D) \$8,000.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 30) Refer to Figure 7.12. The slope of the isocost line is
- A) -2.  
B) -1/2.  
C) 1/2.  
D) 2.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Analytic

- 31) Refer to Figure 7.13. At point C the slope of the  $q_2 = 200$  isoquant is
- A) -2.
  - B) -1/2.
  - C) -1.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 32) Refer to Figure 7.13. If the isocost line given represents the firm's level of total cost, the \_\_\_\_\_ point represents the firm's optimal combination of capital and labor.
- A) A
  - B) B
  - C) C
  - D) 50 units of capital and 50 of labor

Answer: C

Diff: 3

Topic: Appendix: Isoquants and Isocosts

Skill: Conceptual

- 33) The least costly way to produce any given level of output is indicated by the
- A) point of intersection between the isoquant corresponding to that level of output and the Y-axis.
  - B) point of intersection between the isoquant corresponding to that level of output and the X-axis.
  - C) point of tangency between an isocost line and the isoquant corresponding to that level of output.
  - D) isocost line corresponding to that level of output.

Answer: C

Diff: 1

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 34) The point of tangency between an isocost line and an isoquant is necessarily
- A) the profit-maximizing combination of inputs a firm can hire to produce that output level.
  - B) the least costly combination of inputs the firm can hire to produce that output level.
  - C) both the profit-maximizing and least costly combination of inputs a firm can use to produce that output level.
  - D) the minimum amount of output a firm can attain for that level of expenditure.

Answer: B

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Fact

- 35) We can derive a firm's total cost curve from its isoquant and isocost curves by varying
- A) the prices of capital and labor and keeping total expenditure constant.
  - B) the production technologies, but keeping input prices and total expenditures constant.
  - C) total expenditures while keeping input prices and the production technology constant.
  - D) the price of either capital or labor while keeping total expenditures and the production technology constant.

Answer: C

Diff: 3

Topic: Appendix: Isoquants and Isocosts

Skill: Conceptual

- 36) The slope of the isoquant is
- A)  $-MP_L/MP_K$ .
  - B) the marginal rate of technical substitution.
  - C) negative.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Appendix: Isoquants and Isocosts

Skill: Definition



# Chapter 8 Short-Run Costs and Output Decisions

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## 8.1 Costs in the Short Run

### 1 Multiple Choice

1) In the short run

- A) a fixed factor of production does NOT impose limits on existing firms.
- B) all firms must bear some costs regardless of their output.
- C) new firms can enter an industry.
- D) existing firms can exit an industry.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

2) Fixed costs

- A) do NOT exist in the long run.
- B) depend on a firm's level of output.
- C) are zero if a firm produces no output.
- D) are total costs minus average variable costs.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

3) Which statement is NOT true? Variable costs are

- A) equal to total costs in the long run.
- B) zero if output is zero.
- C) equal to the product of average variable cost and the output level.
- D) constant as output increases.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

4) Economists usually assume that \_\_\_\_\_ is a fixed input in the \_\_\_\_\_ run.

- A) labor; short
- B) capital; short
- C) labor; long
- D) capital; long

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

5) Economists usually assume that labor is \_\_\_\_\_ input in the \_\_\_\_\_ run.

- A) a fixed; short
- B) a fixed; long
- C) a variable; short
- D) part fixed and part variable; long

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 6) The formula for total fixed cost is
- A)  $TFC = TC + TVC$ .
  - B)  $TFC = TVC - TC$ .
  - C)  $TFC = TC / TVC$ .
  - D)  $TFC = TC - TVC$ .

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 7) Total cost is calculated as
- A)  $TFC + TVC$ .
  - B)  $ATC \times P$ .
  - C) the sum of all the firm's implicit costs.
  - D)  $AFC + AVC$ .

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 8) The Lawn Ranger, a landscaping company, has total costs of \$5,000 and total variable costs of \$1,000. The Lawn Ranger's total fixed costs are
- A) \$0.
  - B) \$4,000.
  - C) \$6,000.
  - D) indeterminate because the firm's output level is unknown.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 9) The Lawn Ranger, a landscaping company, has total costs of \$7,000 and total fixed costs of \$5,000. The Lawn Ranger's total variable costs are
- A) \$2,000.
  - B) \$3,000.
  - C) \$5,000.
  - D) indeterminate because the firm's output level is unknown.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 10) A dairy company, Farley Farm, has total costs of \$10,000 and total variable costs of \$3,000. Farley Farm's total fixed costs are
- A) \$0.
  - B) \$7,000.
  - C) \$13,000.
  - D) indeterminate because the firm's output level is not known.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic



16) Average fixed costs

- A) are the costs associated with producing an additional unit of output.
- B) provide a per unit measure of costs.
- C) fall as output rises.
- D) are constant.

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

Refer to the information provided in Figure 8.1 below to answer the question that follows.

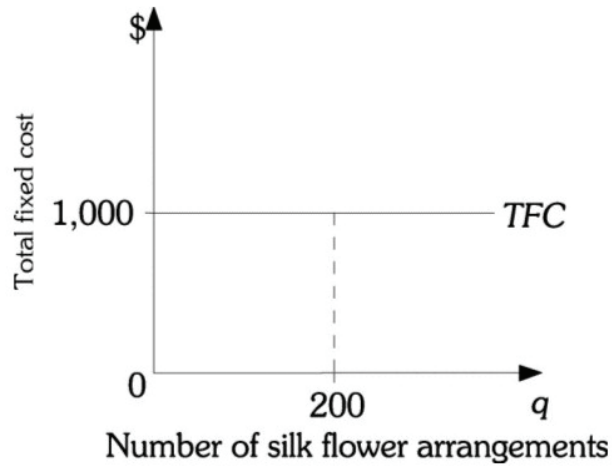


Figure 8.1

17) Refer to Figure 8.1 above. The total fixed costs for Cyndy's Floral Arrangements are \$1,000. If Cyndy's Floral Arrangements produces 200 silk flower arrangements, the average fixed costs are

- A) \$0.20.
- B) \$5.
- C) \$20.
- D) \$50.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Figure 8.2 below to answer the question that follows.

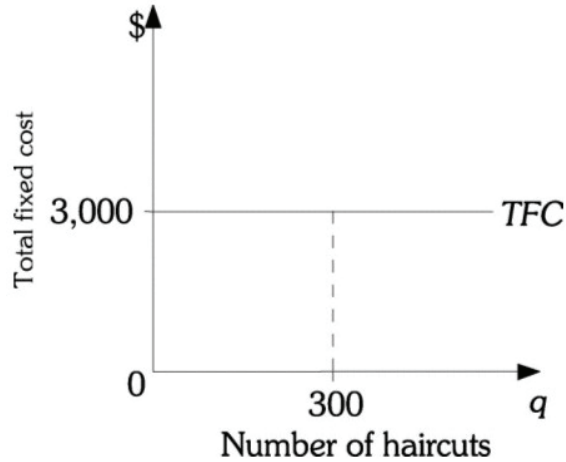


Figure 8.2

- 18) Refer to Figure 8.2 above. The total fixed costs for The Barber Shop are \$3,000. If The Barber Shop produces 300 hair cuts, the average fixed costs are
- A) \$.20.                      B) \$5.                      C) \$10.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 19) As output decreases, average fixed costs
- A) decrease.                      B) initially decrease and then increase.  
C) remain constant.                      D) increase.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 20) Both Kate and Kyle own saltwater taffy factories. Kate's factory has low fixed costs and high variable costs. Kyle's factory has high fixed costs and low variable costs. Currently, each factory is producing 1,000 boxes of taffy at the same total cost. Complete the following statement with the correct answer. If each produces
- A) less, their costs will be equal.  
B) more, their costs will be equal.  
C) more, the costs of Kate's factory will exceed those of Kyle's factory.  
D) less, the costs of Kate's factory will exceed those of Kyle's factory.

Answer: C

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

- 21) Short-run costs that do NOT depend on the level of output are
- A) total fixed costs only.
  - B) total variable costs only.
  - C) total costs only.
  - D) both total variable costs and total costs.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 22) Which statement is NOT true regarding the total variable cost curve?
- A) The total variable cost curve increases as output increases.
  - B) The total variable cost curve shows the variable costs of production given current factor prices.
  - C) The total variable cost curve starts at the origin.
  - D) The total variable cost curve is a horizontal line.

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 23) A point on a total variable cost curve shows the \_\_\_\_\_ variable cost a firm will bear to produce a certain output.
- A) highest
  - B) lowest
  - C) change in
  - D) average

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 24) \_\_\_\_\_ is(are) most likely a variable cost for a firm.
- A) The interest payments made on loans
  - B) The franchiser's fee that a restaurant must pay to the national restaurant chain
  - C) The monthly rent on office space that it leased for a year
  - D) The payroll taxes that are paid on employee wages

Answer: D

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

- 25) \_\_\_\_\_ are likely a fixed cost of a firm.
- A) Wages paid to employees
  - B) The payments for supplies
  - C) Lease payments for office space
  - D) Travel expenses to meet with clients

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

Refer to the information provided in Table 8.1 below to answer the questions that follow.

Table 8.1

Produce	Using Techniques	Units of Variable K	Inputs L
1 unit of output	A	8	8
	B	4	12
2 units of output	A	14	12
	B	8	20
3 units of output	A	16	12
	B	12	22

- 26) Refer to Table 8.1. Assuming the price of capital ( $K$ ) is \$10 per unit and the price of labor ( $L$ ) is \$5 per unit, what production technique should this firm use to produce 2 units of output?
- A) production technique A
  - B) production technique B
  - C) The firm is indifferent between production technique A and production technique B.
  - D) It is impossible to determine if the firm should select production technique A or B because total fixed costs are not given.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 27) Refer to Table 8.1. Assuming the price of capital ( $K$ ) is \$10 per unit and the price of labor ( $L$ ) is \$5 per unit, the lowest long-run total cost of producing one unit of output is
- A) \$16.
  - B) \$100.
  - C) \$120.
  - D) \$220.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 28) Refer to Table 8.1. Assume that the relevant time period is the short run. Assuming the price of capital ( $K$ ) is \$10 per unit and the price of labor ( $L$ ) is \$5 per unit, this firm's total cost of producing one unit of output is
- A) \$100.
  - B) \$120.
  - C) \$220.
  - D) indeterminate from this information.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

29) Refer to Table 8.1. Assume that the relevant time period is the short run. Assuming the price of labor ( $L$ ) is \$5 per unit and the price of capital ( $K$ ) is \$10 per unit, the average total cost of producing two unit of output is

- A) \$20.                      B) \$40.                      C) \$90.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

30) Refer to Table 8.1. Assuming the price of capital ( $K$ ) is \$10 per unit and the price of labor ( $L$ ) is \$5 per unit, the marginal cost of producing the third unit of output is

- A) \$30.                                              B) \$40.  
C) \$50.                                              D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

31) Refer to Table 8.1. Assuming the price of capital ( $K$ ) is \$10 per unit and the price of labor ( $L$ ) is \$5 per unit, the firm will use production technique \_\_\_\_\_ to produce \_\_\_\_\_ of output.

- A) A; all three units  
B) B; all three units  
C) B; the first two units of output and production technique A to produce the third unit  
D) A; the first unit and production technique B to produce the second and third units

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

32) Marginal cost is the

- A) increase in total cost resulting from producing one more unit of output.  
B) average cost of production divided by output.  
C) increase in  $AVC$  resulting from producing one more unit of output.  
D) equivalent of average total cost.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

33) A firm will begin to experience diminishing returns at the output where marginal

- A) cost increases.                                              B) cost decreases.  
C) product increases.                                              D) both B and C

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Definition



- 34) Diminishing marginal returns implies
- A) decreasing average variable costs.
  - B) decreasing marginal costs.
  - C) increasing marginal costs.
  - D) decreasing average fixed costs.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Definition

- 35) Marginal cost is \_\_\_\_\_ average variable cost when \_\_\_\_\_.
- A) equal to; average total cost is minimized
  - B) less than; total cost is maximized
  - C) greater than; average fixed cost is minimized
  - D) equal to; average variable cost is minimized.

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

- 36) In a short run production process a(n) \_\_\_\_\_ marginal product of labor explains why marginal cost is positive and \_\_\_\_\_.
- A) zero; falls
  - B) constant; rises
  - C) increasing; does not change
  - D) diminishing; rises

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 37) In the short run when the marginal product of labor \_\_\_\_\_, the marginal cost of an additional unit of output \_\_\_\_\_.
- A) rises; rises
  - B) falls; falls
  - C) rises; falls
  - D) falls; doesn't change

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Fact

- 38) Total variable costs \_\_\_\_\_ with increasing output.
- A) always increase
  - B) always decrease
  - C) initially increase and then decrease
  - D) initially decrease and then increase

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 39) One formula for MC is
- A)  $TVC/q$ .
  - B)  $q/TVC$ .
  - C)  $\Delta TVC/q$ .
  - D)  $\Delta TVC/\Delta q$ .

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Fact



Refer to the information provided in Figure 8.3 below to answer the questions that follow.

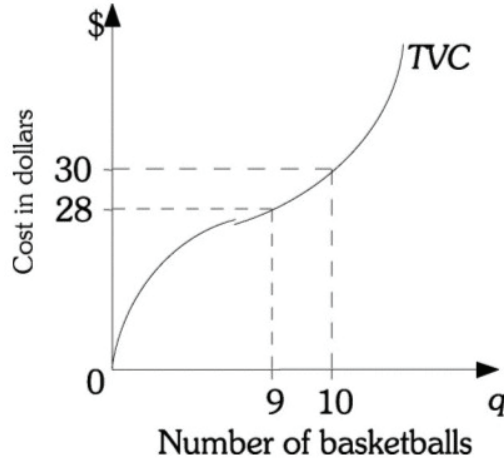


Figure 8.3

- 45) Refer to Figure 8.3. The marginal cost of the 10th basketball is  
A) \$2.                      B) \$3.                      C) \$3.05.                      D) \$5.80.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 46) Refer to Figure 8.3. If total fixed costs are \$50, then average total cost of producing 10 basketballs is  
A) \$3.                      B) \$5.                      C) \$8.                      D) \$80.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 47) Refer to Figure 8.3. The marginal cost of the ninth basketball is  
A) less than \$2.                      B) \$2.  
C) \$3.                      D) greater than \$3.

Answer: A

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

- 48) Labor is the only variable input for Elliot's dog-walking service. His labor costs are \$300 a day and his service walks 25 dogs per day. His labor costs increase to \$315.50 a day to walk 26 dogs per day. The marginal cost of walking that 26th dog is
- A) \$15.50
  - B) \$19.50.
  - C) \$29.50.
  - D) indeterminate from the information given.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Table 8.2 below to answer the questions that follow.

Number of Earnings	TVC	MC	AVC	TFC	TC	AFC	ATC
0					100		
1		50					
2							95
3			46.67				
4					300		
5	270						

- 49) Refer to Table 8.2. If Sherry produces zero earrings, her total fixed costs are
- A) \$0.
  - B) \$50.
  - C) \$100.
  - D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 50) Refer to Table 8.2. If Sherry produces one pair of earrings, her total variable costs are
- A) \$50.
  - B) \$100.
  - C) \$150.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 51) Refer to Table 8.2. If Sherry produces two pairs of earrings, her marginal cost is
- A) \$40.
  - B) \$45.
  - C) \$72.50.
  - D) \$122.50.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 52) Refer to Table 8.2. If Sherry produces three pairs of earrings, her total variable costs are  
A) \$26.67.                      B) \$140.                      C) \$175.                      D) \$225.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 53) Refer to Table 8.2. If Sherry produces five pairs of earrings, her total costs are  
A) \$320.                      B) \$360.                      C) \$370.                      D) \$400.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 54) Refer to Table 8.2. If Sherry produces four pairs of earrings, her average fixed costs are  
A) \$4.                      B) \$20.                      C) \$25.                      D) \$100.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 55) Refer to Table 8.2. Assume that Sherry's Earrings is producing in a perfectly competitive market and the market price for earrings is \$60. To maximize profits Sherry should produce \_\_\_\_\_ pairs of earrings.  
A) two                      B) three                      C) four                      D) five

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Table 8.3 below to answer the questions that follow.

Number of Earrings	TVC	MC	AVC	TFC	TC	AFC	ATC
0							
1	20						
2		10			30		
3					110		
4			20				
5					180		

56) Refer to Table 8.3. What is the total cost of producing zero units of output?

- A) \$0
- B) \$30
- C) \$60
- D) indeterminate from the given information

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Conceptual

57) Refer to Table 8.3. The marginal cost of the fourth unit is \_\_\_\_\_ and the average total cost of the fourth unit is \_\_\_\_\_.

- A) \$10; \$30
- B) \$20; \$45
- C) \$30; \$35
- D) indeterminate from the given information

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

58) Refer to Table 8.3. From the information in the given table,

- A) the firm is in the long run.
- B) the firm experiences diminishing returns to its variable input.
- C) the marginal cost curve intersects the average total cost curve between 3 and 4 units of output.
- D) the difference between total cost and total variable cost decreases as output increases.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 59) Refer to Table 8.3. If the firm is in a perfectly competitive industry with a market price of \$30 per unit, the firm will produce \_\_\_\_\_ units and earn a profit of \_\_\_\_\_ .  
A) three; \$20                      B) four; \$20                      C) four; -\$20                      D) five; \$30

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 60) If we know average total cost and the amount of output, then we can always calculate total cost by \_\_\_\_\_ average total cost \_\_\_\_\_ the amount of output.  
A) adding; and                      B) subtracting; from  
C) multiplying; by                      D) dividing; by

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 61) If the marginal cost curve is above the average variable cost curve, then  
A) average variable cost is increasing.                      B) average variable cost is decreasing.  
C) average variable cost is constant.                      D) marginal cost is decreasing.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 62) Marginal cost intersects \_\_\_\_\_ at its minimum.  
A) total cost                      B) average total cost  
C) average fixed cost                      D) (B) and (C) are both correct.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Fact

- 63) If the marginal cost curve is below the average variable cost curve, then  
A) average variable cost is increasing.                      B) average variable cost is decreasing.  
C) average variable cost is constant.                      D) marginal cost is increasing.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 64) If the average variable cost curve is above the marginal cost curve, then  
A) marginal costs must be decreasing.  
B) marginal costs must be increasing.  
C) marginal costs can be either increasing or decreasing.  
D) average variable costs must be increasing.

Answer: C

Diff: 3

Topic: Costs in the Short Run

Skill: Fact

65) The marginal cost curve intersects the average variable cost curve at the \_\_\_\_\_ value of the average variable cost curve.

- A) maximum                      B) minimum                      C) zero                      D) average

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

66) Twenty-five students in a class take a test for which the average grade is 75. Then a twenty-sixth student enters the class, takes the same test, and scores 70. The test average grade calculated with 26 students will

- A) rise above 75.  
B) fall below 75.  
C) change from 75 but the direction is unclear.  
D) still equal 75.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

67) If a firm's total costs are \$75 when it produces 10 units of output and \$80 when it produces 11 units of output, then the marginal cost of producing the 11th unit is

- A) \$1.                      B) \$5.                      C) \$8.09.                      D) \$10.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

68) If a firm's total costs are \$100 when 10 units of output are produced and \$105 when 11 units of output are produced, the marginal cost of the 11th unit is

- A) \$1.                      B) \$3.                      C) \$5.                      D) \$9.36.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

69) If the average variable cost of the fifth hat is \$30, then the total variable cost of five hats is

- A) \$6.                      B) \$150.  
C) \$1800.                      D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic





- 74) Refer to Figure 8.4. Up to point A \_\_\_\_\_ costs are \_\_\_\_\_.
- A) marginal; decreasing
  - B) marginal; increasing
  - C) average variable; decreasing
  - D) average variable; increasing

Answer: C

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

- 75) Refer to Figure 8.4. After point A \_\_\_\_\_ costs are \_\_\_\_\_.
- A) average total; increasing
  - B) marginal; decreasing
  - C) average variable; decreasing
  - D) average variable; increasing

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 76) Refer to Figure 8.4. Marginal costs will equal average variable costs at
- A) two microwave ovens.
  - B) three microwave ovens.
  - C) six microwave ovens.
  - D) an indeterminate number of microwave ovens from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 77) Refer to Figure 8.4. Micro Oven's average total costs are \_\_\_\_\_ if it produces six microwave ovens.
- A) \$33.33
  - B) \$83.33
  - C) \$116.67
  - D) \$200.00

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 78) Refer to Figure 8.4. The marginal cost of the sixth microwave oven is
- A) \$83.33.
  - B) \$116.67.
  - C) \$200.
  - D) \$1200.

Answer: B

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

- 79) Refer to Figure 8.4. Average variable costs are minimized at an output level of
- A) 2.
  - B) 3.
  - C) 6.
  - D) an indeterminate number based on the available information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 80) Refer to Figure 8.4. 's average fixed costs are \_\_\_\_\_ if it produces six microwave ovens.  
 A) \$33.33  
 B) \$83.33  
 C) \$116.67  
 D) indeterminate from this information

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 81) Refer to Figure 8.4. Micro Oven minimizes average total costs at \_\_\_\_\_ microwave ovens.  
 A) two  
 B) between three and five  
 C) six  
 D) greater than six

Answer: D

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 82) Refer to Figure 8.4. The vertical distance *AB* represents \_\_\_\_\_ costs.  
 A) total fixed  
 B) average fixed  
 C) marginal  
 D) average total

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Figure 8.5 below to answer the questions that follow.

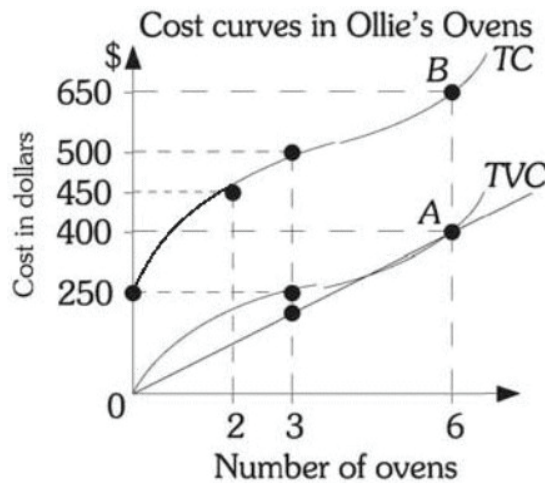


Figure 8.5

- 83) Refer to Figure 8.5. The total fixed costs for Ollie's Ovens are  
 A) \$0.  
 B) \$250.  
 C) \$300.  
 D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 84) Refer to Figure 8.5. Average variable costs are \_\_\_\_\_ if Ollie's Ovens produces two ovens.  
 A) \$100  
 B) \$200  
 C) \$225  
 D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 85) Refer to Figure 8.5. Average variable costs are \_\_\_\_\_ if Ollie's Ovens produces three ovens.  
 A) \$166.67  
 B) \$83.33  
 C) \$500  
 D) \$1,500

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 86) Refer to Figure 8.5. The marginal cost of the third oven is  
 A) \$50.  
 B) \$100.  
 C) \$150.  
 D) indeterminate from this information.

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Figure 8.5 below to answer the questions that follow.

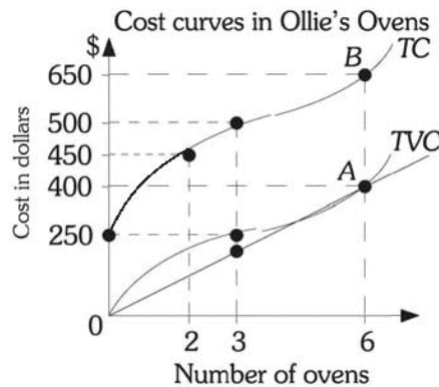


Figure 8.5

- 87) Refer to Figure 8.5. The marginal cost is equal to average variable cost when \_\_\_\_\_ ovens are produced.  
 A) two  
 B) three  
 C) six  
 D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 88) Refer to Figure 8.5. The average total costs are minimized when \_\_\_\_\_ ovens are produced.
- A) exactly six
  - B) more than six
  - C) less than six
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 89) Refer to Figure 8.5. The marginal cost of the sixth oven is
- A) \$50.00.
  - B) \$66.67.
  - C) \$108.33.
  - D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 90) A short run total cost schedule is a \_\_\_\_\_ cost schedule shifted upward by the amount of \_\_\_\_\_ cost.
- A) total fixed; marginal
  - B) marginal; total variable
  - C) total variable; total fixed
  - D) total variable; marginal

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 91) There are outputs for which \_\_\_\_\_ costs exceed \_\_\_\_\_ costs in the short run.
- A) total fixed; total
  - B) average variable; average total
  - C) total variable; total
  - D) average total; average variable

Answer: D

Diff: 1

Topic: Costs in the Short Run

Skill: Conceptual

- 92) Total cost is
- A)  $TFC - TVC$ .
  - B)  $TFC/TVC$ .
  - C)  $TFC + TVC$ .
  - D)  $AFC + AVC$ .

Answer: C

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 93) Total cost refers to
- A) the full economic costs of production.
  - B) the sum of average fixed cost and average variable cost.
  - C) the fixed costs of production.
  - D) the explicit costs of production.

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Definition

- 94) ATC is  
A)  $TC/q$ .                      B)  $q/TC$ .                      C)  $AFC - AVC$ .                      D)  $\Delta TC - \Delta q$ .

Answer: A

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 95) Average total cost  
A) measures the spread of overhead across output.  
B) is the average cost of producing each unit of output.  
C) is always increasing.  
D) is the sum of fixed cost and average variable cost.

Answer: B

Diff: 1

Topic: Costs in the Short Run

Skill: Fact

- 96) The Framing Gallery frames posters and has total fixed costs of \$1,000. The Framing Gallery is currently framing \_\_\_\_\_ posters if its average variable cost is \$20 and its average total cost is \$30.  
A) 5                                              B) 25  
C) 100                                              D) an indeterminate number of

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 97) The average variable cost of producing 100 sundaes is \$3. At this level of output, average variable cost is minimized. Which of the following statements is TRUE?  
A) Marginal cost of the 100th sundae is \$300.  
B) Average total cost is minimized at an output greater than 100 sundaes.  
C) Average fixed cost is minimized at an output less than 100 sundaes.  
D) Total cost of producing 100 sundaes is \$300.

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 98) Average variable and average total costs get closer together as output increases because \_\_\_\_\_ as output increases.  
A) diminishing returns set in  
B) average fixed costs decrease  
C) marginal costs decrease  
D) total and total variable costs get closer together

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

Refer to the information provided in Figure 8.6 below to answer the questions that follow.

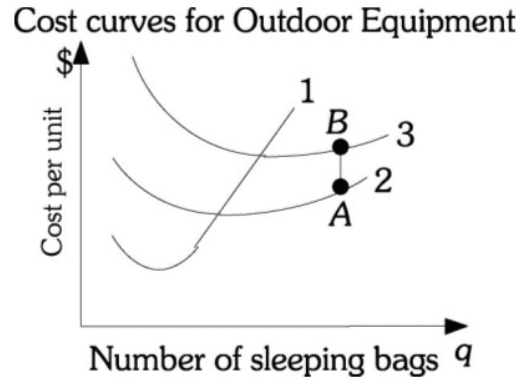


Figure 8.6

- 99) Refer to Figure 8.6. Curve 1 is Outdoor Equipment's \_\_\_\_\_ cost curve.
- |                  |                     |
|------------------|---------------------|
| A) marginal      | B) average variable |
| C) average total | D) average fixed    |

Answer: A

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 100) Refer to Figure 8.6. Outdoor Equipment's average total costs are minimized at the output level
- |                                                                    |
|--------------------------------------------------------------------|
| A) where Curves 1 and 2 intersect.                                 |
| B) where Curves 1 and 3 intersect.                                 |
| C) between the intersections of Curves 1 and 2 and Curves 1 and 3. |
| D) indeterminate with the given information.                       |

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 101) Refer to Figure 8.6. Curve 2 is Outdoor Equipment's \_\_\_\_\_ cost curve.
- |                  |                     |
|------------------|---------------------|
| A) marginal      | B) average variable |
| C) average total | D) average fixed    |

Answer: B

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 102) Refer to Figure 8.6. Curve 3 is Outdoor Equipment's \_\_\_\_\_ cost curve.
- |                  |                     |
|------------------|---------------------|
| A) marginal      | B) average variable |
| C) average total | D) average fixed    |

Answer: C

Diff: 2

Topic: Costs in the Short Run

Skill: Analytic

- 103) Refer to Figure 8.6. The vertical distance  $AB$  is Outdoor Equipment's \_\_\_\_\_ cost.  
 A) marginal                      B) average fixed                      C) total fixed                      D) total  
 Answer: B  
 Diff: 2  
 Topic: Costs in the Short Run  
 Skill: Definition
- 104) If marginal cost is below average total cost, average total cost will  
 A) be maximized.                      B) decrease.  
 C) increase.                      D) remain constant.  
 Answer: B  
 Diff: 2  
 Topic: Costs in the Short Run  
 Skill: Analytic
- 105) If marginal cost equals average total cost, average total cost will  
 A) be maximized.                      B) decrease.                      C) increase.                      D) be minimized.  
 Answer: D  
 Diff: 2  
 Topic: Costs in the Short Run  
 Skill: Analytic
- 106) The short-run average total cost curve eventually begins to increase at an increasing rate because of  
 A) diseconomies of scale phenomena.  
 B) a constraint that does not allow the firm to change its production technology.  
 C) diminishing returns phenomena.  
 D) increasing returns to scale to capital.  
 Answer: C  
 Diff: 1  
 Topic: Costs in the Short Run  
 Skill: Fact
- 107) The law of diminishing marginal returns  
 A) results in average variable cost ( $AVC$ ), average total cost ( $ATC$ ), and marginal cost ( $MC$ ) curves eventually increasing at an increasing rate.  
 B) results in  $MC$  but not  $AVC$  curves eventually increasing at an increasing rate.  
 C) causes average fixed costs to decline continuously as output increases.  
 D) causes the difference between average total cost and average variable cost to increase as output increases.  
 Answer: A  
 Diff: 2  
 Topic: Costs in the Short Run  
 Skill: Definition
- 108) In the short run a firm using variable labor and fixed capital inputs achieves the efficient (lowest cost) level of output at the minimum point on its \_\_\_\_\_ cost curve.  
 A) average total                      B) total variable                      C) average fixed                      D) marginal  
 Answer: A  
 Diff: 2  
 Topic: Costs in the Short Run  
 Skill: Fact



109) A firm is producing output less than the output associated with the minimum point on the firm's short run average variable cost curve. At this level of output the firm uses its fixed capital input \_\_\_\_\_ and its variable labor input \_\_\_\_\_.

- A) efficiently; efficiently
- B) efficiently; inefficiently
- C) inefficiently; efficiently
- D) inefficiently; inefficiently

Answer: D

Diff: 3

Topic: Costs in the Short Run

Skill: Conceptual

110) Consider an output beyond the minimum point of a firm's short run average total cost curve. At this level of output the firm can use its \_\_\_\_\_ input at a lower average cost but only by using its \_\_\_\_\_ input at a higher average cost.

- A) fixed capital; variable labor
- B) variable labor; fixed capital
- C) variable capital; fixed labor
- D) fixed labor; variable capital

Answer: A

Diff: 3

Topic: Costs in the Short Run

Skill: Analytic

111) Related to the *Economics in Practice* on page 166: When considering expanding its student body a college should

- A) compare the marginal cost of educating an additional student to the tuition that student pays.
- B) compare the average total cost of educating an additional student to the tuition that student pays.
- C) definitely expand because education is very important and should be made available to as many people as possible.
- D) only consider doing so if they have sufficient housing.

Answer: A

Diff: 2

Topic: Costs in the Short Run: Economics in Practice

Skill: Conceptual

112) Related to the *Economics in Practice* on page 166: In higher education

- A) the average total cost of educating students equals the marginal cost of educating an additional student.
- B) the average total cost of educating students exceeds the marginal cost of educating an additional student.
- C) the average total cost of educating students is less than the marginal cost of educating an additional student.
- D) the total fixed cost of educating students is less than the marginal cost of educating an additional student.

Answer: B

Diff: 2

Topic: Costs in the Short Run: Economics in Practice

Skill: Fact

## 2 True/False

- 1) Average fixed costs rise continuously as quantity of output rises.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 2) The increase in total cost that results from producing one more unit of output is the marginal cost.

Answer: TRUE

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Definition*

- 3) The best combination of inputs at one level of production may not be best at other levels.

Answer: TRUE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 4) If marginal cost is increasing, then average variable cost must be increasing simultaneously.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Fact*

- 5) Average total cost is minimized at a higher level of output than average variable cost.

Answer: TRUE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Conceptual*

- 6) When marginal cost is between average variable cost and average total cost, marginal cost is decreasing.

Answer: FALSE

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Conceptual*

- 7) Average total cost of producing 100 units of output is \$5. If the marginal cost of producing the 101st unit is \$6, then average total cost of 101 units is less than \$5.

Answer: FALSE

Diff: 2

Topic: *Costs in the Short Run*

Skill: *Conceptual*

- 8) Total variable cost divided by output is marginal cost.

Answer: FALSE

Diff: 1

Topic: *Costs in the Short Run*

Skill: *Definition*

## 8.2 Output Decisions: Revenues, Costs, and Profit Maximization

### 1 Multiple Choice

1) Marginal revenue (MR) is

A)  $TR/q$

B)  $\Delta TR/\Delta q$ .

C)  $P \times q$

D)  $P/q$

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

2) The main decision for a profit maximizing perfectly competitive firm is NOT what \_\_\_\_\_ but what \_\_\_\_\_.

A) level of output to produce; price to charge

B) price to charge; level of output to produce

C) level of output to produce; total revenue to achieve

D) price to charge; total cost to achieve

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

3) If an individual perfectly competitive firm charges a price above the industry equilibrium price while competitors charge the equilibrium price, the firm will

A) sell all that it can produce and forgo no revenue.

B) sell all that it can produce and gain more revenue with the higher price.

C) sell part of what it can produce and forgo some revenue that it could have had.

D) not sell any of what it produces.

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

4) If an individual perfectly competitive firm charges a price below the industry equilibrium price while competitors charge the equilibrium price, the firm will

A) not sell any of what it produces.

B) sell part of what it produces but forgo no revenue.

C) sell all that it produces and forgo no revenue.

D) sell all that it produces but forgo revenue that it could have had.

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

5) Any firm's total revenue equals

A)  $MR \times q$ .

B)  $P \times q$ .

C)  $P/q$ .

D)  $MR/q$ .

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

6) The added revenue that a firm takes in when it increases output by one additional unit is \_\_\_\_\_ revenue.

- A) total                      B) marginal                      C) variable                      D) fixed

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

7) Marginal revenue is the

- A) ratio of total revenue to quantity.  
B) difference between total revenue and total costs.  
C) added revenue that a firm takes in when it increases output by one additional unit.  
D) additional profit the firm earns when it sells an additional unit of output.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

8) In perfect competition, a firm's marginal revenue curve

- A) and the demand curve facing the firm are identical.  
B) is always above the demand curve facing the firm.  
C) is always below the demand curve facing the firm.  
D) intersects the demand curve when marginal revenue is minimized.

Answer: A

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

9) In perfect competition, a firm's marginal revenue curve is

- A) downward sloping.                      B) upward sloping.  
C) horizontal.                      D) vertical.

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

10) The relationship between the price that a perfectly competitive firm can charge buyers and the firm's marginal revenue is that the price is \_\_\_\_\_ marginal revenue over all output.

- A) above                      B) below  
C) equal to                      D) sometimes above and sometimes below

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

11) Profit-maximizing firms want to maximize the difference between \_\_\_\_\_ revenue and \_\_\_\_\_ cost.

- A) total; marginal
- B) total; total
- C) marginal; marginal
- D) marginal; average

Answer: B

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

12) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price exceeds the firm's marginal and average variable costs. It follows that producing one more computer will cause this firm's

- A) total cost to decrease.
- B) profits to increase.
- C) profits to decrease.
- D) profits to remain unchanged.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

13) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price exceeds this firm's marginal and average variable costs. To maximize profits, Dell should

- A) make no adjustments as they are already maximizing their profits.
- B) increase their output.
- C) decrease their output.
- D) stop producing since it is earning a loss.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

14) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, marginal cost exceeds this firm's price. Assuming price exceeds average variable cost, to maximize profits Dell should

- A) make no adjustments as they are already maximizing their profits.
- B) increase their output.
- C) decrease their output.
- D) stop producing since it is earning a loss.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 15) Assume Dell Computer Company operates in a perfectly competitive market producing 5,000 computers per day. At this output level, price equals this firm's marginal cost. Assuming price exceeds average variable cost, to maximize profits Dell should
- A) make no adjustments as they are already maximizing their profits.
  - B) increase their output.
  - C) decrease their output.
  - D) stop producing since it is earning a loss.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

Refer to the information provided in Table 8.5 below to answer the following questions.

Number of Fruit Baskets	TFC	TVC	TC	MC
0	\$50	\$0	\$50	--
1	50	10	60	10
2	50	15	65	5
3	50	21	71	6
4	50	31	81	10
5	50	46	96	15
6	50	68	118	22

- 16) Refer to Table 8.5. Assume that Exotic Fruit sells fruit baskets in a perfectly competitive market. The market price of a fruit basket is \$22. To maximize profits, Exotic Fruit should sell \_\_\_\_\_ fruit basket(s) and their profit is \_\_\_\_\_.
- A) three; \$5
  - B) four; \$7
  - C) five; \$14
  - D) six; \$14

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 17) Refer to Table 8.5. Assume that Exotic Fruit sells fruit baskets in a perfectly competitive market. The market price of a fruit basket is \$15. To maximize profits, Exotic Fruit should sell \_\_\_\_\_ fruit basket(s) and their profit is \_\_\_\_\_.
- A) zero; \$0
  - B) two; -\$35
  - C) three; -\$26
  - D) five; -\$21

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 18) If a firm's demand curve is perfectly elastic, then at the profit maximizing level of output
- A)  $P > MR > MC$ .
  - B)  $P = MR = MC$ .
  - C)  $P < MR < MC$ .
  - D)  $P > 0$  and  $MR = 0$ .

Answer: B

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 19) If a profit maximizing firm is currently producing output where  $MR = MC$ , it should
- A) increase output so that marginal revenue is less than marginal cost.
  - B) decrease output so that marginal revenue will be greater than marginal cost and the firm's profit will increase.
  - C) not change output because it is already maximizing profit.
  - D) exit the industry.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 20) If a firm is producing where  $MR > MC$
- A) the revenue gained by producing one more unit of output exceeds the cost incurred by doing so.
  - B) the revenue gained by producing one more unit of output equals the cost incurred by doing so.
  - C) the revenue gained by producing one more unit of output is less than the cost incurred by doing so.
  - D) the firm is already maximizing profits because revenue is being increased by more than costs.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 21) Joe's Butcher Shop is producing where  $MR = MC$ , Joe's Butcher Shop must be
- A) earning a zero economic profit.
  - B) incurring a loss.
  - C) maximizing profits.
  - D) maximizing revenue but not maximizing profits.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 22) The profit-maximizing level for all firms, regardless of industry structure, is the output level where
- A)  $TR = MC$ .
  - B)  $P = MC$ .
  - C)  $ATC = P$ .
  - D)  $MC = MR$ .

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

Refer to the information provided in Figure 8.7 below to answer the question that follows.

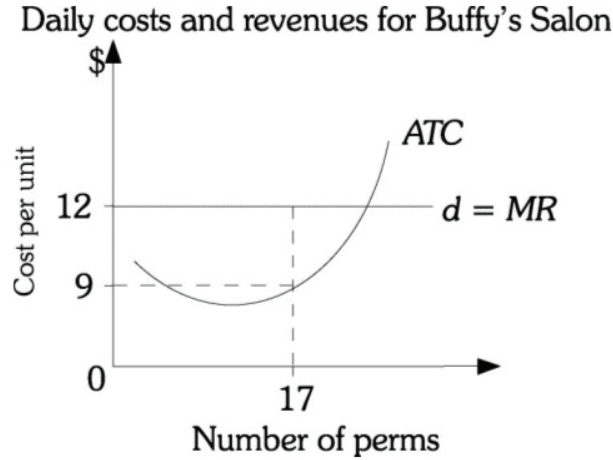


Figure 8.7

- 23) Refer to Figure 8.7. If Buffy gives 17 perms per day, her daily profit is  
 A) \$3.                      B) \$51.                      C) \$153.                      D) \$204.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 24) A firm in a perfectly competitive industry produces its profit-maximizing quantity, 40 units. Industry price is \$3, total fixed costs are \$45, and total variable costs are \$60. The firm's economic profit is  
 A) \$15.                      B) \$30.                      C) \$35.                      D) \$60.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 25) An individual wheat farmer produces wheat in a perfectly competitive market. An increase in the market demand for wheat will cause the farmer's marginal revenue to \_\_\_\_\_ and his profit maximizing level of output to \_\_\_\_\_.  
 A) increase; increase                      B) increase; decrease  
 C) decrease; increase                      D) decrease; decrease

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual



26) Corn is produced in a perfectly competitive market. The demand for ethanol decreases. This will cause the individual corn farmer's marginal revenue to \_\_\_\_\_ and their profit maximizing level of output to \_\_\_\_\_.

- A) increase; increase  
B) increase; decrease  
C) decrease; increase  
D) decrease; decrease

Answer: D

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

27) Strawberries, a normal good, are produced in a perfectly competitive market. Average consumer incomes increase. This will cause the individual strawberry farmer's marginal revenue to \_\_\_\_\_ and their profit maximizing level of output to \_\_\_\_\_.

- A) increase; increase  
B) increase; decrease  
C) decrease; increase  
D) decrease; decrease

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

28) A farmer producing bushels of soybeans in the perfectly competitive soybean industry is currently maximizing profits. If the market price of soybeans falls and the farmer adjusts output to the new price, he will produce \_\_\_\_\_ soybeans and make \_\_\_\_\_ profit.

- A) fewer; the same  
B) fewer; less  
C) more; more  
D) the same bushels of; the same

Answer: B

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

Refer to the information provided in Figure 8.8 below to answer the questions that follow.

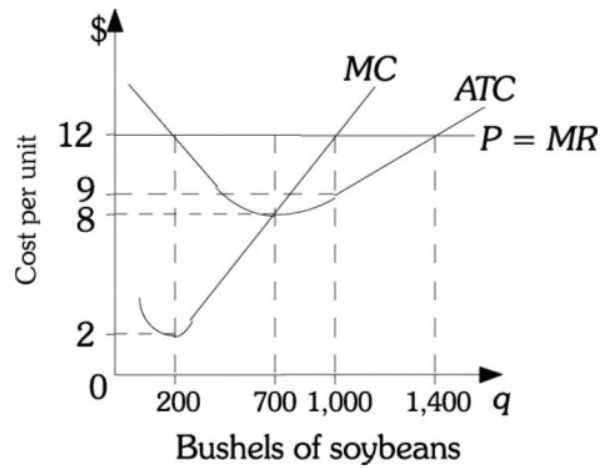


Figure 8.8

29) Refer to Figure 8.8. A soybean farmer's profit-maximizing level of output is \_\_\_\_\_ units of output.

- A) 200                                      B) 700                                      C) 1,000                                      D) 1,400

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

30) Refer to Figure 8.8. If this farmer is producing the profit-maximizing level of output, her profit is

- A) \$0.                                      B) \$2,800.                                      C) \$3,000.                                      D) \$12,000.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

31) Refer to Figure 8.8. What is the total cost of producing the profit maximizing level of output?

- A) \$9.                                      B) \$1,000.                                      C) \$5,600.                                      D) \$9,000.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 32) Refer to Figure 8.8. If the market price of soybeans falls to \$8, then to maximize profits this farmer should produce
- A) 200 bushels of soybeans.
  - B) 700 bushels of soybeans.
  - C) 1,000 bushels of soybeans.
  - D) a level of output that is indeterminate from this information.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 33) Refer to Figure 8.8. If this farmer produces the profit maximizing level of soybeans when the market price is \$8 per bushel, then her total revenue would be
- A) \$1,200.
  - B) \$2,800.
  - C) \$5,600.
  - D) \$8,400.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 34) Refer to Figure 8.8. If this farmer produces the profit maximizing level of soybeans when the market price is \$8 per bushel, then her profit would be
- A) \$0.
  - B) \$2,800.
  - C) \$5,600.
  - D) \$8,000.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

Refer to the information provided in Figure 8.9 below to answer the questions that follow.

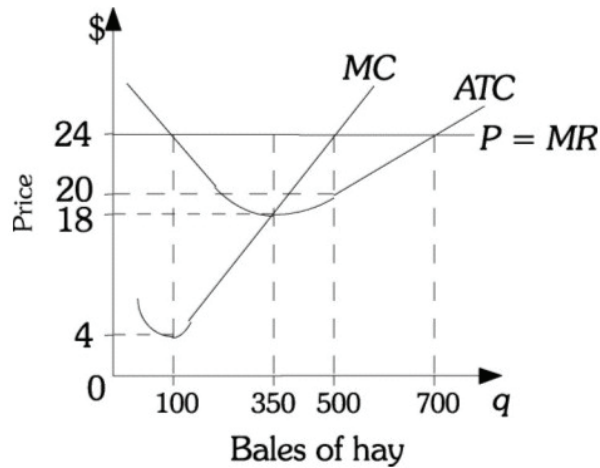


Figure 8.9

- 35) Refer to Figure 8.9. This farmer's profit-maximizing level of output is \_\_\_\_\_ units of output.  
 A) 100                      B) 350                      C) 500                      D) 700

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 36) Refer to Figure 8.9. If this farmer is producing the profit maximizing level of output, her profit is  
 A) \$0.                      B) \$1,000.                      C) \$2,000.                      D) \$3,000.

Answer: C

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 37) Refer to Figure 8.9. If the market price of hay falls to \$18, then to maximize profits this farmer should produce  
 A) 350 bales of hay.  
 B) 500 bales of hay.  
 C) 750 bales of hay.  
 D) a level of output that is indeterminate from this information.

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic



- 44) If a perfectly competitive firm is currently producing where  $P = MC$  and  $MC = ATC$ , then the firm will earn \_\_\_\_\_ profits.  
A) positive                      B) zero                      C) negative                      D) above normal

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 45) If industry supply increases while the industry demand remains the same, then an individual firm in a perfectly competitive industry currently earning positive profits will see its profits  
A) increase.                      B) not change.  
C) decrease.                      D) impossible to determine

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 46) If an industry supply curve decreases while the industry demand curve remains the same, then an individual firm in a perfectly competitive industry currently earning losses will see its losses  
A) increase.                      B) not change.  
C) decrease.                      D) impossible to determine

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 47) Perfectly competitive firms  
A) sell homogeneous products.  
B) are price takers.  
C) are small relative to the size of the market.  
D) All of the above are correct.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 48) The rising part of a perfectly competitive firm's \_\_\_\_\_ cost curve is the firm's short-run \_\_\_\_\_ curve.  
A) average total; supply                      B) average variable; demand  
C) average fixed; demand                      D) marginal; supply

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 49) The law of supply holds for perfectly competitive firms assuming that each firm tries to
- A) maximize profits.
  - B) minimize total costs.
  - C) maximize revenue.
  - D) minimize variable costs.

Answer: A

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

Refer to the information provided in Figure 8.10 below to answer the question that follows.

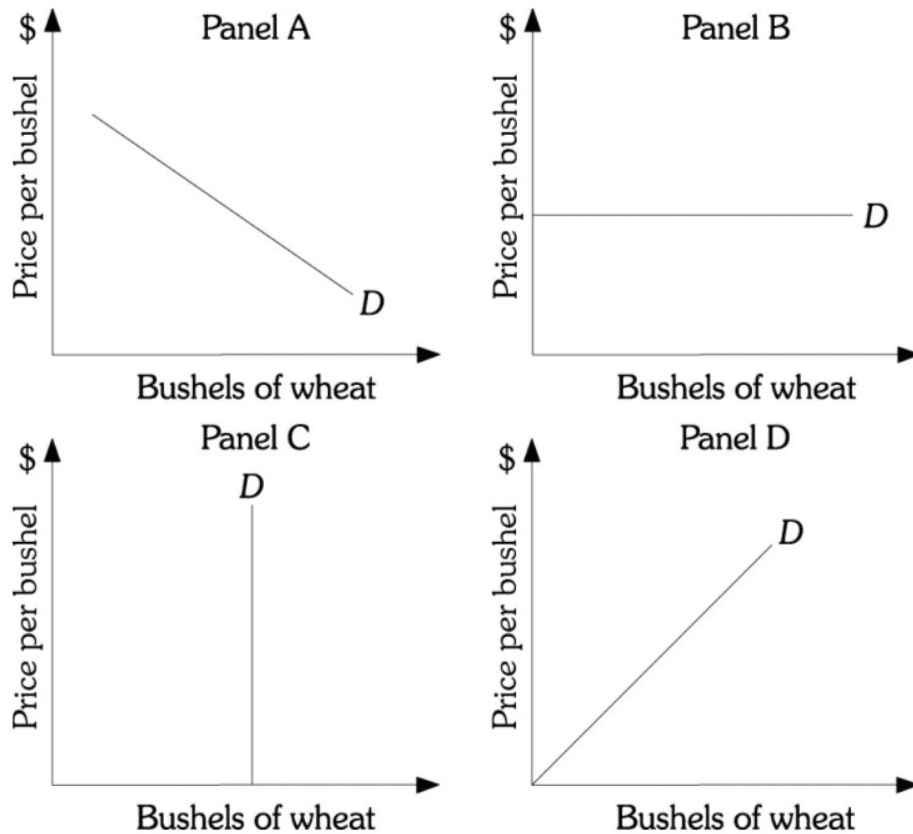


Figure 8.10

- 50) Refer to Figure 8.10. Panel \_\_\_\_\_ represents the demand curve facing a perfectly competitive producer of wheat.
- A) A
  - B) B
  - C) C
  - D) D

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Analytic

- 51) Jerry sells cherry sno-cones along the boardwalk in New Jersey. During the summer this is a perfectly competitive business, and Jerry faces a perfectly price elastic demand curve. If he wants to try to increase revenues, he should
- A) raise the price of his sno-cones to make more per sale.
  - B) lower the price of his sno-cones to try to sell more.
  - C) keep the price the same but produce more to increase revenues.
  - D) do nothing since he can do nothing to increase revenue.

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 52) A firm in a perfectly competitive market has no control over price because
- A) the government imposes price ceilings on the products produced in perfectly competitive markets.
  - B) any firm may freely enter into and/or exit from the market.
  - C) each firm's product perfectly substitutes for every other firm's product.
  - D) the market demand for products produced in perfectly competitive markets is perfectly price elastic.

Answer: C

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 53) The closest example of a perfectly competitive industry is
- A) fast foods.
  - B) beer.
  - C) gasoline stations.
  - D) soybeans.

Answer: D

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual



Refer to the information provided in Figure 7.13 below to answer the questions that follow.

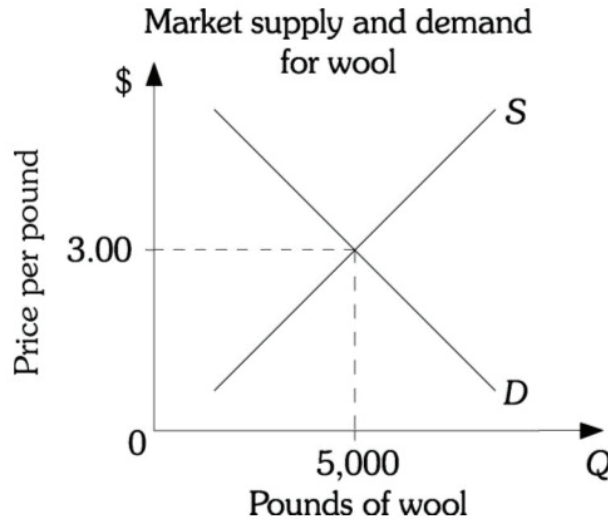


Figure 7.13

- 54) Refer to the figure above. Assuming the wool market (industry) is perfectly competitive, each wool producer faces a(n) \_\_\_\_\_ demand curve starting at \$3.00 per pound.
- |                     |                   |
|---------------------|-------------------|
| A) downward sloping | B) upward sloping |
| C) vertical         | D) horizontal     |

Answer: D

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 55) Refer to figure above. Assuming the coffee market (industry) is perfectly competitive, each coffee producer faces a(n) \_\_\_\_\_ demand curve starting at \$4.00 per pound.
- |                     |                   |
|---------------------|-------------------|
| A) downward sloping | B) upward sloping |
| C) vertical         | D) horizontal     |

Answer: D

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 56) A market demand curve is
- |                       |                         |
|-----------------------|-------------------------|
| A) downward sloping.  | B) upward sloping.      |
| C) perfectly elastic. | D) perfectly inelastic. |

Answer: A

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 57) If a firm in a perfectly competitive industry raises its price above the market price, its
- A) total revenue will increase.
  - B) profit will increase.
  - C) sales will drop to zero.
  - D) demand curve will become downward sloping.

Answer: C

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 58) A firm facing a perfectly price elastic demand curve, *ceteris paribus*
- A) can sell all it produces only by lowering its price below the market price.
  - B) can raise its price and not lose all its customers.
  - C) will sell the same amount regardless if it raises or lowers the price it charges.
  - D) will have zero quantity demanded if it raises its price above the market price.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 59) It is difficult for a wool producer in a perfectly competitive wool industry to make excess profits because
- A) wool producers are "price takers."
  - B) wool producers in the industry do not "differentiate" their products.
  - C) the demand curve facing each wool producer is perfectly elastic.
  - D) entry into the wool industry is free.

Answer: D

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 60) If the wool industry is perfectly competitive, the market demand curve for wool is \_\_\_\_\_ and an individual wool producer's demand curve is \_\_\_\_\_.
- A) downward sloping; horizontal
  - B) horizontal; downward sloping
  - C) horizontal; horizontal
  - D) downward sloping; downward sloping

Answer: A

Diff: 3

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Conceptual

- 61) Free entry implies that
- A) a perfectly competitive firm can never earn a profit.
  - B) if an industry's existing firms make excessively high profits, new firms are likely to enter the industry.
  - C) the government regulates the number of firms it allows in an industry.
  - D) firms will always earn above normal profit, as new firms can enter the industry at any time they like.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 62) Economists do NOT consider the fast-food industry perfectly competitive because
- A) the government strictly regulates entry and exit.
  - B) fast-food products are heterogeneous.
  - C) fast food firms face a large number of customers each relatively small.
  - D) there are a large number of fast-food firms.

Answer: B

Diff: 2

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Definition

- 63) Related to the *Economics in Practice* on page 170: Janice owns an ice cream shop. Monthly revenue is \$12,000. Her fixed cost of operation include rent, electricity, interest on a loan, etc. and come to \$3,500 per month. Her variable costs include wages for her workers and ice cream supplies which are \$4,000 per month. Janice is trying to decide whether to stay in business or return to her previous occupation as an elementary school teacher. Janice should return to teaching only if she earns more than \_\_\_\_\_ a month.
- A) \$4,500
  - B) \$8,000
  - C) \$8,500
  - D) She should return to teaching regardless of her salary because education is the most important career anyone can have.

Answer: A

Diff: 2

Topic: Output Decisions: Economics in Practice

Skill: Analytic

- 64) Related to the *Economics in Practice* on page 170: You are the owner of an ice cream shop. You normally close at 8pm, but are considering staying open an additional hour. You
- A) should definitely stay open as your profits will increase as your sales increase.
  - B) should only stay open if the additional revenue you generate exceeds the average total cost of operation.
  - C) should only stay open if the additional revenue you generate exceeds the marginal cost of operating an additional hour.
  - D) work too hard -- don't stay open any later.

Answer: C

Diff: 2

Topic: Output Decisions: Economics in Practice

Skill: Conceptual

## 2 True/False

- 1) In perfectly competitive industries all firms supply a homogeneous product.

Answer: TRUE

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 2) A firm's demand curve in a perfectly competitive industry is price inelastic.

Answer: FALSE

Diff: 1

Topic: Output Decisions: Revenues, Costs, and Profit Maximization

Skill: Fact

- 3) The total revenue curve for a perfectly competitive firm will be a straight line with positive slope.  
Answer: TRUE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 4) The marginal revenue curve for a perfectly competitive firm will be downward sloping.  
Answer: FALSE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 5) Marginal costs reflect changes in variable costs.  
Answer: TRUE  
Diff: 1  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Fact*
- 6) The short run is a period of less than one year.  
Answer: FALSE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Definition*
- 7) The shut-down decision is a short-run decision.  
Answer: TRUE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Definition*
- 8) If demand in a perfectly competitive market decreases, then an individual firm in that industry will see its profits fall.  
Answer: TRUE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Conceptual*
- 9) For a perfectly competitive firm, when  $P=MC=ATC$  the firm should reduce its output so as to increase its profits.  
Answer: FALSE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Conceptual*
- 10) Firms maximize their profits by producing the output level where  $MR=ATC$ .  
Answer: FALSE  
Diff: 2  
Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*  
Skill: *Conceptual*

- 11) Perfectly competitive firms minimize their losses by producing the output level where  $P=MR=AVC$ .
- Answer: FALSE
- Diff: 2
- Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*
- Skill: *Conceptual*
- 12) The upward sloping portion of the perfectly competitive firm's average variable cost curve is the firm's short run supply curve.
- Answer: FALSE
- Diff: 2
- Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*
- Skill: *Conceptual*
- 13) Perfectly competitive firms sell heterogeneous products.
- Answer: FALSE
- Diff: 1
- Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*
- Skill: *Definition*
- 14) Perfectly competitive firms are price takers.
- Answer: TRUE
- Diff: 1
- Topic: *Output Decisions: Revenues, Costs, and Profit Maximization*
- Skill: *Definition*

# Chapter 9 Long-Run Costs and Output Decisions

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## 9.1 Short-Run Conditions and Long-Run Conditions

### 1 Multiple Choice

- 1) Assume firms in an industry break even. New investors \_\_\_\_\_ attracted to the industry and current ones \_\_\_\_\_ running away from it.
- A) are not; are not  
B) are not; are  
C) are; are not  
D) are; are

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 2) Firms that are "breaking even" are
- A) earning zero economic profits.  
B) earning less than a normal rate of return.  
C) shutting down in the short run.  
D) All of the above are correct.

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

- 3) Firms earning a profit will want to \_\_\_\_\_ their profits in the short run while firms suffering losses will want to \_\_\_\_\_ their losses.
- A) maximize; maximize  
B) maximize; minimize  
C) minimize; maximize  
D) minimize; minimize

Answer: B

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 4) In the short run,
- A) all firms that earn a loss will shut down.  
B) if current firms are earning a profit, new firms will enter the industry.  
C) firms act such that they minimize losses or maximize profits.  
D) All of the above are correct.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

*Refer to the information provided below in Scenario 9.1 to answer the following questions.*

SCENARIO 9.1: Amy borrowed \$40,000 from her parents to open a bagel shop. She pays her parents a 5% yearly return on the money they lent her. Her other yearly fixed costs equal \$18,000. Her variable costs equal \$40,000. In her first year, Amy sold 40,000 dozen at a price of \$2.50 per dozen.

- 5) Refer to Scenario 9.1. Amy's total fixed costs equal  
A) \$2,000.                      B) \$18,000.                      C) \$20,000.                      D) \$22,000.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 6) Refer to Scenario 9.1. Amy's total costs equal  
A) \$20,000.                      B) \$40,000.                      C) \$60,000.                      D) \$100,000.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 7) Refer to Scenario 9.1. Amy's profit is  
A) \$0.                              B) \$20,000.                      C) \$30,000.                      D) \$40,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

*Refer to the information provided below in Scenario 9.2 to answer the following questions.*

SCENARIO 9.2: Tom borrowed \$80,000 from his parents to open a donut stand. He agrees to pay his parents a 5% yearly return on the money they lent him. His other yearly fixed costs equal \$16,000. His variable costs equal \$60,000. He sold 50,000 dozen donuts during the year at a price of \$3.00 per dozen.

- 8) Refer to Scenario 9.2. Tom's total fixed costs equal  
A) \$4,000.                      B) \$16,000.                      C) \$20,000.                      D) \$80,000.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 9) Refer to Scenario 9.2. Tom's total costs equal  
A) \$20,000.                      B) \$40,000.                      C) \$60,000.                      D) \$80,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 10) Refer to Scenario 9.2. Tom's total revenue was  
A) \$60,000.                      B) \$80,000.                      C) \$100,000.                      D) \$150,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 11) Refer to Scenario 9.2. Tom's profit is  
A) \$0.                                  B) \$30,000.                      C) \$50,000.                      D) \$70,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

**Refer to the information provided below in Scenario 9.3 to answer the following questions.**

SCENARIO 9.3: Investors put up \$1,040,000 to construct a building and purchase all equipment for a new restaurant. The investors expect to earn a minimum return of 10 per cent on their investment. The restaurant is open 52 weeks per year and serves 900 meals per week. The fixed costs are spread over the 52 weeks (i.e. prorated weekly). Included in the fixed costs is the 10% return to the investors and \$2,000 in other fixed costs. Variable costs include \$2,000 in weekly wages, and \$600 per week in materials, electricity, etc. The restaurant charges \$8 on average per meal.

- 12) Refer to Scenario 9.3. The normal return to the investors on a weekly basis is  
A) \$600.                                  B) \$1,000.                      C) \$2,000.                      D) \$4,500.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 13) Refer to Scenario 9.3. Total fixed costs per week are  
A) \$1,000.                                  B) \$2,000.                      C) \$3,000.                      D) \$4,000.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 14) Refer to Scenario 9.3. Total variable costs per week are  
A) \$600.                                  B) \$1,000.                      C) \$2,600.                      D) \$4,000.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 15) Refer to Scenario 9.3. Total cost per week is  
A) \$1,600.                                  B) \$2,000.                      C) \$5,000.                      D) \$6,600.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic



- 16) Refer to Scenario 9.3. Total revenue per week is  
 A) \$6,000.                      B) \$7,200.                      C) \$8,100.                      D) \$9,500.  
 Answer: B  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*
- 17) Refer to Scenario 9.3. Economic profit per week is  
 A) -\$400.                      B) \$0.                      C) \$600.                      D) \$900.  
 Answer: C  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*
- 18) Refer to Scenario 9.3. The restaurant is making \_\_\_\_\_ economic profits per week.  
 A) positive                      B) zero                      C) negative                      D) breakeven  
 Answer: A  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*
- 19) Refer to Scenario 9.3. If the restaurant were to shut down, losses per week would be  
 A) \$2,000.                      B) \$3,600.                      C) \$4,000.                      D) \$7,200.  
 Answer: C  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*
- 20) Refer to Scenario 9.3. The operating profit per week of the restaurant is  
 A) \$0.                      B) \$2,900.                      C) \$4,600.                      D) \$4,900.  
 Answer: C  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*

***Refer to the information provided below in Scenario 9.4 to answer the following questions.***

SCENARIO 9.4: Sponsors invest \$250,000 in a new deli on the promise that they will earn a return of 10% per year on their investment. The deli sells 52,000 sandwiches per year. The deli's fixed costs include the return to investors and \$79,000 in other fixed costs. Variable costs consist of wages (\$1000 per week) plus materials, electricity, etc. (\$3000 per week). The deli is open 52 weeks per year.

- 21) Refer to Scenario 9.4. The deli's annual fixed costs sum to \_\_\_\_\_ .  
 A) \$25,000                      B) \$79,000                      C) \$104,000                      D) \$208,000  
 Answer: C  
 Diff: 2  
 Topic: *Short-Run Conditions and Long-Run Directions*  
 Skill: *Analytic*

- 22) Refer to Scenario 9.4. The deli's annual total costs sum to \_\_\_\_\_ .  
 A) \$79,000                      B) \$104,000                      C) \$208,000                      D) \$312,000

Answer: D  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic

- 23) Refer to Scenario 9.4. The deli is earning exactly a normal profit. Thus, the average price per sandwich must be \_\_\_\_\_ .  
 A) \$1.52                      B) \$2                      C) \$4                      D) \$6

Answer: D  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic

- 24) Refer to Scenario 9.4. The deli's profit \_\_\_\_\_ when the average price per sandwich is \$7.50.  
 A) \$78,000                      B) \$182,000                      C) \$286,000                      D) \$311,000

Answer: A  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic

Refer to the information provided below in Figure 9.1 to answer the questions that follow.

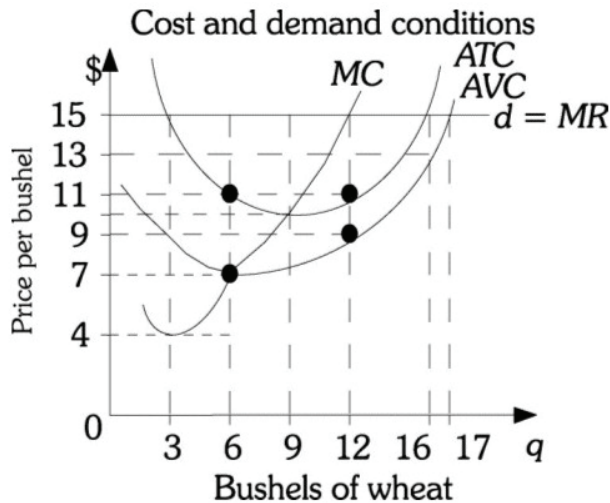


Figure 9.1

- 25) Refer to Figure 9.1. This farmer maximizes profits by producing \_\_\_\_\_ bushels of wheat.  
 A) 6                      B) 9                      C) 12                      D) 16

Answer: C  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic

- 26) Refer to Figure 9.1. If this farmer maximizes profits, his total costs will be  
A) \$11.                      B) \$66.                      C) \$90.                      D) \$132.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 27) Refer to Figure 9.1. If this farmer maximizes profits, his TVC will be  
A) \$24.                      B) \$42.                      C) \$108.                      D) \$255.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 28) Refer to Figure 9.1. If this farmer maximizes profits, his fixed costs will be  
A) \$0.  
B) \$24.  
C) \$45.  
D) indeterminate unless we know the level of output the firm is producing.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 29) Refer to Figure 9.1. If this farmer maximizes profits, his total revenue will be  
A) \$90.                      B) \$135.                      C) \$180.                      D) \$240.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 30) Refer to Figure 9.1. If this farmer maximizes profits, his profits will be  
A) -\$24.                      B) \$45.                      C) \$48.                      D) \$72.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 31) Refer to Figure 9.1. If this farmer maximizes profits, his operating profit (or loss) will be  
A) -\$24.                      B) \$48.                      C) \$72.                      D) \$156.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 32) Refer to Figure 9.1. This farmer will earn zero operating profit if price will be  
A) \$7.                      B) \$9.                      C) \$10.                      D) \$11.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 33) Refer to Figure 9.1. This farmer will earn zero economic profit if price will be  
 A) \$7.                                      B) \$9.                                      C) \$10.                                      D) \$11.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 34) Refer to Figure 9.1. This farmer's shutdown point price is  
 A) \$0.                                      B) \$4.                                      C) \$7.                                      D) \$10.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

Refer to the information provided in Figure 9.7 below to answer the questions that follow.

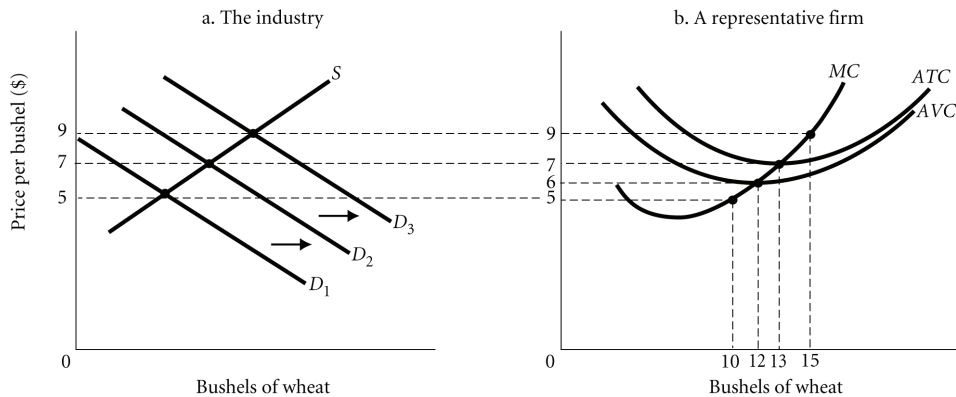


Figure 9.7

- 35) Refer to Figure 9.7. In which of the following price ranges will the firm continue to operate but at a loss?  
 A) \$5-\$6                                      B) \$6-\$7                                      C) \$7-\$8                                      D) \$8-\$9

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 36) Refer to Figure 9.7. The firm's shut down point is at a price of  
 A) \$5                                      B) \$6                                      C) \$7                                      D) \$8

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

37) Refer to Figure 9.7. Suppose demand for wheat is initially D2. If consumer incomes increase, then demand for wheat will shift to \_\_\_\_\_. This will \_\_\_\_\_ the equilibrium price of wheat and individual profit maximizing firms will produce \_\_\_\_\_ bushels of wheat.

- A) D3; increase; 15  
B) D1; increase; 10  
C) D3; decrease; 7  
D) D1; decrease; 0

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

38) Refer to Figure 9.7. Suppose demand for wheat is initially D2. If the price of rice (a substitute for wheat) falls, then demand for wheat will shift to \_\_\_\_\_. This will \_\_\_\_\_ the equilibrium price of wheat and individual profit maximizing firms will produce \_\_\_\_\_ bushels of wheat.

- A) D3; increase; 15  
B) D1; increase; 13  
C) D3; decrease; 10  
D) D1; decrease; 0

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

39) Refer to Figure 9.7. If demand for wheat is D2, then a profit maximizing firm will produce \_\_\_\_\_ units and earn a profit of \_\_\_\_\_.

- A) 13; \$0  
B) 7; \$0  
C) 13; \$91  
D) 15; \$30

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

40) Refer to Figure 9.7. If demand for wheat is D3, then a profit maximizing firm will produce \_\_\_\_\_ units and earn \_\_\_\_\_.

- A) 15; positive profits  
B) 9; positive profits  
C) 12; negative profits  
D) 13; exactly a normal return

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

41) Refer to Figure 9.7. If demand for wheat is D3, then in the long run

- A) the firm will shut down.  
B) the firm will exit the industry.  
C) new firms will enter the industry and the current firms will expand production.  
D) None of the above is correct.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

42) Refer to Figure 9.7. If demand for wheat is  $D_1$ , then a profit maximizing firm will produce \_\_\_\_\_ units and earn \_\_\_\_\_.

A) 0; negative profits

B) 5; zero profits

C) 10; negative profits

D) 12; positive profits

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

43) Refer to Figure 9.7. If demand for wheat is  $D_1$ , then in the long run

A) the firm will increase its price and output.

B) the firm will exit the industry.

C) new firms will enter the industry and the current firms will expand production.

D) firms will increase their output so that their average fixed cost per unit falls.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

44) Operating profit is

A)  $TR - TC$ .

B)  $TR - TFC$ .

C)  $TR - TVC$ .

D)  $TVC - TFC$ .

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

45) Economic profit is

A)  $TR - TC$ .

B)  $TR - TFC$ .

C)  $TR - TVC$ .

D)  $TVC - TFC$ .

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

46) A firm earns an operating profit if

A) revenues exceed variable costs of production.

B) revenues equal fixed costs.

C) price is less than average variable costs of production.

D) price equals marginal cost.

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 47) A firm suffers an operating loss if
- A) price exceeds average variable cost but is less than average total cost.
  - B) price exceeds marginal cost.
  - C) revenues are smaller than total variable costs of production.
  - D) revenues are greater than total variable costs of production but less than total costs.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 48) The Reliable Auto Repair Shop has total revenue of \$7,000. It has total fixed costs of \$700 and total variable costs of \$2,500. The Reliable Auto Repair Shop's operating profit is
- A) -\$1,800.
  - B) \$3,800.
  - C) \$4,500.
  - D) \$6,300.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 49) The Reliable Auto Repair Shop has total revenue of \$5,000. It has total fixed costs of \$700 and total variable costs of \$2,500. The Reliable Auto Repair Shop's operating profit is
- A) -\$3,200.
  - B) \$1,800.
  - C) \$2,500.
  - D) \$4,300.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 50) If a firm's operating profit is \$0, then
- A)  $TR$  equals  $TC$ .
  - B)  $TR$  equals  $TVC$ .
  - C)  $TR$  equals  $TFC$ .
  - D)  $TFC$  is zero.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 51) If a firm's economic profit is \$0, then
- A)  $TR$  equals  $TC$ .
  - B)  $TR$  equals  $TVC$ .
  - C)  $TR$  equals  $TFC$ .
  - D)  $TFC$  is zero.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 52) We can call a profit-maximizing strategy a loss-minimizing strategy when a perfectly competitive firm produces where
- A)  $AVC < P < ATC$ .
  - B)  $P > ATC$ .
  - C)  $P = ATC$ .
  - D)  $MR = MC < P$ .

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 53) A firm will choose to operate rather than shut down as long as
- A) price is greater than or equal to  $AFC$ .
  - B)  $AFC$  is greater than  $AVC$ .
  - C) price is greater than or equal to  $AVC$ .
  - D)  $AVC$  is greater than  $MC$ .

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 54) Economic profit is
- A)  $(P - ATC)q$ .
  - B)  $(P + ATC)q$ .
  - C)  $P(q - ATC)$ .
  - D)  $Pq/ATC$ .

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 55) A firm suffering economic losses decides whether or not to produce in the short run on the basis of whether
- A) revenues cover variable costs.
  - B) revenues from operating are sufficient to cover fixed costs.
  - C) revenues from operating are sufficient to cover fixed plus variable costs.
  - D) Firms suffering economic losses will always shut down.

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 56) The Pampered Pet Shop operates in a perfectly competitive industry and hires you as an economic consultant. The firm is currently producing at a point where market price equals its marginal cost. Its total revenue exceeds its total variable cost, but is less than its total cost. You advise the firm to
- A) cease production immediately because it is incurring a loss.
  - B) lower its price so that it can sell more units of output.
  - C) produce in the short run to minimize its loss, but exit the industry in the long run.
  - D) raise its price until it breaks even.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 57) The Pampered Pet Shop operates in a perfectly competitive industry and hires you as an economic consultant. The firm is currently producing at a point where market price equals its marginal cost. Its market price is less than its average variable cost. You advise the firm to
- A) cease production immediately because it is not covering its operating costs.
  - B) lower its price so that it can sell more units of output.
  - C) produce in the short run to minimize its loss, but exit the industry in the long run.
  - D) raise its price until it breaks even.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual





- 64) A firm that shuts down when \_\_\_\_\_ are less than \_\_\_\_\_ minimizes its losses.
- A) variable costs; fixed costs
  - B) fixed costs; variable costs
  - C) revenues; variable costs
  - D) operating profits; sunk costs

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 65) A firm is better off operating than shutting down when price adequately covers
- A) marginal cost.
  - B) average fixed cost.
  - C) average variable cost.
  - D) marginal revenue.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 66) The Taste Freeze Ice Cream Company is a perfectly competitive firm producing where  $MR = MC$ . The current market price of an ice cream sandwich is \$5.00. The firm sells 200 ice cream sandwiches. Its  $AVC$  is \$8.00 and its  $AFC$  is \$3.00. What should Taste Freeze do?
- A) Continue to produce because price exceeds  $AFC$ .
  - B) Shut down and produce zero sandwiches because price is less than  $AVC$ .
  - C) Decrease production so that  $AVC$  will decrease.
  - D) Increase production so that  $AFC$  will decrease.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 67) The Taste Freeze Ice Cream Company is a perfectly competitive firm producing where  $MR = MC$ . The current market price of an ice cream sandwich is \$5.00. The firm sells 200 ice cream sandwiches. Its  $AVC$  is \$3.00 and its  $AFC$  is \$3.00. What should Taste Freeze do?
- A) Continue to produce because price exceeds  $AVC$ .
  - B) Shut down and produce zero sandwiches because price is less than  $ATC$ .
  - C) Decrease production so that  $AVC$  will decrease.
  - D) Increase production so that  $AFC$  will decrease.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 68) The Speedy Typesetting Company, a perfectly competitive firm, is currently producing where  $P = MC$  and is earning a normal profit. The yearly licensing fee that this firm must pay for the use of a statistical software program was just increased from \$1,000 to \$1,200. In the short run, this firm will most likely
- A) reduce the amount of output it produces because its cost curves have shifted up and to the left.
  - B) continue to produce the same amount of output because only its fixed costs have increased.
  - C) produce more units of output to increase revenue to cover the additional fixed costs.
  - D) shut down because it will no longer be earning a normal profit.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 69) The Speedy Typesetting Company, a perfectly competitive firm, is currently producing where  $P = MC$  and is earning a normal profit. The firm mainly employs minimum wage workers and the government just increased the minimum wage from \$5.85 to \$6.55 per hour. In the short run, this firm will most likely
- A) reduce the amount of output it produces because its cost curves have shifted up and to the left.
  - B) continue to produce the same amount of output because only its fixed costs have increased.
  - C) produce more units of output to increase revenue to cover the additional fixed costs.
  - D) shut down because it will no longer be earning a normal profit.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

*Refer to the information provided below in Scenario 9.5 to answer the following questions.*

SCENARIO 9.5: Investors put up \$1,040,000 to construct a building and purchase all equipment for a new restaurant. The investors expect to earn a minimum return of 10 per cent on their investment. The restaurant is open 52 weeks per year and serves 900 meals per week. The fixed costs are spread over the 52 weeks (i.e. prorated weekly). Included in the fixed costs is the 10% return to the investors and \$2,000 in other fixed costs. Variable costs include \$2,000 in weekly wages, and \$600 per week in materials, electricity, etc. The restaurant charges \$6 on average per meal.

- 70) Refer to Scenario 9.5. Weekly total revenue is
- A) \$1,600.
  - B) \$2,000.
  - C) \$3,600.
  - D) \$5,400.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 71) Refer to Scenario 9.5. The restaurant's economic profit is  
A) positive.                      B) negative.                      C) zero.                      D) break even.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 72) Refer to Scenario 9.5. The economic profit is  
A) -\$3,600.                      B) -\$1,200.                      C) \$0.                      D) \$5,400.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 73) Refer to Scenario 9.5. In the long run, the restaurant will want to  
A) operate and expand.                      B) operate but not expand.  
C) shut down but don't go out of business.                      D) go out of business.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 74) Refer to Scenario 9.5. In the short run, if the restaurant shuts down, it will \_\_\_\_\_ variable costs and \_\_\_\_\_ revenue.

- A) have; receive                      B) have; receive no  
C) have no; receive                      D) have no; receive no

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 75) Refer to Scenario 9.5. In the short run, if the restaurant shuts down, its losses will equal its \_\_\_\_\_ costs of \_\_\_\_\_.

- A) variable; \$2,600                      B) total; \$6,600  
C) fixed; \$4,000                      D) fixed; \$2,000

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 76) Refer to Scenario 9.5. In the short run, if the restaurant decides to stay open, it will make weekly operating profits of

- A) -\$2,800.                      B) \$0.                      C) \$2,800.                      D) \$5,400.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

Refer to the data provided in Table 9.1 below to answer the following questions.

**Table 9.1**

q	TFC	TVC	TC	MC	AVC	ATC
0	\$50	\$0	\$50	--	--	--
1	50	20	70	20	20	70
2	50	30	80	10	15	40
3	50	45	95	15	15	31.67
4	50	62	112	17	15.50	28
5	50	90	140	28	18	28
6	50	132	182	42	22	30.33
7	50	186	236	54	26.57	33.71

77) Refer to Table 9.1. If the market price is \$10, then this firm will maximize profits by producing \_\_\_\_\_ units of output.

- A) zero                                      B) one                                      C) two                                      D) three

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

78) Refer to Table 9.1. If the market price is \$42, then this firm will maximize profits by producing \_\_\_\_\_ units of output and its profits will be \_\_\_\_\_ .

- A) five; \$70                                      B) six; \$70                                      C) six; \$120                                      D) seven; \$58

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

79) Refer to Table 9.1. If the market price is \$42, then in the long run the firm will

- A) operate and expand.                                      B) operate but not expand.  
C) shut down, but not go out of business.                                      D) go out of business.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

80) Refer to Table 9.1. If the market price is \$17, then in the long run the firm will

- A) operate and expand.                                      B) operate but not expand.  
C) shut down, but not go out of business.                                      D) go out of business.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 81) Refer to Table 9.1. If the market price is \$17, then in the short run the firm will  
 A) operate and expand. B) operate but not expand.  
 C) shut down, but not go out of business. D) go out of business.
- Answer: B  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic
- 82) Refer to Table 9.1. If the market price is \$15, then this firm will maximize profits by producing \_\_\_\_\_ units of output.  
 A) three B) four C) five D) six
- Answer: A  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic
- 83) Refer to Table 9.1. The shutdown point price for this firm is  
 A) \$0. B) \$10. C) \$15. D) \$28.
- Answer: C  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic
- 84) Refer to Table 9.1. The lowest output this firm would produce before shutting down is \_\_\_\_\_ units.  
 A) 1 B) 2 C) 3 D) 4
- Answer: C  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic
- 85) Refer to Table 9.1. In the long run, if cost conditions do not change, this firm will earn a zero economic profit if price is  
 A) \$10. B) \$15. C) \$20. D) \$28.
- Answer: D  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Analytic
- 86) A firm stands to gain by operating instead of shutting down as long as \_\_\_\_\_ sufficiently covers \_\_\_\_\_.  
 A) price; average variable cost B) price; average fixed cost  
 C) total revenue; total fixed costs D) operating profit; economic profit
- Answer: A  
 Diff: 2  
 Topic: Short-Run Conditions and Long-Run Directions  
 Skill: Fact

- 87) The rising part of a perfectly competitive firm's marginal cost curve that is equal to or above points on its average variable cost curve is the firm's
- A) normal profit curve.
  - B) operating profit curve.
  - C) short-run supply curve.
  - D) long-run supply curve.

Answer: C

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 88) If  $TR > TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; contract
  - C) shut down; expand
  - D) shut down; contract

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 89) If  $TR < TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) indeterminate; contract
  - B) operate; contract
  - C) shut down; expand
  - D) shut down; contract

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 90) If  $TR > TVC$  but  $TR < TC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; exit the industry
  - C) shut down; expand
  - D) shutdown; exit the industry

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 91) If  $TR < TVC$ , a firm would \_\_\_\_\_ in the short run and \_\_\_\_\_ in the long run.
- A) operate; expand
  - B) operate; exit the industry
  - C) not operate; expand
  - D) shut down; exit the industry

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 92) If a perfectly competitive firm operates in the short run and expands in the long run, then the firm's short run condition is

- A)  $TR > TC$ .
- B)  $TR > TVC$  and  $TR < TC$ .
- C)  $TR < TVC$ .
- D)  $TR < TFC$ .

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic





- 97) Refer to Table 9.2. The market price is \$42 and this firm is producing four units of output. Which of the following would you recommend to this firm?
- A) Continue producing four units of output, because the firm is able to make an economic profit.
  - B) Increase output to six units, so that marginal cost equals marginal revenue.
  - C) Reduce price to \$17, so that marginal cost will equal marginal revenue at 4 units of output.
  - D) Increase output to seven units so that price is less than marginal cost.

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 98) Refer to Table 9.2. At a market price of \$28, the best this firm can do is to produce \_\_\_\_\_ units of output and earn an economic profit of \_\_\_\_\_.
- A) 0; -\$50
  - B) 4;\$0
  - C) 5;\$0
  - D) either 4 or 5; \$0

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 99) Refer to Table 9.2. If the market price is \$20, then to maximize profits this firm should produce
- A) zero units of output.
  - B) one unit of output.
  - C) two units of output.
  - D) an output level of about four.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 100) The short-run supply curve of a perfectly competitive firm is the portion of
- A) the average variable cost curve that lies above its marginal cost curve.
  - B) its marginal cost curve that lies above its average variable cost curve.
  - C) its marginal cost curve that lies above its average total cost curve.
  - D) its average total cost curve that lies above its marginal cost curve.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

Refer to the information provided in Figure 9.2 below to answer the questions that follow.

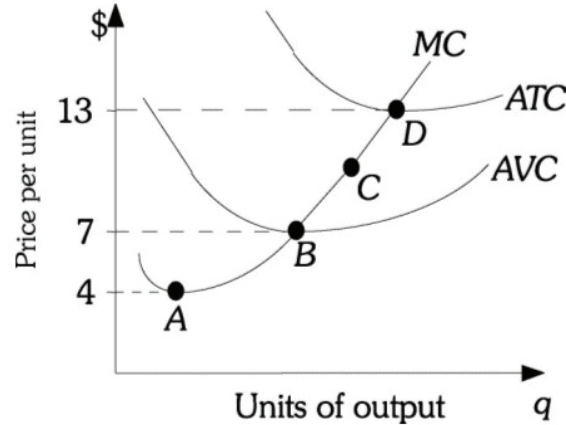


Figure 9.2

101) Refer to Figure 9.2. This firm's shutdown point corresponds to point

- A) A.                      B) B.                      C) C.                      D) D.

Answer: B

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

102) Refer to Figure 9.2. This firm's short-run supply curve is the firm's

- A) AVC curve to the right of point B.                      B) marginal cost curve above point A.  
C) marginal cost curve above point B.                      D) marginal cost curve above point D.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

103) Refer to Figure 9.2. This firm will earn an operating profit, but incur an economic loss if price is

- A) between \$0 and \$4.                      B) between \$4 and \$7.  
C) between \$7 and \$13.                      D) above \$13.

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

104) Refer to Figure 9.2. This firm will earn a zero economic profit if price is

- A) \$0.                      B) \$4.                      C) \$7.                      D) \$13.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

105) The best explanation for the shape of a short-run marginal cost schedule is

- A) increasing returns to scale.
- B) decreasing returns to scale.
- C) the lack of a fixed factor of production.
- D) a fixed factor causes diminishing returns to other factors.

Answer: D

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

106) A perfectly competitive firm will be operating at its shutdown point if it operates at the minimum point on its \_\_\_\_\_ cost curve.

- A) total
- B) average variable
- C) average total
- D) marginal

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

107) The short-run industry supply curve for a perfectly competitive industry is the

- A) horizontal sum of the individual firms' marginal cost curves above *AVC*.
- B) vertical sum of the individual firms' marginal cost curves above *AVC*.
- C) horizontal sum of the individual firms' marginal cost curves above *ATC*.
- D) vertical sum of the individual firms' marginal cost curves above *ATC*.

Answer: A

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

108) A(n) \_\_\_\_\_ will shift the short-run industry supply curve of a perfectly competitive industry.

- A) increase in the price of an input
- B) increase in the income of consumers
- C) increase in the price of the product
- D) increase in the demand for the product

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

109) If the price of an input decreases, each individual firm's marginal cost curve shifts \_\_\_\_\_ and the industry supply curve \_\_\_\_\_.

- A) downward; shifts to the left
- B) downward; shifts to the right
- C) upward; does not change
- D) upward; shifts to the left

Answer: B

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

- 110) If the price of an input increases, each individual firm's marginal cost curve shifts \_\_\_\_\_ and the industry supply curve \_\_\_\_\_.
- A) downward; shifts to the left  
 B) downward; shifts to the right  
 C) upward; does not change  
 D) upward; shifts to the left

Answer: D

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

Refer to the information provided in Figure 9.3 below to answer the question that follows.

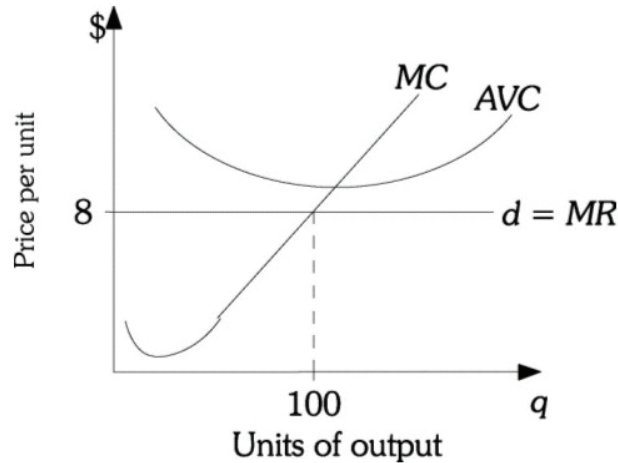


Figure 9.3

- 111) Refer to Figure 9.3. In the short run if economic conditions do not change this firm should \_\_\_\_\_ and in the long run it should \_\_\_\_\_.
- A) shut down; exit the industry  
 B) exit the industry; shut down  
 C) continue to produce where  $MC = MR$ ; expand production  
 D) continue to produce where  $MC = MR$ ; shut down

Answer: A

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

Refer to the information provided in Figure 9.4 below to answer the question that follows.

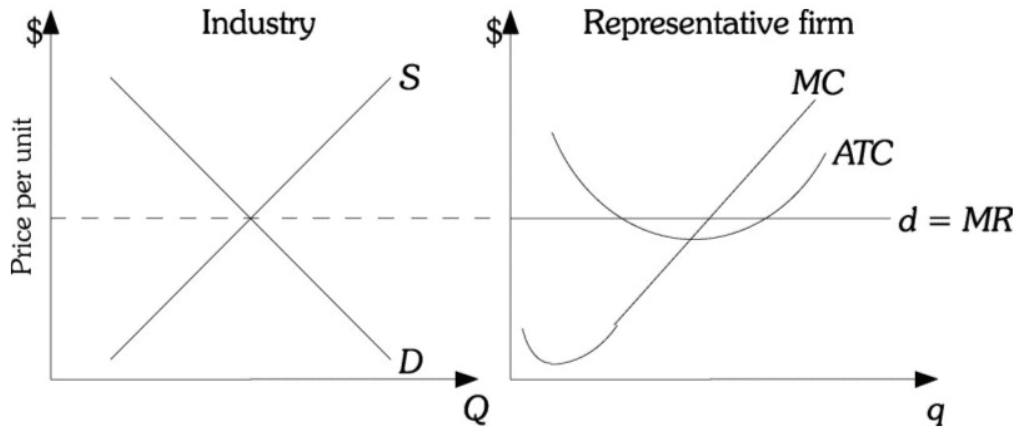


Figure 9.4

- 112) Refer to Figure 9.4. As long as incumbent firms in this perfectly competitive industry make \_\_\_\_\_ economic profits, new firms will \_\_\_\_\_ it and existing firms will \_\_\_\_\_ it.
- |                               |                                   |
|-------------------------------|-----------------------------------|
| A) zero; not enter; leave     | B) positive; not enter; not leave |
| C) positive; enter; not leave | D) zero; enter; leave             |

Answer: C

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Analytic

- 113) If a firm is incurring an operating loss, in the short run the firm should \_\_\_\_\_ and in the long run it should \_\_\_\_\_.
- |                                                |
|------------------------------------------------|
| A) produce where $MC = MR$ ; exit the industry |
| B) shut down; exit the industry                |
| C) produce where $MC = MR$ ; expand            |
| D) shut down; expand                           |

Answer: B

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 114) A perfectly competitive firm, Billy Bob's Fertilizer Engineers, is incurring a loss while still earning an operating profit. In the short run it should \_\_\_\_\_ and in the long run, if there is no change in economic conditions, it should \_\_\_\_\_.
- |                                                |
|------------------------------------------------|
| A) shut down; exit the industry                |
| B) shut down; expand                           |
| C) produce where $MR = MC$ ; exit the industry |
| D) produce where $MR = MC$ ; expand            |

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 115) A perfectly competitive firm is earning an economic profit. In the short run it should \_\_\_\_\_.  
In the long run it should \_\_\_\_\_.
- A) shut down; expand
  - B) produce where  $MC = MR$ ; leave the industry
  - C) produce where  $MC = MR$ ; expand production
  - D) shut down; exit the industry

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 116) The owner of Tie-Dyed T-shirts, a perfectly competitive firm, hires you to give him economic advice. He tells you that the market price for his shirts is \$15 and that he is currently producing 200 shirts at an  $AVC$  of \$10 and an  $ATC$  of \$20. What would you recommend that he do?
- A) Continue producing in the short run, as his loss from production is less than his fixed costs, but exit the industry in the long run if there are no changes in economic conditions.
  - B) Shut down in the short run, as he is incurring a loss, and leave the industry in the long run, if there are no changes in economic conditions.
  - C) Continue to produce in the short run, even though he is earning a loss, and expand production in the future hoping to increase market share and total revenue.
  - D) Tell him that you cannot make any recommendations until you know what his fixed costs are.

Answer: A

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 117) The owner of Tie-Dyed T-shirts, a perfectly competitive firm, hires you to give him economic advice. He tells you that the market price for his shirts is \$15 and that he is currently producing 200 shirts at an  $AVC$  of \$10 and an  $ATC$  of \$20. You tell him he should continue to operate in the short run because
- A) he is earning an economic profit of \$4,000.
  - B) his loss from operating is only \$2,000 which is less than his loss if he shuts down.
  - C) he has to pay his fixed costs of \$2,000 if he shuts down which is greater than his loss when he operates.
  - D) In fact you do not tell him to operate -- he should shut down since he has a loss.

Answer: C

Diff: 3

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

- 118) \_\_\_\_\_ is a short run phenomenon.
- A) Economies of scale
  - B) Constant returns to scale
  - C) Diseconomies of scale
  - D) Diminishing marginal returns

Answer: D

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

## 2 True/False

- 1) Input prices fall as entry occurs in an increasing-cost industry.

Answer: FALSE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

- 2) Input prices fall as entry occurs in a decreasing-cost industry.

Answer: TRUE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

- 3) Entry of new firms in an increasing-cost industry leads to an upward shift of the *LRAC* curve.

Answer: TRUE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

- 4) Entry of new firms in a decreasing-cost industry leads to an upward shift of the *LRAC* curve.

Answer: FALSE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

- 5) Information on marginal cost of production is all that is necessary to obtain the long run industry supply curve, because  $P=MC$  is the profit-maximizing condition for all firms.

Answer: FALSE

Diff: 2

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Definition*

- 6) The long run industry supply curve is made up of the zero-profit equilibrium levels of output as the industry expands due to entry.

Answer: TRUE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

- 7) A firm suffering short-run losses will continue to operate rather than shut down when price sufficiently covers its average variable costs.

Answer: TRUE

Diff: 1

Topic: *Short-Run Conditions and Long-Run Directions*

Skill: *Fact*

8) Firms suffering losses in the short run should always continue to operate since they must pay their fixed costs.

Answer: FALSE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Conceptual

9) A firm's optimal short-run output is zero at all prices below its shutdown point.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

10) The horizontal sum of marginal cost curves (above *AVC*) of all the firms in an industry is the short-run industry supply curve.

Answer: TRUE

Diff: 2

Topic: Short-Run Conditions and Long-Run Directions

Skill: Definition

11) A firm's marginal cost curve above its *AVC* is also its short-run supply curve.

Answer: TRUE

Diff: 1

Topic: Short-Run Conditions and Long-Run Directions

Skill: Fact

## 9.2 Long-Run Cost Economies and Diseconomies of Scale

### 1 Multiple Choice

1) In the short-run average costs eventually increase because of \_\_\_\_\_, and in the long run average costs eventually increase because of \_\_\_\_\_.

- A) diminishing returns; diseconomies of scale
- B) diseconomies of scale; diminishing returns
- C) constant returns to scale; decreasing returns to scale
- D) increasing returns to scale; diseconomies of scale

Answer: A

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

2) Engineers for the Off Road Skateboard Company determine that a 12% increase in all inputs will cause output to increase by 6%. Assuming that input prices remain constant, you correctly deduce that such a change in inputs will cause \_\_\_\_\_ as output increases.

- A) total costs to decrease
- B) average costs to increase
- C) average costs to decrease
- D) average fixed costs to increase

Answer: B

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual



3) Engineers for The All-Terrain Bike Company determine that a 10% increase in all inputs will cause a 10% increase in output. Assuming that input prices remain constant, you correctly deduce that such a change in inputs will cause \_\_\_\_\_ as output increases.

- A) average costs to increase
- B) average costs to decrease
- C) average costs to remain constant
- D) marginal costs to increase

Answer: C

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

4) Engineers for The Giffen Record Company determine that a 30% increase in all compact disc inputs will cause a 40% increase in output. Assuming that input prices remain constant, you correctly deduce that such a change in inputs will cause \_\_\_\_\_ as output increases.

- A) average costs to increase
- B) average costs to decrease
- C) average costs to remain constant
- D) marginal costs to increase

Answer: B

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

5) The shape of a firm's \_\_\_\_\_ average cost curve depends on how costs vary with \_\_\_\_\_.

- A) short-run; scale of operations
- B) short-run; no fixed factor of production
- C) long-run; scale of operations
- D) long-run; a fixed factor of production

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

6) A(n) \_\_\_\_\_ in a firm's scale of production leads to \_\_\_\_\_ average total cost when there are economies of scale.

- A) increase; lower
- B) increase; higher
- C) decrease; lower
- D) decrease; no change in

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

7) When increased scale of production leads to higher average costs, an industry exhibits

- A) diminishing returns.
- B) increasing returns to scale.
- C) decreasing returns to scale.
- D) constant returns to scale.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 8) When decreased scale of production leads to higher average costs, an industry exhibits
- A) diminishing returns.
  - B) increasing returns to scale.
  - C) decreasing returns to scale.
  - D) constant returns to scale.

Answer: B

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 9) Which of the following is an example of economies of scale?
- A) As the computer industry expands, the number of professionally trained computer programmers also increases, which causes the salaries of computer programmers to increase.
  - B) A state government trying to attract firms to locate in the state reduces the tax rate on profits that businesses must pay, thus lowering costs to firms locating in the state.
  - C) A firm lowers its health insurance costs as it increases in size because as the size of the group insured increases, the premium per person decreases substantially.
  - D) As the demand for calculators increases, the price of calculators actually falls.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 10) Which of the following is an example of diseconomies of scale?
- A) As the computer industry expands, the demand for professionally trained computer programmers also increases, which causes the salaries of computer programmers to increase.
  - B) As a firm hires additional workers, each worker adds less to total output than the worker hired just before him.
  - C) A firm lowers its health insurance costs as it increases in size because as the size of the group insured increases, the premium per person decreases substantially.
  - D) As the demand for calculators decreases, the price of calculators actually rose.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 11) A firm is experiencing \_\_\_\_\_ on the downward sloping portion of a firm's long run average cost curve.
- A) increasing returns to scale
  - B) constant returns to scale
  - C) decreasing returns to scale
  - D) diminishing marginal returns

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 12) A firm is experiencing \_\_\_\_\_ on the upward sloping portion of a firm's long run average cost curve.
- A) increasing returns to scale
  - B) constant returns to scale
  - C) decreasing returns to scale
  - D) diminishing marginal returns

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 13) The Supply Room, a mail-order school supply store, is growing rapidly. As a result of achieving larger size, the firm realizes (1) volume discounts when buying from its suppliers, and (2) lower transportation costs by bulk shipping. The best explanation for these events is that the Supply Room is experiencing \_\_\_\_\_ returns to scale.
- A) increasing
  - B) constant
  - C) decreasing
  - D) first decreasing and then increasing

Answer: A

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 14) Every point on a U-shaped long-run average cost curve represents
- A) the minimum cost at which the associated output level can be produced when the scale of plant can be changed.
  - B) the minimum point of the associated short-run average cost curve.
  - C) the minimum cost at which the associated output level can be produced when the scale of plant cannot be changed.
  - D) both A and B

Answer: A

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

- 15) Suppose Heidi's Ice Cream experiences economies of scale up to a certain point and diseconomies of scale beyond that point. Its long-run average cost curve is most likely to be
- A) upward sloping to the right.
  - B) downward sloping to the right.
  - C) horizontal.
  - D) U-shaped.

Answer: D

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

- 16) Internal economies of scale occur at the \_\_\_\_\_ level(s).
- A) plant and firm
  - B) plant and industry
  - C) firm and industry
  - D) plant, firm, and industry

Answer: A

Diff: 1

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

17) A(n) \_\_\_\_\_ in a firm's scale of production leads to \_\_\_\_\_ average total cost as long as there are constant returns to scale.

A) increase; lower

B) increase; higher

C) decrease; a change in

D) decrease; no change in

Answer: D

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

18) The smallest plant size at which a firm's long run average cost curve is at its minimum is called the \_\_\_\_\_.

A) envelope

B) profit maximizing scale of production

C) minimum efficiency scale

D) shut down point

Answer: A

Diff: 1

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Definition

19) A firm's long-run average cost curve is declining as output increases over all levels of output. As a result,

A) small firms and large firms will have identical average costs.

B) there should be a large number of firms in the industry.

C) small firms would have lower average costs of production than large firms.

D) there should be only one firm in the industry.

Answer: D

Diff: 3

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Conceptual

Refer to the information provided in Figure 9.5 below to answer the questions that follow.

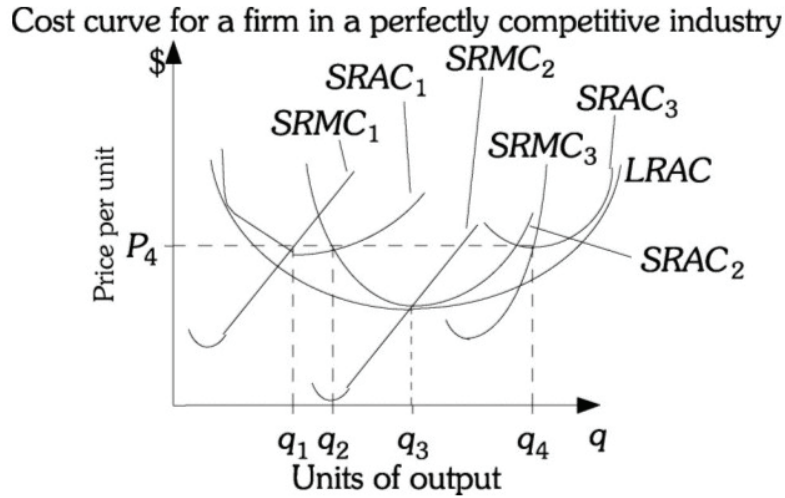


Figure 9.5

- 20) Refer to Figure 9.5. Economies of scale exist up to \_\_\_\_\_ units of output for this firm.  
 A)  $q_1$                       B)  $q_2$                       C)  $q_3$                       D)  $q_4$

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

- 21) Refer to Figure 9.5. Assume this firm is in a constant-cost industry. For this firm to be in long-run equilibrium, the firm must be producing  
 A)  $q_1$  units of output.  
 B)  $q_2$  units of output.  
 C)  $q_3$  units of output.  
 D) an amount that is indeterminate from this information.

Answer: C

Diff: 2

Topic: Long-Run Costs: Economies and Diseconomies of Scale

Skill: Analytic

- 22) Related to the *Economics in Practice* on page 187: Florida Blood Services and the Northwest Florida Blood Center merged  
 A) in an attempt to gain market power.  
 B) to take advantage of economies of scale in blood testing and complying with government regulations.  
 C) to drive all other blood banks in the area out of the market.  
 D) to avoid diminishing marginal returns.

Answer: B

Diff: 1

Topic: Long-Run Costs: Economies and Diseconomies: Economics in Practice

Skill: Fact

## 2 True/False

- 1) When an increase of a firm's scale of production leads to higher average costs per unit produced, there is an increasing return to scale.  
Answer: FALSE  
Diff: 2  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 2) Economies of scale cannot be due only to the sheer size of a firm's operation.  
Answer: FALSE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Fact
- 3) Across different output levels, a firm can experience both economies and diseconomies of scale.  
Answer: TRUE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 4) A firm's long run average cost curve represents the minimum cost of producing each level of output when the scale of production can be adjusted.  
Answer: TRUE  
Diff: 1  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition
- 5) A firm that has increasing returns to scale in the long run does not experience diminishing marginal returns in the short run.  
Answer: FALSE  
Diff: 2  
Topic: Long-Run Costs: Economies and Diseconomies of Scale  
Skill: Definition

## 9.3 Long-Run Adjustments to Short-Run Conditions

### 1 Multiple Choice

- 1) Industries in which firms suffer losses are likely to \_\_\_\_\_ in the long-run.  
A) expand  
B) contract  
C) neither expand nor contract, as firms must earn an economic profit to stay in business  
D) expand or contract depending on the normal rate of return  
Answer: B  
Diff: 3  
Topic: Long-Run Adjustments to Short-Run Conditions  
Skill: Conceptual

- 2) Industries in which firms enjoy positive profits are likely to \_\_\_\_\_ in the long-run.
- A) expand
  - B) contract
  - C) neither expand nor contract, as firms must earn an economic profit to stay in business
  - D) expand or contract depending on the normal rate of return

Answer: A

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 3) For a perfectly competitive industry, an improvement in technology will cause
- A) a movement up the short-run industry supply curve.
  - B) a movement down the short-run industry supply curve.
  - C) the industry short-run supply curve to shift to the right.
  - D) the industry short-run supply curve to shift to the left.

Answer: C

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 4) Which of the following is the set of conditions necessary for long-run equilibrium for a perfectly competitive firm?
- A)  $P = SRMC < SRAC = LRAC$
  - B)  $P > SRMC = SRAC = LRAC$
  - C)  $P = SRMC = SRAC > LRAC$
  - D)  $P = SRMC = SRAC = LRAC$

Answer: D

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 5) Assume the peanut industry is perfectly competitive and in long-run equilibrium with a market price of \$5. If the demand for peanuts increases in this decreasing-cost industry, long-run equilibrium will be reestablished at a price
- A) greater than \$5.
  - B) less than \$5.
  - C) equal to \$5.
  - D) either greater than or less than \$5, depending on the number of firms that enter the industry.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 6) Assume a perfectly competitive industry is in long-run equilibrium at a price of \$20. If this industry is a constant-cost industry and the demand for the product decreases, long-run equilibrium will be reestablished at a price
- A) greater than \$20.
  - B) less than \$20.
  - C) of \$20.
  - D) either greater than or less than \$20 depending on the magnitude of the decrease in demand.

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

- 7) Assume a perfectly competitive industry is in long-run equilibrium at a price of \$30. If this industry is an increasing-cost industry and the demand for the product increases, long-run equilibrium will be reestablished at a price
- A) greater than \$30.
  - B) of \$30.
  - C) less than \$30.
  - D) either greater than or less than \$30 depending on the magnitude of the decrease in demand.

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic



Refer to the information provided in Figure 9.6 below to answer the questions that follow.

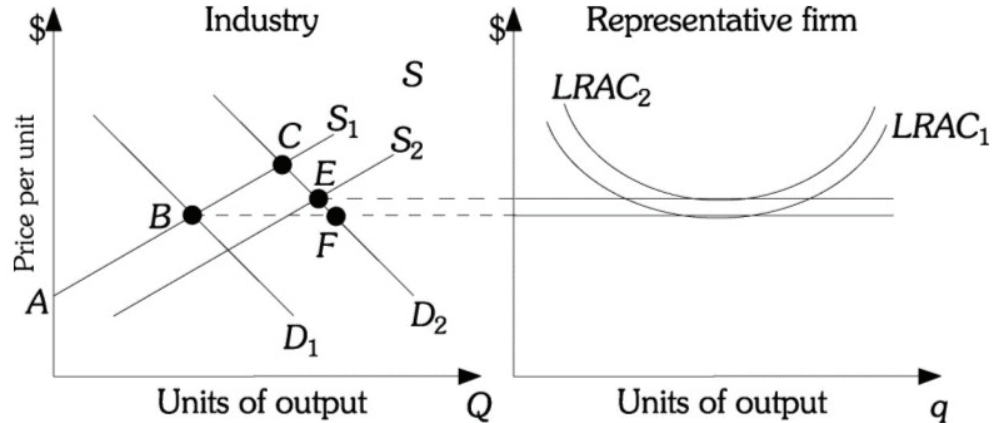


Figure 9.6

- 8) Refer to Figure 9.6. Industry demand is initially  $D_1$  and industry supply is initially  $S_1$  in this increasing cost industry. If demand increases to  $D_2$ , then in the long run the industry will
- A) stay at point  $B$ .
  - B) move to point  $C$ .
  - C) move to point  $E$ .
  - D) move to point  $F$ .

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

- 9) Refer to Figure 9.6. This increasing cost industry's long-run supply curve would be found by drawing a line from
- A) points  $A$  to  $E$ .
  - B) points  $B$  to  $F$ .
  - C) points  $B$  to  $C$ .
  - D) points  $B$  to  $E$ .

Answer: D

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

- 10) Refer to Figure 9.6. This figure depicts a(n) \_\_\_\_\_ type of industry.
- A) increasing-cost
  - B) decreasing-cost
  - C) constant-cost
  - D) impossible to determine from this information

Answer: A

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 11) An industry is in \_\_\_\_\_ if firms have an incentive to enter or exit in the \_\_\_\_\_ run.
- A) disequilibrium; short
  - B) disequilibrium; long
  - C) equilibrium; short
  - D) equilibrium; long

Answer: B

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Analytic

- 12) In the long run firms will expand as long as there are more \_\_\_\_\_ and new firms will enter the industry as long as they earn \_\_\_\_\_.
- A) economies of scale; zero profits
  - B) economies of scale; positive economic profits
  - C) diseconomies of scale; zero profits
  - D) diseconomies of scale; positive economic profits

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 13) In long run equilibrium for a perfectly competitive industry, firms earn \_\_\_\_\_ economic profits and produce \_\_\_\_\_.
- A) zero; efficiently
  - B) zero; inefficiently
  - C) positive; efficiently
  - D) positive; inefficiently

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 14) Assume the market for beef is perfectly competitive. Beef producers currently earn a zero economic profit. If consumers switch from beef to chicken, which of the following is most likely to occur?
- A) Beef producers will now incur economic losses in both the short run and the long run.
  - B) Beef producers will incur economic losses in the short run. Some producers will exit the industry until those remaining earn a zero economic profit.
  - C) Beef producers will incur economic losses in the short run. Some producers will exit the industry until those remaining earn an economic profit.
  - D) Beef producers will now earn economic profits in the short run and there will be no additional adjustments in the long run.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 15) Assume the market for beef is perfectly competitive. Beef producers currently earn a zero economic profit. If consumers switch to beef from chicken, which of the following is most likely to occur?
- A) Beef producers will now incur economic profits in both the short run and the long run.
  - B) Beef producers will incur economic profits in the short run. Some producers will enter the industry until all firms in the industry earn a zero economic profit.
  - C) Beef producers will incur economic profits in the short run. Some producers will enter the industry until all firms in the industry earn an economic profit.
  - D) Beef producers will now earn economic losses in the short run and there will be no additional adjustments in the long run.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 16) As long as existing firms earn economic profits in an industry, new firms will \_\_\_\_\_ the industry and the industry supply curve will shift to the \_\_\_\_\_.
- A) enter; right
  - B) enter; left
  - C) not enter; left
  - D) not enter; right

Answer: A

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 17) As long as existing firms earn economic losses in an industry, new firms will \_\_\_\_\_ the industry and the industry supply curve will shift to the \_\_\_\_\_.
- A) enter; right
  - B) enter; left
  - C) exit; left
  - D) exit; right

Answer: C

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 18) As new firms enter a decreasing-cost industry
- A) the *LRAC* curve shifts down.
  - B) the *LRAC* curve shifts up.
  - C) the position of the *LRAC* curve doesn't change, but firms move down their *LRAC* curve.
  - D) the position of the *LRAC* curve doesn't change, but firms move up their *LRAC* curve.

Answer: A

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 19) As new firms enter an increasing-cost industry
- A) the *LRAC* curve shifts down.
  - B) the *LRAC* curve shifts up.
  - C) the position of the *LRAC* curve doesn't change, but firms move down their *LRAC* curve.
  - D) the position of the *LRAC* curve doesn't change, but firms move up their *LRAC* curve.

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 20) Assume the tennis ball industry, a perfectly competitive industry, is in long-run equilibrium with a market price of \$5. If the demand for tennis balls DECREASES and the industry experiences decreasing returns to scale, long-run equilibrium will be reestablished at a price
- A) greater than \$5.
  - B) less than \$5.
  - C) equal to \$5.
  - D) either greater than or less than \$5, depending on the number of firms that enter the industry.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 21) Firms are making profits in an increasing-cost industry. Which of the following statements describes what will happen in the long run?
- A) More firms will enter this industry, causing the industry supply schedule to shift to the right and the LRAC curve facing firms to shift down.
  - B) More firms will enter this industry, causing the industry supply schedule to shift to the right and the LRAC curve facing firms to shift up.
  - C) Firms will exit this industry, causing the industry supply schedule to shift to the right and the LRAC curve to shift down.
  - D) Firms will exit this industry, causing the industry supply schedule to shift to the left and the LRAC curve to shift down.

Answer: B

Diff: 3

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 22) An industry with a positive sloping long-run supply curve is called a(n) \_\_\_\_\_ industry.
- A) constant-cost
  - B) decreasing-cost
  - C) increasing-cost
  - D) decreasing-profit

Answer: C

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Definition

- 23) An industry with a horizontal long-run supply curve is called a(n) \_\_\_\_\_ industry.
- A) constant-cost
  - B) decreasing-cost
  - C) increasing-cost
  - D) decreasing-profit

Answer: A

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Definition

- 24) In efficient markets \_\_\_\_\_ flows toward \_\_\_\_\_ opportunities.
- A) investment capital; consumption
  - B) investment capital; profit
  - C) consumption; profit
  - D) consumption; investment

Answer: B

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Fact

- 25) Related to the *Economics in Practice* on page 190: If firms have flat long run average cost curves,
- A) their long run supply curves are downward sloping.
  - B) the optimal number of firms in the industry is one.
  - C) larger firms have a cost advantage over smaller firms.
  - D) it is impossible to predict the structure of the industry.

Answer: D

Diff: 2

Topic: Long-Run Adjustments: Economics in Practice

Skill: Conceptual

- 26) Related to the *Economics in Practice* on page 194: Hot dogs are more expensive in New York's Central Park than in the rest of the city
- A) due entirely to demand side factors.
  - B) because hot dogs in Central Park are larger and tastier than those available outside the park.
  - C) because vendors have fixed stands and those outside the park cannot wheel their carts into the park to compete with existing park vendors.
  - D) due to the considerably higher prices of licenses to sell hot dogs in Central Park (as compared to the rest of the city).

Answer: D

Diff: 1

Topic: Long-Run Adjustments: Economics in Practice

Skill: Fact

## 2 True/False

- 1) Firms earning short run losses will exit in the long run.

Answer: TRUE

Diff: 1

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

- 2) Short run profits attract resources to industries in the long run resulting in their expansion.

Answer: TRUE

Diff: 2

Topic: Long-Run Adjustments to Short-Run Conditions

Skill: Conceptual

## 9.4 Appendix: External Economies and Diseconomies and the Long-Run Industry Supply Curve

### 1 Multiple Choice

- 1) Sources of external economies of scale include
- A) larger plant size that allows the plant to take advantage of technology.
  - B) larger firm size that result in volume discounts.
  - C) larger industry size results in lower production costs.
  - D) All of the above are correct.

Answer: C

Diff: 1

Topic: Appendix: External Economies and Diseconomies and the Long-Run Industry Supply Curve

Skill: Definition

# Chapter 10 Input Demand: The Labor and Land Markets

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## 10.1 Input Markets: Basic Concepts

### 1 Multiple Choice

- 1) The idea that the demand for autoworkers stems from the demand for automobiles is
- A) the value of the marginal product of autoworkers.
  - B) derived demand.
  - C) indirect demand.
  - D) output demand.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 2) Demand for the services of Derek Jeter is
- A) horizontal.
  - B) unrelated to his true productivity.
  - C) an output demand.
  - D) derived from the demand for Yankee's tickets when Jeter plays.

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 3) Salaries of NFL quarterbacks, like Tom Brady, are
- A) too high.
  - B) related to the additional revenues team owners expect to enjoy as a result of having them on the team roster.
  - C) the result of perfectly competitive markets.
  - D) All of the above are correct.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A decrease in the wage rate will change
- A) only the amount of labor hired.
  - B) the amount of labor employed, and it may also change the amount of other inputs employed.
  - C) the price the firm charges for the product, but it will not affect the demand for any of the inputs.
  - D) the firm's profit-maximizing level output, but not its usage of inputs.

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 5) When a large amount of output is produced per unit of the input, the input is said to exhibit
- A) high productivity.
  - B) low productivity.
  - C) marginal productivity.
  - D) derived productivity.

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 6) The demand for \_\_\_\_\_ is a "derived demand."
- A) ice cream cones on a hot day
  - B) tax-free municipal bonds
  - C) a hair stylist by a salon owner
  - D) a birthday cake for your brother

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 7) The demand for inputs is a derived demand because
- A) it does not come from competitive markets.
  - B) it depends on the demand for outputs.
  - C) it is derived from nature.
  - D) it is derived from production.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 8) A car manufacturing company adopts a new technology that, *ceteris paribus*, increases the productivity of capital. At the same time, workers unionize and demand higher wages. Assume that for this firm capital and labor are substitutable. Which of the following is most likely to occur?
- A) Capital will be substituted for labor.
  - B) Labor will be substituted for capital.
  - C) Output increases as do the prices of capital and labor.
  - D) Output decreases as does the price of cars.

Answer: A

Diff: 3

Topic: *Input Markets: Basic Concepts*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) Factors of production that can be used together to enhance the other's productivity are
- A) substitutable inputs.
  - B) complementary inputs.
  - C) duplicate inputs.
  - D) proportionate inputs.

Answer: B

Diff: 2

Topic: *Input Markets: Basic Concepts*

Skill: *Definition*

- 10) Labor and capital are substitutes in production. If labor becomes more educated, then, *ceteris paribus*,
- A) capital is substituted for labor.
  - B) labor is substituted for capital.
  - C) output decreases as does the rental rate.
  - D) output increases as does the price of the output.

Answer: B

Diff: 2

Topic: *Input Markets: Basic Concepts*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 11) If labor and capital are complementary in production and a technological advance increases the productivity of capital, then, *ceteris paribus*,
- A) labor productivity is likely to fall.
  - B) labor productivity is likely to rise.
  - C) wages are likely to fall.
  - D) Both (A) and (C) are correct.

Answer: B

Diff: 2

Topic: *Input Markets: Basic Concepts*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 12) The marginal revenue product
- A) is the product of the marginal product of labor and the price of the output.
  - B) eventually increases as labor input increases.
  - C) measures the benefit to the firm from hiring an additional unit of labor.
  - D) Both (A) and (C) are correct.

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 13) If a pet grooming salon hires an additional groomer, that worker can groom 4 additional pets per day. The average grooming fee is \$25. The most the salon would be willing to pay that groomer is
- A) \$4 per day.
  - B) \$25 per day.
  - C) \$100 per day.
  - D) indeterminate with the given information.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 14) The marginal revenue product of labor is
- A) the additional revenue a firm earns by employing one additional unit of labor.
  - B) the additional profit a firm earns by employing one additional unit of labor.
  - C) the marginal product of capital times the price of labor.
  - D) the additional revenue the firm makes by selling one unit of labor.

Answer: A

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

- 15) If the marginal product of a worker for a calculator manufacturer is 10 calculators, and the price of a calculator is \$10, the firm's marginal revenue product is
- A) \$1.00.
  - B) \$10.00.
  - C) \$100.00.
  - D) \$1,000.00.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

16) The Package Store hires workers to wrap packages. The store sells this service for \$5. The marginal revenue product of this store's fifth worker is \$50. The marginal product of the fifth worker is

- A) 0.01 package.
- B) 1 package.
- C) 10 packages.
- D) indeterminate from this information.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

17) The Ernie Egg Store hires workers to paint eggs. The store sells the eggs for \$3. The marginal revenue product of this store's fifth worker is \$21. The marginal product of the fifth worker is

- A) 0.14 eggs.
- B) 7 eggs.
- C) 36 eggs.
- D) indeterminate from this information.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 10.1 below to answer the following questions.

Table 10.1

Total Labor Units (employees)	Total Product (T-shirts per day)	Marginal Product of Labor (per day)	Price per T-shirt
0	0	--	--
1	20	20	\$5
2	50	30	5
3	75	25	5
4	95	20	5
5	110	15	5

18) Refer to Table 10.1. The marginal revenue product of the fourth worker is

- A) \$5.
- B) \$20.
- C) \$100.
- D) \$475.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

19) Refer to Table 10.1. The marginal revenue product of the \_\_\_\_\_ worker is \$150.

- A) second
- B) third
- C) fourth
- D) fifth

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Table 10.1. If the payment to labor per day is \$100, this T-shirt manufacturer is maximizing profits if he will hire \_\_\_\_\_ employees.

- A) one                      B) two                      C) four                      D) five

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Table 10.1. The maximum payment to labor per day that this profit-maximizing T-shirt manufacturer would be willing to pay to hire three workers per day is

- A) \$15.                      B) \$75.                      C) \$125.                      D) \$200.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

22) If the price of the product produced by labor increases, the marginal revenue product of labor curve will

- A) be unaffected because productivity of labor has not changed.  
B) shift to the left.  
C) shift to the right.  
D) become more elastic.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

23) The formula for the marginal revenue product of labor (L is for labor, X is the output) is

- A)  $MP_L/P_X$ .                      B)  $P_X/MP_L$ .  
C)  $(MP_L)(MR_X)$ .                      D)  $MP_L + P_X$ .

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

Refer to the data provided in Table 10.2 below to answer the following questions.

Total Labor Units (employees)	Total Product (frames per day)	Price per Frame
0	0	\$10
1	10	\$10
2	30	\$10
3	55	\$10
4	70	\$10
5	82	\$10

- 24) Refer to Table 10.2. Diminishing returns to labor start with the \_\_\_\_\_ worker.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Table 10.2. Marginal revenue product of the \_\_\_\_\_ worker is \$250.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 26) Refer to Table 10.2. Marginal revenue product of the \_\_\_\_\_ worker is \$120.  
 A) second                      B) third                      C) fourth                      D) fifth

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 27) Refer to Table 10.2. If workers are paid \$150 per day, then the firm is profit maximizing when it hires \_\_\_\_\_ workers.  
 A) two                      B) three                      C) four                      D) five

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Table 10.2. The most firms would be willing to pay per worker and hire three total workers is  
 A) \$120                      B) \$150                      C) \$200                      D) \$250

Answer: D

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Table 10.2. The firm currently employs 4 workers at the market wage of \$120 per worker per day. If the firm wants to maximize its profits, it should
- A) hire fewer workers
  - B) hire more workers.
  - C) make no adjustments as it is already employing the profit maximizing number of workers.
  - D) shut down since it is incurring a loss.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 10.1 below to answer the questions that follow.



Figure 10.1

- 30) Refer to Figure 10.1. This firm is currently hiring 16 workers and paying a wage of \$10. This firm should
- A) do nothing because it is maximizing profits.
  - B) reduce employment to 15 workers to increase profits.
  - C) reduce employment to 14 workers to increase profits.
  - D) increase employment to 17 workers to increase profits.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Analytic Skills

- 31) A firm will continue hiring labor as long as the MRP of labor \_\_\_\_\_ the market wage rate.
- A) is greater than or equal to
  - B) is less than
  - C) is equal to
  - D) determines

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 32) The marginal cost of a unit of labor in a perfectly competitive labor market is
- A) its average *MRP*.
  - B) equal to product price.
  - C) the market wage rate.
  - D) equal to *MRP*.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 33) Tony's Lawn Service uses only one variable input, fertilizer. The firm's demand curve for fertilizer in the short run is the input's
- A) total product curve.
  - B) marginal product curve.
  - C) marginal revenue product curve.
  - D) total cost curve.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

- 34) Sally's Sandwiches produces sandwiches using one variable input -- labor. Sally's Sandwiches is a \_\_\_\_\_ in the labor market and a \_\_\_\_\_ in the sandwich market.
- A) producer; consumer
  - B) consumer; producer
  - C) consumer; consumer
  - D) producer; producer

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

- 35) You have been hired by a data processing firm to provide economic advice. The owner of the firm tells you that the firm's only variable input is the number of data-entry operators. The hourly wage for data-entry operators is \$15.00. The marginal revenue product curve for data-entry operators reaches its maximum at three workers with a marginal revenue product of \$12.00. What advice would you give this firm?
- A) Hire three data-entry operators so as to minimize the amount of money the firm will lose.
  - B) Shut down immediately, as the firm is not able to cover all of its variable costs.
  - C) Increase the wage rate paid to data-entry operators so that their marginal revenue product will increase.
  - D) Produce as much as possible so as to maximize the difference between the wage paid to data-entry operators and their marginal revenue product.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 36) You have been hired by a data processing firm to provide economic advice. The owner of the firm tells you that the firm's only variable input is the number of data-entry operators. The hourly wage for data-entry operators is \$10.00. The marginal revenue product curve for data-entry operators reaches its maximum at three workers with a marginal revenue product of \$12.00. What advice would you give this firm?
- A) Hire three data-entry operators so as to maximize profits.
  - B) Shut down immediately, as the firm is not able to cover all of its variable costs.
  - C) Decrease the wage rate paid to data-entry operators so that their marginal revenue product will decrease.
  - D) Hire data-entry operators until the marginal revenue product is equal to the wage -- which will occur when more than three operators are employed.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 37) Firms will employ an input up to the point where
- A) the wage rate equals the productivity of capital.
  - B) its marginal cost equals its marginal product.
  - C) the input's price equals its marginal revenue product.
  - D) the input's price equals its marginal product.

Answer: C

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 38) Liu's Potato Chips is a perfectly competitive firm currently employing 30 workers. The marginal revenue product of the 30th worker is \$7.00 per hour. The wage rate is \$8.00 per hour. To increase profits, this firm should
- A) decrease employment until the *MRP* of labor equals \$8.00.
  - B) increase employment until the *MRP* of labor equals \$8.00.
  - C) continue hiring 30 workers because the firm earns a surplus of \$1.00 on each worker hired.
  - D) increase the price of potato chips so that the marginal revenue product increases to \$8.00 per hour.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 39) If the supply of labor decreases, which of the following events will occur?
- A) The wage rate will fall and firms will increase employment up until the point where *MRP* equals the new wage rate.
  - B) The wage rate will fall and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - C) The wage rate will increase and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - D) The wage rate will increase and firms will increase employment up until the point where *MRP* equals the new wage rate.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 40) If the supply of labor increases, which of the following events will occur?
- A) The wage rate will fall and firms will increase employment up until the point where *MRP* equals the new wage rate.
  - B) The wage rate will fall and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - C) The wage rate will increase and firms will decrease employment to the point where *MRP* equals the new wage rate.
  - D) The wage rate will increase and firms will increase employment up until the point where *MRP* equals the new wage rate.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 41) If Tie-Dyed T-Shirts is currently employing labor so that the wage is less than the marginal revenue product of labor, it must also be true that
- A) total revenues would be greater than total costs.
  - B) the wage is greater than marginal cost.
  - C) the price of the product must be less than marginal cost.
  - D) the price of the product must be greater than marginal cost.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 42) Assume that labor is the only variable input and that the payment made to labor is denoted as *W*. The marginal product of labor can be stated as
- A)  $(W) \times (MC)$ .
  - B)  $W/MC$ .
  - C)  $MC/W$ .
  - D)  $TC/W$ .

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Definition



- 43) If the wage rate is less than the marginal revenue product of labor, the firm should \_\_\_\_\_ to maximize profits.
- A) hire less labor and produce less output
  - B) hire less labor and produce more output
  - C) hire more labor and produce less output
  - D) hire more labor and produce more output

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 10.2 below to answer the questions that follow.

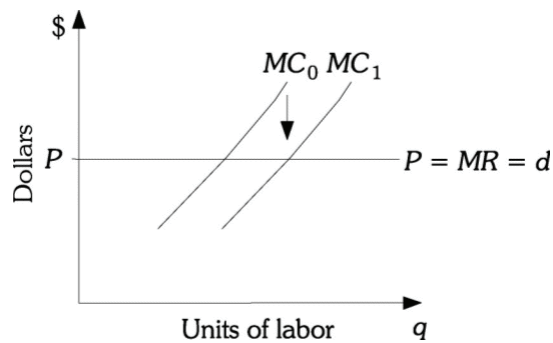


Figure 10.2

- 44) Refer to Figure 10.2. This firm's marginal cost curve has shifted from  $MC_0$  to  $MC_1$ . A likely explanation for this is that
- A) the productivity of a variable input declined.
  - B) the price of a variable input decreased.
  - C) the demand for the firm's product decreased.
  - D) the supply of a variable input decreased.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 45) Refer to Figure 10.2. This firm's marginal cost curve has shifted from  $MC_0$  to  $MC_1$ . A profit-maximizing firm should \_\_\_\_\_ the amount of output produced and \_\_\_\_\_ its demand for labor.
- A) increase; increase
  - B) increase; decrease
  - C) decrease; decrease
  - D) keep constant; increase

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 46) If capital and labor are complementary inputs and the firm increases the amount of capital employed in production, the marginal revenue product of labor will
- decrease.
  - increase.
  - remain constant because the amount of labor was not changed.
  - either increase, decrease or remain constant depending on how complementary labor and capital are in production.

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

Refer to the information provided in Figure 10.3 below to answer the questions that follow.

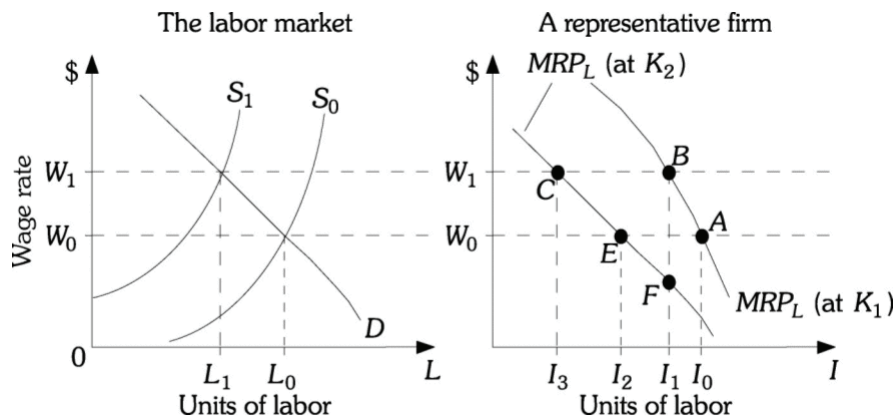


Figure 10.3

- 47) Refer to Figure 10.3. If labor supply is given by  $S_0$  and the firm is using  $K_1$  units of capital, this firm should hire \_\_\_\_\_ units of labor to maximize profit.
- $I_0$
  - $I_1$
  - $I_2$
  - $I_3$

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 48) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ , if the firm does not change the amount of capital it employs, the firm will move to Point \_\_\_\_\_ to maximize profits.
- B
  - C
  - E
  - F

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

49) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ . The firm's  $MRP_L$  curve will shift from  $MRP_L$  at  $K_1$  to  $MRP_L$  at  $K_2$  because

- A) the factor substitution effect will cause the firm to substitute capital for the higher-priced labor.
- B) the supply of labor decreased and therefore the productivity of labor decreased.
- C) the output effect led to a decrease in the demand for capital, which in turn decreased the productivity of labor.
- D) the firm is no longer maximizing profits.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

50) Refer to Figure 10.3. The market wage is initially  $W_0$  and the firm is initially at Point A. Labor supply decreases from  $S_0$  to  $S_1$ ; after the firm is fully able to adjust all inputs, the firm will hire \_\_\_\_\_ units of labor to maximize profits.

- A) I0
- B) I1
- C) I2
- D) I3

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 10.4 below to answer the questions that follow.

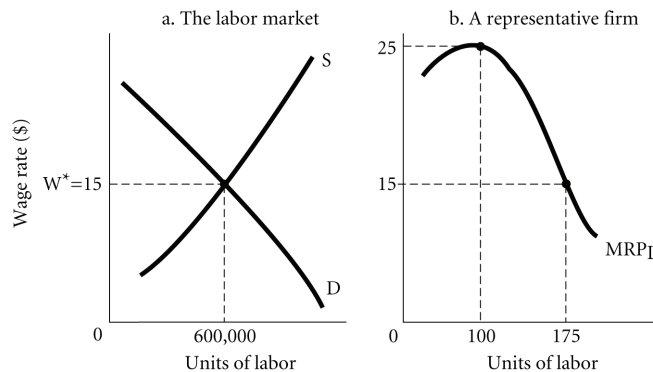


Figure 10.4

51) Refer to Figure 10.4. Firms will

- A) hire 175 units of labor at a market wage of \$15.
- B) hire 100 units of labor at a market wage of \$15 and have a surplus of \$5 per unit of labor.
- C) hire 100 workers at a wage of \$25.
- D) indeterminate from the given information.

Answer: A

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 52) The demand for any factor of production in a competitive industry depends on
- A) its productivity and upon how its product is valued in the marketplace.
  - B) its productivity and the productivity of all other inputs.
  - C) the productivity of all the other inputs and how these inputs are valued in the marketplace.
  - D) the amount of the factor that is used and the amounts of all the other factors that are used.

Answer: A

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 53) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, the farmer employs five workers and the marginal product of the fifth worker is 10 bushels. What would you advise this farmer to do?
- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
  - B) Reduce employment because the wage paid is less than the marginal revenue product.
  - C) Increase employment because the wage paid is less than the marginal revenue product.
  - D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: C

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 54) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, the farmer employs five workers and the marginal product of the fifth worker is 3 bushels. What would you advise this farmer to do?
- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
  - B) Reduce employment because the wage paid is more than the marginal revenue product.
  - C) Increase employment because the wage paid is less than the marginal revenue product.
  - D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 55) A wheat farmer sells wheat in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of wheat is \$2 a bushel, the wage rate is \$10, and the farmer employs five workers. If the farmer is maximizing his profits, then the marginal product of the fifth worker is \_\_\_\_\_.
- A) 0.2 bushels
  - B) 5 bushels
  - C) 20 bushels
  - D) indeterminate from the given information.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 56) The law of \_\_\_\_\_ explains why a marginal revenue product schedule eventually declines.
- A) diminishing marginal opportunity costs
  - B) increasing marginal returns
  - C) increasing marginal opportunity costs
  - D) diminishing marginal returns

Answer: D

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 57) An increase in technology will cause a marginal revenue product of labor curve to
- A) be unaffected because the productivity of labor has not changed.
  - B) shift to the left.
  - C) shift to the right
  - D) become more inelastic.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 58) A firm competing in a perfectly competitive labor market desires to maximize \_\_\_\_\_.
- A) marginal profit, not total profit
  - B) total profit, not marginal profit
  - C) marginal profit, not average profit
  - D) average profit, not marginal profit

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 59) To get a profit maximizing firm in a perfectly competitive labor market to hire another worker, the firm will need to pay a
- A) lower wage rate but only to that last worker hired.
  - B) higher wage rate but only to that last worker hired.
  - C) lower wage rate not only to that last worker hired but also to all previous workers hired.
  - D) higher wage rate not only to that last worker hired but also to all previous workers hired.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 60) Suppose the supply of labor schedule increases in a perfectly competitive labor market while the market demand schedule remains unchanged. A profit maximizing representative firm will
- A) hire more workers.
  - B) hire less workers.
  - C) hire the same number of workers.
  - D) substitute capital for labor.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 61) A firm's marginal cost curve in a perfectly competitive product market is the same as its \_\_\_\_\_ curve. Similarly, a firm's marginal revenue product curve in a perfectly competitive labor market is the same as its \_\_\_\_\_ curve.
- A) demand; supply
  - B) supply; demand
  - C) demand; demand
  - D) supply; supply

Answer: B

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 62) In the product market changes in technology affect the marginal \_\_\_\_\_ of a unit of output. In the labor market, changes in technology affect the marginal \_\_\_\_\_ of a unit of labor input.
- A) cost; cost
  - B) revenue; revenue
  - C) revenue product; cost
  - D) cost; revenue product

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 63) Where L represents labor and X represents output,  $MPL \times PX$  is the \_\_\_\_\_ while the wage rate is the \_\_\_\_\_.
- A) cost of a marginal unit of labor; value of labor's marginal product
  - B) value of labor's marginal product; cost of a marginal unit of labor
  - C) marginal revenue of a unit of output; marginal cost of a unit of output
  - D) marginal cost of a unit of output; marginal revenue of a unit of output

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 64) Assuming that labor is the only variable input if society values a good \_\_\_\_\_ it costs firms to hire the workers to produce that good, the good \_\_\_\_\_ be produced.
- A) more than; will
  - B) less than; will
  - C) more than; will not
  - D) equal to what; will not

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 65) A soybean farmer sells soybeans in a perfectly competitive market and hires labor in a perfectly competitive market. The market price of soybeans is \$1 a bushel, the wage rate is \$12, the farmer employs six workers and the marginal product of the sixth worker is 10. What would you advise this farmer to do?
- A) Do nothing because the wage rate and the marginal product of the last worker hired are equal.
  - B) Reduce employment because the wage paid is greater than the marginal revenue product.
  - C) Increase employment because the wage paid is less than the marginal revenue product.
  - D) Reduce the product price so that the wage and marginal revenue product will be equal.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Analytic

AACSB: Analytic Skills

- 66) The price of a good will be demand determined if
- A) the demand for the good is unit elastic.
  - B) the demand for the good is perfectly inelastic.
  - C) the supply of the good is perfectly elastic.
  - D) the supply of the good is perfectly inelastic.

Answer: D

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 67) The return to any factor of production that is in fixed supply is
- A) pure profit.
  - B) pure rent.
  - C) producer surplus.
  - D) factor surplus.

Answer: B

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

- 68) If a firm could increase profits by hiring less labor and more capital, then
- A) the last dollar spent on labor must yield a smaller increase in output than the last dollar spent on capital.
  - B) the last dollar spent on labor must yield a larger increase in output than the last dollar spent on capital.
  - C) the price of labor exceeds the price of capital.
  - D) the optimal production technique must be capital intensive.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 69) At its current level of production and input employment, a firm's marginal products of labor and capital are 5 units of output. The market wage is \$10 per unit of labor and the price per unit of capital is \$25. The firm could increase its profits by
- A) hiring more labor and less capital.
  - B) hiring more capital and less labor.
  - C) hire less capital and less labor.
  - D) making no changes since it is already employing the profit maximizing combination of inputs.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 70) If a product's demand decreases as its supply simultaneously increases, the marginal revenue product curve will
- A) shift to the right.
  - B) shift to the left.
  - C) remain unchanged.
  - D) either shift to the left, shift to the right, or remain unchanged depending upon what happens to product price.

Answer: B

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking



71) The marginal revenue product curve of labor will always shift to the right if

- A) the wage rate rises.
- B) product demand decreases and product price decreases.
- C) product demand increases and product price increases.
- D) the price of capital rises.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

72) If product demand increases and product price increases,

- A) the marginal revenue product curve will shift to the right.
- B) the marginal revenue product curve will shift to the left.
- C) the firm will move up the marginal revenue product curve and hire fewer units of the input.
- D) the firm will move down the marginal revenue product curve and hire more units of the input.

Answer: A

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

73) Assume that automobiles are a normal good. An increase in income will

- A) shift the marginal revenue product curve of autoworkers to the left.
- B) move a firm down the marginal revenue product curve of autoworkers.
- C) shift the marginal revenue product curve of autoworkers to the right.
- D) have no effect on the marginal revenue product curve of autoworkers.

Answer: C

Diff: 3

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

1) Productivity of an input is the amount of output produced per unit of input.

Answer: TRUE

Diff: 2

Topic: Input Markets: Basic Concepts

Skill: Definition

2) Households will supply labor as long as the wage they receive is less than the value of their leisure time.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 3) The price of any factor of production in a competitive market depends on the value of the final product it is used to produce.

Answer: TRUE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Fact

- 4) Input demand is derived demand in the sense that it is dependent upon the productivity of the input.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Definition

## 10.2 Labor Markets

### 1 Multiple Choice

- 1) To produce one unit of output, a firm can use either one unit of capital or one unit of labor. In this case, capital and labor are
- A) complementary inputs.
  - B) substitutable inputs.
  - C) both complementary and substitutable inputs.
  - D) unrelated inputs.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact

- 2) Assuming labor is the only variable factor of production, production of a good will occur
- A) as long as the marginal revenue product of labor is positive.
  - B) if society values a good more than it costs firms to hire the workers to produce the good.
  - C) as long as the product's price is greater than the marginal revenue product of labor.
  - D) if the marginal cost of a unit of output equals the marginal revenue product of labor.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) When a firm substitutes away from a factor whose price has risen and toward a factor whose price has fallen, it is an example of the
- A) output effect of a factor price decrease.
  - B) factor substitution effect.
  - C) factor complementary effect.
  - D) output substitution effect.

Answer: B

Diff: 2

Topic: Labor Markets

Skill: Definition

- 4) According to the output effect of a factor price increase, the demand for
- A) the factor whose price has increased will decrease, but the demand for the other factors will increase.
  - B) all factors decreases.
  - C) all factors increases.
  - D) the factor whose price has increased will increase, but the demand for the other factors will decrease.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact

- 5) The owner of Instant Printing, a firm that prints business cards, tells you that as a result of an increase in the wage rate of printer operators he has reduced the amount of output he produces and the amount of capital he uses. How would you respond to this?
- A) You should tell him that this doesn't make any economic sense because according to the factor substitution effect he should have substituted toward capital and away from labor.
  - B) This seems logical, because the output effect of a factor price increase would cause a firm to demand less of all inputs, not just the input whose price increased.
  - C) You should tell him that instead of reducing output and the demand for all factors of production, he should increase output and the demand for all factors of production so that he can meet the higher labor costs by generating more revenue.
  - D) You tell him that capital must be an inferior input, because he reduced his use of capital when the price of labor increased.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 6) The demand curve for an input will slope downward because of
- A) the factor substitution effect.
  - B) the output effect.
  - C) decreasing returns to scale.
  - D) Both A and B

Answer: D

Diff: 1

Topic: Labor Markets

Skill: Fact

- 7) If the price of labor falls,
- A) we can conclude that the demand for capital will always decrease because only the factor substitution effect is relevant.
  - B) we can conclude that the demand for capital will always increase because only the output effect is relevant.
  - C) the change in the demand for capital cannot be predicted because the factor substitution effect and output effect work in opposite directions.
  - D) the demand for capital will be unaffected, because only a change in the price of capital would change the demand for capital.

Answer: C

Diff: 1

Topic: Labor Markets

Skill: Fact

- 8) Which of the following situations is most likely to generate the largest output effect from a decrease in the price of one of a firm's inputs?
- A) The demand for a firm's product is inelastic.
  - B) The demand for a firm's product is elastic.
  - C) The inputs used in production are highly substitutable.
  - D) The inputs used in production are highly complementary.

Answer: B

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Assume that Creative Ceramics can vary both capital and labor. An increase in the amount of capital will
- A) have no impact on the productivity of labor.
  - B) cause the firm to move down along the marginal revenue product of labor curve and hire more labor.
  - C) cause the marginal revenue product of labor curve to be more inelastic.
  - D) shift the marginal revenue product curve of labor out to the right.

Answer: D

Diff: 3

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 10) An increase in the productivity of a factor of production will
- A) shift its marginal revenue product curve to the right.
  - B) shift its marginal revenue product curve to the left.
  - C) cause a firm to move down the marginal revenue product curve.
  - D) cause a firm to move up the marginal revenue product curve.

Answer: A

Diff: 1

Topic: Labor Markets

Skill: Fact

- 11) An decrease in the productivity of a factor of production will
- A) shift its marginal revenue product curve to the right.
  - B) shift its marginal revenue product curve to the left.
  - C) cause a firm to move down the marginal revenue product curve.
  - D) cause a firm to move up the marginal revenue product curve.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Fact

- 12) The production and use of capital
- A) reduces the productivity of labor and decreases wages.
  - B) reduces the productivity of labor and drives up wages.
  - C) enhances the productivity of labor and drives up wages.
  - D) enhances the productivity of labor and decreases wages.

Answer: C

Diff: 1

Topic: Labor Markets

Skill: Fact

- 13) According to the output effect of a factor price change, if supply of labor increases, then once the firm fully adjust to the labor supply change it
- A) increases output and thus demand for all inputs increases.
  - B) decreases output and thus demand for all inputs decreases.
  - C) increases demand for labor alone and there is no change in its output level.
  - D) increases output and decreases demand for labor.

Answer: A

Diff: 1

Topic: Labor Markets

Skill: Definition

- 14) According to the output effect of a factor price change, if supply of labor decreases, then once the firm fully adjust to the labor supply change it
- A) increases output and thus demand for all inputs increases.
  - B) decreases output and thus demand for all inputs decreases.
  - C) decreases demand for labor alone and there is no change in its output level.
  - D) decreases output and decreases demand for labor.

Answer: B

Diff: 1

Topic: Labor Markets

Skill: Definition

- 15) Related to the *Economics in Practice* on page 211: Julia Roberts earned \$35,000 per week for her work in the play *Three Days of Rain*. Her average weekly salary for a movie is in excess of \$1 million. Why the difference?
- A) Roberts prefers working in the theater and thus is willing to do so for a lower salary.
  - B) Movie tickets are more expensive than theater tickets, thus film producers are willing to pay Roberts more than theater producers.
  - C) The presence of Roberts in the a movie increases the expected revenues for that movie by a much larger amount than her presence in a play.
  - D) Roberts is far better in movies than in live performances (such as plays) and thus is paid more for movies.

Answer: C

Diff: 2

Topic: Labor Markets: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Complements and substitutes exist for outputs, but not for inputs.

Answer: FALSE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 2) If capital and labor are substitute inputs, the productivity of labor falls as the use of capital increases.

Answer: FALSE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 3) The infusion of capital into an industry raises the productivity of the other inputs in that industry.

Answer: TRUE

Diff: 1

Topic: Labor Markets

Skill: Fact

- 4) Labor is a firm's only variable input. The firm should hire additional units of labor as long as the wage is less than or equal to the marginal revenue product of that additional unit of labor.

Answer: TRUE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 5) As firms hire additional units of labor, eventually the marginal revenue product will always increase.

Answer: FALSE

Diff: 1

Topic: Input Markets: Basic Concepts

Skill: Conceptual

AACSB: Reflective Thinking

- 6) According to the output effect of a labor price decrease, when supply of labor increases, firms eventually increase output and demand for all inputs.

Answer: TRUE

Diff: 1

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 7) When wages increase, the net effect on the level of capital used depends on the relative magnitudes of the factor substitution and output effects.

Answer: TRUE

Diff: 2

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

8) When wages fall, the employment of capital always decreases.

Answer: FALSE

Diff: 2

Topic: Labor Markets

Skill: Conceptual

AACSB: Reflective Thinking

9) Related to the *Economics in Practice* on page 211: Demand for Julia Roberts' acting services is \$1 million per week regardless of whether she works in a film, TV, or theater.

Answer: FALSE

Diff: 1

Topic: Labor Markets: Economics in Practice

Skill: Fact

## 10.3 Land Markets

### 1 Multiple Choice

1) Because a famous painting is fixed in supply, its price is

A) demand determined.

B) supply determined.

C) inelastic.

D) independently determined.

Answer: A

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

2) The number of seats available in a stadium is fixed at 80,000. The equilibrium price for a ticket to a football game at the stadium is \$30. The equilibrium price for a ticket to a baseball game at the stadium is \$20. Which of the following is TRUE?

A) Football games must be more expensive to produce than baseball games.

B) The demand for baseball games must be more elastic than the demand for football games.

C) The supply of baseball games must be less elastic than the supply of football games.

D) The demand for each baseball game must be lower than the demand for each football game.

Answer: D

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 3) The number of seats available in a stadium is fixed at 80,000. The equilibrium price for a ticket to a football game at the stadium is \$30. The equilibrium price for a ticket to a soccer match at the stadium is \$10. Which of the following is TRUE?
- A) Football games must be more expensive to produce than a soccer match.
  - B) The demand for each football game must be more than the demand for each soccer match.
  - C) The supply of soccer matches must be less elastic than the supply of football games.
  - D) The demand for each soccer game must be greater than the demand for each football game.

Answer: B

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 4) If the marginal revenue product of land is greater than its price, a firm should
- A) use more land.
  - B) use less land.
  - C) try to decrease the productivity of land.
  - D) decrease the price it is willing to pay for land.

Answer: A

Diff: 3

Topic: Land Markets

Skill: Conceptual

AACSB: Reflective Thinking

- 5) A profit-maximizing firm will continue to employ land until
- A)  $MP_{LAND} = P_{LAND}$ .
  - B)  $MRP_{LAND} = 0$ .
  - C)  $MRP_{LAND} = MP_{LAND}$ .
  - D)  $MRP_{LAND} = P_{LAND}$ .

Answer: D

Diff: 1

Topic: Land Markets

Skill: Fact

- 6) If the MRP of land is less than its price, a firm should
- A) use more land.
  - B) use less land.
  - C) try to decrease the productivity of land.
  - D) increase the price it is willing to pay for land.

Answer: B

Diff: 1

Topic: Land Markets

Skill: Fact



- 7) If land becomes more valuable in residential use than in commercial use,
- A) the supply of land available for commercial use should decrease and the supply of land for residential use should increase.
  - B) there can be no change in the allocation of land because land is fixed in supply.
  - C) there will be no change in the allocation of land, as there is no responsiveness to price changes by suppliers of land.
  - D) the supply of land for commercial use will become perfectly elastic and the supply of land for residential use will become perfectly inelastic.

Answer: A

Diff: 1

Topic: *The Firm's Profit Maximization Condition in Input Markets*

Skill: *Fact*

- 8) Related to the *Economics in Practice* on page 214: The network of high-speed rail has expanded considerably in Europe. As a result,
- A) the opportunity cost of living farther from one's work has fallen.
  - B) land values in communities served by the network is falling.
  - C) demand for air travel in Europe is likely becoming less elastic.
  - D) All of the above are correct.

Answer: A

Diff: 2

Topic: *Land Markets: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 9) Related to the *Economics in Practice* on page 214: When a town is added to the European network of high-speed rail,
- A) property values in that town are likely to increase.
  - B) employment in the town is likely to increase.
  - C) the economy of the town is likely to grow.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *Land Markets: Economics in Practice*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) "Demand determined" means that price is set by buyers' demand and a fixed supply.

Answer: TRUE

Diff: 2

Topic: *Land Markets*

Skill: *Definition*

- 2) Pure rent is the return to any factor of production that is in fixed supply.

Answer: TRUE

Diff: 2

Topic: *Land Markets*

Skill: *Definition*

3) A firm will use land up to the point at which the  $MRP$  of land is equal to the price of land.

Answer: TRUE

Diff: 1

Topic: Land Markets

Skill: Fact

4) The return to a factor that is in fixed supply is a pure rent.

Answer: TRUE

Diff: 1

Topic: Land Markets

Skill: Definition

5) The value of land is determined in part by what firms and households are willing to pay for it.

Answer: FALSE

Diff: 2

Topic: Land Markets

Skill: Definition

## 10.4 The Firm's Profit-Maximizing Condition in Input Markets

### 1 Multiple Choice

1) Assume the Backwoods Shoe Company hires three inputs: labor ( $L$ ), capital ( $K$ ), and land ( $A$ ) to produce shoes ( $X$ ). Which of the following conditions must be met so that the firm is using the optimal, or least costly, combination of inputs?

A)  $MPL = MPK = MPA$

B)  $PL = PK = PA$

C)  $MPL/PL = MPK/PK = MPA/PA$

D)  $MPL = MPK = MPA = 1/PX$

Answer: C

Diff: 1

Topic: The Firm's Profit Maximization Condition in Input Markets

Skill: Fact

2) A firm hires labor, capital, and land to produce tomatoes. Currently the marginal product of the last unit of labor input is 20, the marginal product of the last unit of capital input is 30, and the marginal product of the last unit of land input is 100. The market wage is \$10 and the market price for capital is \$15. If the firm is using the optimal combination of inputs, then the price of land is

A) \$2.

B) \$20.

C) \$50.

D) indeterminate from the given information.

Answer: C

Diff: 2

Topic: The Firm's Profit Maximization Condition in Input Markets

Skill: Analytic

AACSB: Analytic Skills

- 3) A firm is currently hiring capital and labor so that  $MPL/PL < MPK/PK$ , if the firm wishes to maximize profits it should hire
- A) less labor and less capital.
  - B) more capital and more labor.
  - C) more labor and less capital.
  - D) less labor and more capital.

Answer: D

Diff: 3

Topic: The Firm's Profit Maximization Condition in Input Markets

Skill: Conceptual

AACSB: Reflective Thinking

## 10.5 Input Demand: The Labor and Land Markets

### 1 Multiple Choice

- 1) Shifts in factor demand result from changes in
- A) demand for outputs.
  - B) the quantity of other factors with which it works.
  - C) the price of other inputs.
  - D) All of the above are correct.

Answer: A

Diff: 1

Topic: Input Demand Curves

Skill: Definition

### 2 True/False

- 1) A technological change would cause movement along the demand curve for inputs.

Answer: FALSE

Diff: 2

Topic: Input Demand Curves

Skill: Definition

## 10.6 Resource Allocation and the Mix of Output in Competitive Markets

### 1 Multiple Choice

- 1) Custom Made Clothing, a small clothing manufacturer, can use either a capital-intensive or labor-intensive technology to produce a product. If the price of capital increases and the price of labor remains constant, this firm most likely would
- A) switch to the labor-intensive technology.
  - B) continue to use the capital-intensive technology and reduce the amount of output produced.
  - C) leave the industry.
  - D) try to increase the productivity of capital.

Answer: A

Diff: 3

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Conceptual

AACSB: Reflective Thinking

2) Joe and Carl are both reporters and they both have the same productivity –they each can write five articles a week. Joe writes articles about celebrities. Carl writes articles about economics. Joe earns twice as much as Carl. Which of the following could explain this?

- A) There are more reporters writing about celebrities than there are reporters writing about economics.
- B) The output effect is greater for celebrity writers than economics writers.
- C) There must be more substitutes available for celebrity writers than there are for economics writers.
- D) People are willing to pay more for stories about celebrities than for stories about economics.

Answer: D

Diff: 3

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Conceptual

AACSB: Reflective Thinking

3) At equilibrium, each factor ends up receiving rewards determined by its productivity. This is known as

- A) marginal productivity theory of income distribution.
- B) law of income distribution.
- C) law of diminishing marginal returns.
- D) derived demand.

Answer: A

Diff: 1

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Definition

## 2 True/False

1) All else equal, more productive workers earn higher incomes.

Answer: TRUE

Diff: 2

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Conceptual

AACSB: Reflective Thinking

2) The marginal productivity theory of income distribution states that income will be distributed equally across all factors of production.

Answer: FALSE

Diff: 2

Topic: Resource Allocation and the Mix of Output in Competitive Markets

Skill: Definition

# Chapter 11 Input Demand: The Capital Market and the Investment Decision

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## 11.1 Capital, Investment, and Depreciation

### 1 Multiple Choice

- 1) Our economic system produces \_\_\_\_\_ goods that firms use as inputs to produce future goods and services.  
A) investment                      B) capital                      C) tangible                      D) depreciation

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 2) In which of the following examples does the firm acquire financial capital from households through a financial intermediary?  
A) A firm sells a bond to John Doe.  
B) The firm sells a bond to an employee pension fund.  
C) The firm uses retained earnings to purchase shares of its stocks owned by individuals.  
D) The firm uses retained earnings to purchase shares of its stock owned by a mutual fund company.

Answer: B

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 3) Large amounts of \_\_\_\_\_ were destroyed in the large earthquake in China in 2008.  
A) tangible capital                      B) social capital  
C) human capital                      D) All of the above are correct.

Answer: D

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Conceptual

AACSB: Reflective Thinking

- 4) As the inventory of a firm falls,  
A) there is no change in its capital.                      B) its intangible capital decreases.  
C) its tangible capital decreases.                      D) its social capital increases.

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 5) Firms that offer to pay for college tuition for their employees are investing in \_\_\_\_\_ capital.  
A) human  
B) productive  
C) social  
D) None of the above are correct.

Answer: A

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 6) A clothing manufacturer produced 5,000 sweaters, but sold only 4,000 of them. We would classify the remaining 1,000 sweaters as  
A) a loss to the firm.  
B) part of the firm's tangible capital.  
C) part of the firm's intangible capital.  
D) a factor of production.

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 7) \_\_\_\_\_ is an example of tangible capital/  
A) A restaurant's unsold, unopened cans of soda  
B) An idea for a new business  
C) The goodwill a firm has established through advertising  
D) Knowledge of how to program a computer

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 8) The measure of a firm's \_\_\_\_\_ is the current market value of its plant, equipment, inventories, and intangible assets.  
A) investment  
B) depreciation  
C) capital stock  
D) capital flow

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 9) A firm's capital is measured as a(n) \_\_\_\_\_ while investment in new capital is measured as a(n) \_\_\_\_\_.  
A) flow; stock  
B) stock; flow  
C) stock; change  
D) physical amount; dollar value

Answer: B

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 10) A university requires that all entering first-year students learn how to use word processing and spreadsheet software. This investment is in \_\_\_\_\_ capital.  
A) tangible  
B) financial  
C) human  
D) productive

Answer: C

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 11) "Goodwill" is an example of
- A) physical capital.
  - B) intangible capital.
  - C) financial capital.
  - D) a public service industry.

Answer: B

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 12) An example of intangible capital is a(n)
- A) vacation house.
  - B) flower garden.
  - C) book.
  - D) apprenticeship program.

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 13) Your taking a class that improves your critical thinking skills represents an investment in your \_\_\_\_\_ capital.

A) human                      B) social                      C) tangible                      D) financial

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

- 14) Capital goods yield benefits
- A) as soon as the investment decision is made.
  - B) before they are put to use.
  - C) over their life spans.
  - D) in the present only.

Answer: C

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Fact

- 15) Economists use the term *investment* to refer to
- A) the creation of new capital.
  - B) the act of buying a share of stock or a bond.
  - C) a household's savings.
  - D) the net worth of a company's financial assets.

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

16) As economists use the term, \_\_\_\_\_ is an act of household investment.

- A) building a new construction vacation home
- B) purchasing 100 shares of Microsoft stock
- C) buying a corporate bond
- D) borrowing money from the bank to pay for a vacation cruise

Answer: A

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

17) We would NOT consider \_\_\_\_\_ an act of capital investment.

- A) a father paying for his daughter's college education
- B) a firm buying a new energy-saving machine
- C) a state government building a new road
- D) the Postal Service delivering the mail

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

18) The \_\_\_\_\_ is called depreciation.

- A) sum of gross and net investment.
- B) new additions to a firm's stock of intangible capital.
- C) decline in the economic value of an asset over time.
- D) decrease in the general price level.

Answer: C

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

19) As economists use the term, depreciation is

- A) using some of your savings to buy a car.
- B) a GM shareholder selling some of her stock.
- C) an increase in sales decreasing a firm's inventories.
- D) a tax accountant's knowledge of the tax code becoming outdated as new tax laws are passed.

Answer: D

Diff: 2

Topic: Capital, Investment, and Depreciation

Skill: Definition

20) A capital asset will depreciate because

- A) it wears out physically.
- B) it becomes obsolete.
- C) of an increase in the tax on profits.
- D) both A and B

Answer: D

Diff: 1

Topic: Capital, Investment, and Depreciation

Skill: Fact



## 2 True/False

- 1) Capital stock is defined as the current market value of a firm's productive assets.

Answer: TRUE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 2) Those goods produced by the economic system that are used as inputs in the production of future goods and services are known as capital.

Answer: TRUE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 3) Capital stock is the current market value of all shares of stock a company has.

Answer: FALSE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 4) The funds that firms use to buy capital come directly or indirectly from households.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Fact*

- 5) Human capital is a type of social capital.

Answer: FALSE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 6) Residential structures and inventories are examples of tangible capital.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 7) The value of capital is as great as the services it produces over time.

Answer: TRUE

Diff: 1

Topic: *Capital, Investment, and Depreciation*

Skill: *Definition*

- 8) Capital stock increases with investment and decreases with depreciation.

Answer: TRUE

Diff: 2

Topic: *Capital, Investment, and Depreciation*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 11.2 The Capital Market

### 1 Multiple Choice

1) In the \_\_\_\_\_ market households supply their savings to firms that demand funds in order to buy capital goods.

- A) money                      B) savings                      C) investment                      D) capital

Answer: D

Diff: 2

Topic: The Capital Market

Skill: Definition

2) When a household lends money directly to a firm, the firm gives the household a

- A) share of stock.                      B) certificate of investment.  
C) bond.                      D) dividend.

Answer: C

Diff: 1

Topic: The Capital Market

Skill: Fact

3) The stock market, banks, and the bond market are three examples of institutions that economists would classify as belonging to the financial \_\_\_\_\_ market.

- A) savings                      B) investment                      C) capital                      D) labor

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Definition

4) The two most important forms of capital income are

- A) rents and profits.                      B) investments and rents.  
C) dividends and depreciation.                      D) interest and profits.

Answer: D

Diff: 1

Topic: The Capital Market

Skill: Fact

5) Capital income includes

- A) rents.                      B) interest.  
C) profit.                      D) Both (B) and (C) are correct.

Answer: D

Diff: 1

Topic: The Capital Market

Skill: Fact



11) You agree to lend \_\_\_\_\_ to a friend for a year at an annual interest rate of 10%. At the end of the year your friend pays you \$600 in interest.

- A) \$60                      B) \$660                      C) \$6,000                      D) \$6,600

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

12) You use \$40,000 of your own money to start a catering business. During the first year you earn a 5% return on that investment. If the current interest rate on savings is 8%, you earn an economic profit of

- A) -\$1,200.                      B) \$1,200.                      C) \$2,000.                      D) \$3,200.

Answer: A

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

13) You use \$50,000 of your own money to start an espresso stand. During the first year you earn a 10% return on that investment. If the current interest rate on savings is 8%, you earn an economic profit of

- A) -\$4,000.                      B) \$1,000.                      C) \$4,000.                      D) \$5,000.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

14) You use \$3,000 of your own money to start a dog-sitting service. During the first year you earn a 10% return on your investment. If the current interest rate on savings is 7%, you earn an economic profit of

- A) -\$90.                      B) \$90.                      C) \$210.                      D) \$300.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

15) You use \$5,000 of your own money to start a dog-walking business. During the first year you earn a 5% return on your investment. If the current interest rate on savings is 8%, you earn an economic profit of

- A) -\$150.                      B) \$150.                      C) \$250.                      D) \$400.

Answer: A

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 16) Firms' ability to invest in capital is limited by households'
- A) investment in stock.
  - B) savings decisions.
  - C) supply of land.
  - D) All of the above are correct.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Definition

- 17) As a holder of a share of common stock,
- A) you are entitled to a portion of the firm's revenues.
  - B) you are entitled to a portion of the firm's profits.
  - C) you are entitled to a standard percentage return on your investment.
  - D) you are responsible for the liabilities of the corporation.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Definition

- 18) When you use your own savings to start a business, you make a profit
- A) after the first dollar you earn, because you borrowed no funds to start the business.
  - B) after you earn an amount equal to the savings you used to start the business.
  - C) only after you cover the opportunity cost of using your savings to start your business.
  - D) only after you earn double the amount of money you invested.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Definition

- 19) Assume that the current interest rate is 7%. You invest \$10,000 of your own money in a restaurant that you own and operate. The normal return on this investment is
- A) \$0, as you used your own money.
  - B) \$700, as that is the interest forgone by not lending the money to someone else at a 7% interest rate.
  - C) \$10,000, as that is the amount invested in the restaurant.
  - D) \$10,700, the amount invested plus the interest charge on the investment.

Answer: B

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 20) You borrow \$10,000 at an interest rate of 6% to open Movies Galore, a DVD rental store. You will earn an economic profit if the return on your investment is
- A) between 0 and 6%.
  - B) 6%.
  - C) greater than 6%.
  - D) 10% or greater.

Answer: C

Diff: 2

Topic: The Capital Market

Skill: Analytic

AACSB: Analytic Skills

- 21) You borrow \$10,000 at an interest rate of 5% to open Movies Galore, a DVD rental store. If \_\_\_\_\_ then you will earn an economic loss.
- A) the return on your investment is less than 5%.
  - B) the return on your investment is exactly 5%.
  - C) the return on your investment is greater than 5%.
  - D) indeterminate from given information.

Answer: A

Diff: 2

Topic: *The Capital Market*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) A software company writes a better operating system for personal computers and earns very large profits on it. Which of the following is TRUE?
- A) The profits this firm earns are a return for an innovation.
  - B) The profits this firm earns aren't deserved, as the firm did not take any risks.
  - C) This firm must not be in a competitive market if it was able to earn a profit.
  - D) both A and C

Answer: A

Diff: 3

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 23) A fund that takes household savings and puts them into high-risk projects in exchange for a share of the profits if the new business succeeds is a(n) \_\_\_\_\_ capital fund.
- A) business
  - B) innovation
  - C) risk
  - D) venture

Answer: D

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 24) A firm that retains earnings does the equivalent of
- A) lending money to the firm's shareholders.
  - B) borrowing money from the firm's shareholders.
  - C) decreasing the net worth of the firm's shareholders.
  - D) decreasing its own net worth.

Answer: B

Diff: 3

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) GM decides to build a new plant using retained earnings, then
- A) GM's tangible capital will increase as a result.
  - B) GM is engaging in saving on behalf of its shareholders.
  - C) GM's capital stock increases as a result of this investment.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Capital Market*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) You paid \$90 for a psychology textbook at the beginning of the semester. At the end of the semester you sell the textbook for \$70. The textbook has depreciated
- A) \$1.00.
  - B) \$15.00.
  - C) \$20.00.
  - D) an indeterminate amount based on this information.

Answer: C

Diff: 2

Topic: *The Capital Market*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 27) \_\_\_\_\_ write(s) most mortgage loans in the United States.
- A) Fannie Mae.
  - B) Banks.
  - C) Savings and loans.
  - D) Mortgage brokers.

Answer: D

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

## 2 True/False

- 1) When we speak of capital, we refer primarily to money and financial assets such as bonds and stock.

Answer: FALSE

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 2) In economics, "investment" refers only to the creation of new capital.

Answer: TRUE

Diff: 2

Topic: *The Capital Market*

Skill: *Definition*

- 3) Payments for capital include interest and rent.

Answer: FALSE

Diff: 1

Topic: *The Capital Market*

Skill: *Definition*

4) Savers and investors interact through intermediaries in financial capital markets.

Answer: TRUE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

5) The level of household savings constrains firm investment.

Answer: TRUE

Diff: 2

Topic: *The Capital Market*

Skill: *Fact*

6) Owning a share of stock entitles the shareholder to a portion of the firm's profits.

Answer: TRUE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

7) Venture capital funds involve very low risk.

Answer: FALSE

Diff: 1

Topic: *The Capital Market*

Skill: *Fact*

### 11.3 The Demand for New Capital and the Investment Decision

#### 1 Multiple Choice

1) You borrow \$40,000 at an interest rate of 5% to open Organic Foods, an all-natural food store. You will earn an economic profit if the return on your investment is

A) greater than 5%.

B) 5%.

C) between 0 and 5%.

D) 10% or greater.

Answer: A

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

2) When making the decision to invest, the evaluation of the expected flow of future productive services that the investment project will yield is an important consideration. This statement is accurate for firms

A) but not for governments and households.

B) and governments, but not for households.

C) and households, but not for governments.

D) and households and governments.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 3) Which of the following is FALSE about the expected flow of future benefits?
- A) Firms must rely on forecasts of expected future benefits to make sensible investment decisions.
  - B) Households, business firms, and governments all evaluate the expected flow of benefits when making investment decisions.
  - C) If future benefits are overestimated by the firm, the firm will under invest in capital.
  - D) Only those investment projects in the economy that are expected to yield a rate of return higher than the market interest rate will be funded.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) If business leaders expect the new Congress to lower the corporate profits tax, most likely this will cause business firms, *ceteris paribus*, to
- A) plan to decrease investment in the future to compensate for the lower tax rate.
  - B) decrease investment because they would expect lower benefits from investment.
  - C) not change their investment plans because lower corporate profit taxes will not change the demand for their product.
  - D) increase investment because the lower corporate profits tax will increase the return on any investment.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) The expected cost of an investment
- A) is zero if a firm uses its own funds.
  - B) equals the market rate of interest plus the normal rate of return on an investment.
  - C) depends on the market interest rate.
  - D) equals the market rate of interest plus the inflation rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) You work as a forecaster for a major producer of digital cameras. You know that there is a strong positive relationship between the demand for digital cameras and the birth of a first child. The government issues a demographic report predicting that it expects the birthrate to increase steadily over the next 10 years. All else equal, which of the following courses of action would you recommend to the firm?
- A) Don't change the amount of investment made, but raise the price of digital cameras in response to the expected increase in the demand.
  - B) Suggest that the firm make an investment in new capital to produce digital cameras only after it can verify an increase in the birthrate.
  - C) Start to increase investment now so that when the birthrate increases and the demand for digital cameras increases, the firm will be able to meet the new demand.
  - D) Suggest that the firm curtail its advertising to avert a substantial increase in demand for digital cameras.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 7) A firm can invest in one of two projects: the purchase of new delivery vans or the training of its sales staff in the use of new sales techniques. Both projects cost the same amount of money. The purchase of new delivery vans is expected to reduce costs by \$5,000 each year for 10 years. The training of the sales staff in the use of a new sales technique is expected to increase revenues by \$5,000 each year for 5 years. Which of the following is TRUE?
- A) Each of these projects would have the same expected rate of return, as they both cost the same.
  - B) The training of the sales staff would have the higher expected rate of return, as it increases revenues whereas the purchase of delivery vans only reduces costs.
  - C) The purchase of delivery vans would have the higher expected rate of return, as it will reduce costs for a longer time period than the sales staff training will increase revenues.
  - D) The expected rates of return for these two projects cannot be compared, as one project reduces costs and the other increases revenues.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) Polar Water, a company that delivers bottled water, is considering three investment opportunities. The expected returns for each of the projects are as follows: buying a new delivery van, 20%; computer training for its office staff, 15%; and defensive driving training for its drivers, 8%. If the current interest rate is 10%, the firm should invest in
- A) only the purchase of a new delivery van.
  - B) the purchase of a new delivery van and computer training for its office staff.
  - C) all of the projects.
  - D) none of the projects.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the data provided in Table 11.1 below to answer the following questions.

Project	Total Investment (dollars)	Expected Rate of Return (percentage)
New notebook for sales staff	\$500,000	22
Remodel for distribution center	\$400,000	18
On-site day care center	\$200,000	10
Employee fitness center	\$100,000	8

- 9) Refer to Table 11.1. If the interest rate is 28%, Nashbar Bicycle should
- A) fund all of the projects.
  - B) fund the remodeling of the distribution center and the on-site day care center.
  - C) fund only the purchase of new notebook computers for its sales staff.
  - D) not fund any of the projects.

Answer: D

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Table 11.1. If the interest rate is 20%, Nashbar Bicycle should
- A) fund only the purchase of new notebook computers for its sales staff.
  - B) fund all of the projects except for the purchase of new notebook computers for its sales staff.
  - C) fund all of the projects.
  - D) not fund any of the projects.

Answer: A

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 11) Refer to Table 11.1. If the interest rate is 5%, Nashbar Bicycle should
- A) fund all of the projects.
  - B) not fund any of the projects.
  - C) fund only the employee fitness center.
  - D) fund all of the projects except for the employee fitness center.

Answer: A

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 12) Refer to Table 11.1. If the interest rate is 20%, Nashbar Bicycle's total investment would be
- A) \$0.
  - B) \$100,000.
  - C) \$500,000.
  - D) \$700,000.

Answer: C

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Analytic

AACSB: Analytic Skills

- 13) Refer to Table 11.1. If the interest rate is 9%, Nashbar Bicycle's total investment would be  
 A) \$200,000.                      B) \$300,000.                      C) \$900,000.                      D) \$1,100,000.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 14) Refer to Table 11.1. If the interest rate is 25%, Nashbar Bicycle's total investment would be  
 A) \$0.                                      B) \$100,000.                      C) \$500,000.                      D) \$1,100,000.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

*Refer to the data provided in Table 11.2 below to answer the following questions.*

**Table 11.2**

Project	Total Investment (dollars)	Expected Rate of Return (percentage)
New bookkeeping software	\$150,000	5
New tractor	\$200,000	12
New grain storage tanks	\$250,000	10
Irrigation system	\$500,000	15

- 15) Refer to Table 11.2. If the interest rate is 11%, then the farmer will only  
 A) buy the bookkeeping software.  
 B) buy the bookkeeping software and the grain storage tanks.  
 C) buy the tractor and the irrigation system.  
 D) buy the tractor.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 16) Refer to Table 11.2. If the interest rate is 13%, then the farmer will engage in investment of  
 A) \$500,000.                      B) \$600,000.                      C) \$700,000.                      D) \$1,100,000.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 17) Refer to Table 11.2. When the interest rate \_\_\_\_\_, the farmer will engage in no investment.
- A) is greater than 15%
  - B) is less than 5%.
  - C) is less than 15%.
  - D) is greater than 5%.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 18) Refer to Table 11.2. When the interest rate \_\_\_\_\_, the farmer will investment in all four projects.
- A) is greater than 15%
  - B) is less than 5%.
  - C) is less than 15%.
  - D) is greater than 5%.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 19) Ceteris paribus, when market interest rates \_\_\_\_\_, firms undertake \_\_\_\_\_ investment projects.
- A) decrease; no
  - B) increase; more
  - C) decrease; less
  - D) increase; fewer

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Figure 11.1 below to answer the questions that follow.  
The MEI (marginal efficiency investment) curve is the demand for investment.

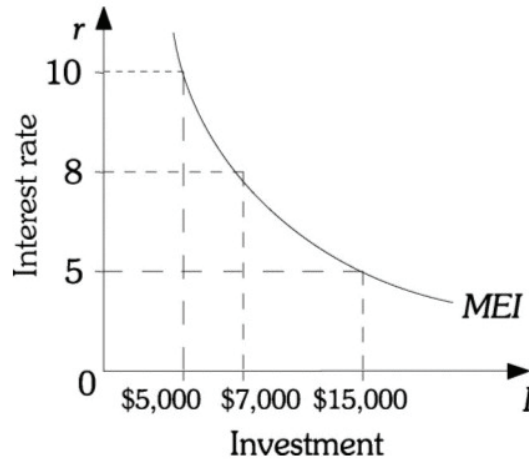


Figure 11.1

- 20) Refer to Figure 11.1. If the market rate of interest is 5%, this firm's investment will total  
 A) \$5,000.                      B) \$8,000.                      C) \$15,000.                      D) \$27,000.

Answer: C

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Conceptual

AACSB: Reflective Thinking

- 21) Refer to Figure 11.1. If the market rate of interest is 10%, this firm's investment will total  
 A) \$0.                                B) \$5,000.                      C) \$7,000.                      D) \$15,000.

Answer: B

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Conceptual

AACSB: Reflective Thinking

- 22) A firm will undertake an investment if the present value of the  
 A) income stream associated with the investment is greater than the full cost of the investment project.  
 B) income stream associated with the investment is less than the full cost of the investment project.  
 C) income stream associated with the investment is positive.  
 D) costs of the investment project exceed the present value of the returns from the investment project.

Answer: A

Diff: 3

Topic: The Demand for New Capital and the Investment Decision

Skill: Conceptual

AACSB: Reflective Thinking

- 23) In general, a firm will be likely to invest as long as the
- A) interest rate is less than the inflation rate.
  - B) firm doesn't have to borrow any money to make the investment.
  - C) profits realized from the investment are sufficient to cover the interest payments.
  - D) firm can sell bonds directly to the public instead of borrowing from a bank.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 24) More investment takes place at
- A) higher market interest rates.
  - B) lower market interest rates.
  - C) higher expected rates of return.
  - D) higher real interest rates.

Answer: B

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 25) Suppose that an international incident occurs that creates uncertainty in the market. It is likely that this incident will \_\_\_\_\_ the level of investment spending.
- A) decrease
  - B) increase
  - C) neutralize
  - D) not affect

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 26) Suppose that the normal rate of return in the computer printer industry is 10% and the return that firms earn in this industry equals exactly 5%. Which of the following is likely to follow from this scenario?
- A) Firms will collude to keep competition out.
  - B) New firms will want to enter the industry.
  - C) Existing firms will want to leave the industry.
  - D) The normal rate of return will fall to 5% in the long run.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) Suppose that a normal rate of return in the economy is 10% and the rate of return that firms earn in a competitive industry equals exactly 10%. Which of the following is a CORRECT prediction based on this information?
- A) New firms will want to enter this industry, as the existing firms are earning an economic profit.
  - B) Firms already in the industry will want to expand to try to increase their rate of return.
  - C) Firms in the industry will not undertake any investment projects other than to replace depreciating capital stock.
  - D) The industry size will contract.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 28) Saying a firm will continue investing up to the point at which the marginal revenue product of capital is equal to the price of capital is equivalent to saying that a firm will keep investing in new capital up to the point where
- A) the expected rate of return is zero.
  - B) the marginal efficiency of investment is zero.
  - C) the expected rate of return is equal to the interest rate.
  - D) the price of capital equals the interest rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 29) A firm should continue investing
- A) even if the  $MRP_K$  is equal to the price of capital.
  - B) only as long as the  $MRP_K$  is less than the price of capital.
  - C) up to the point where the  $MRP_K$  equals the price of capital.
  - D) only as long as the price of capital is greater than the interest rate.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 30) As interest rates fall, a firm would have
- A) higher expected costs of investment.
  - B) a lower present value of their expected future earnings.
  - C) to pay less now to purchase the same number of future dollars.
  - D) to pay more now to purchase the same number of future dollars.

Answer: D

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



- 31) As interest rates rise, a firm would have
- A) lower expected costs of investment.
  - B) increasing present value of expected earning.
  - C) to pay less now to purchase the same number of future dollars.
  - D) to pay more now to purchase the same number of future dollars.

Answer: C

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 32) The quantity of investment demanded by firms
- A) is inversely related to the interest rate.
  - B) is directly related to the interest rate.
  - C) is unrelated to the interest rate.
  - D) is positively related to the level of uncertainty.

Answer: A

Diff: 3

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 33) Related to the *Economics in Practice* on page 231: Why do venture capitalists anticipate high profits in "green" businesses?
- A) Rising fuel prices will increase demand for green products, including alternative fuels.
  - B) High profits for green products will be produced due, in part, to government subsidies for such products.
  - C) The need to reduce global warming and worldwide pollution will increase demand for (and profitability of) green products.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision: Economics in Practice*

Skill: *Fact*

## 2 True/False

- 1) A firm will continue investing up to the point at which the marginal revenue product of capital is equal to the interest rate.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

- 2) A firm should invest as long as funds are available and the expected rate of return is greater than the interest rate.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

3) When a firm retains earnings for investment purposes, it is effectively saving on behalf of its shareholders.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

4) A considerable amount of uncertainty is involved in making investment decisions.

Answer: TRUE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

5) Benefits of investments are generally certain, but costs are harder to quantify and involve greater uncertainty.

Answer: FALSE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Fact*

6) If the expected rate of return on an investment is 10% and the market interest rate is 12%, then the investment will be undertaken.

Answer: FALSE

Diff: 2

Topic: *The Demand for New Capital and the Investment Decision*

Skill: *Analytic*

AACSB: *Analytic Skills*

7) Related to the *Economics in Practice* on page 231: All green companies are sure to be highly profitable.

Answer: FALSE

Diff: 1

Topic: *The Demand for New Capital and the Investment Decision: Economics in Practice*

Skill: *Fact*

## 11.4 Appendix: Calculating Present Value

### 1 Multiple Choice

1) If the interest rate is 5%, the current market value of \$1 to be delivered in one year is  
A) \$0.91.                      B) \$0.95.                      C) \$1.00                      D) \$1.10.

Answer: B

Diff: 2

Topic: *Appendix: Calculating Present Value*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 2) If the interest rate is 12%, the current market value of \$1 to be delivered in one year is  
A) \$0.89.                      B) \$0.95.                      C) \$1.00                      D) \$1.15.

Answer: A

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 3) The present discounted value of R dollars to be paid in t years is  
A) the future market value of receiving R dollars in t years.  
B) equal to  $R \times t$  years.  
C) the amount you have to put aside now if you want to ensure that you end up with R dollars t years from now.  
D) the amount you will have to save in the future to allow you to consume R dollars today.

Answer: C

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Conceptual

AACSB: Reflective Thinking

- 4) The formula for present discounted value is  
A)  $R(1 + r)^t$ .                      B)  $(1 + r)^t/R$ .                      C)  $R/(1 + r)^t$ .                      D)  $(1 + r)/Rt$ .

Answer: C

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Definition

- 5) Assume the current interest rate is 20%. The present value of \$500 in one year would be  
A) \$180.                      B) \$417.                      C) \$750.                      D) \$1,083.

Answer: B

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 6) You win a lottery that pays \$10,000 each year for the next 5 years beginning next year. How much are your winnings worth today?  
A) \$50,000  
B) \$45,455  
C) \$10,000  
D) indeterminate with the given information.

Answer: D

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

7) Assume the current interest rate is 25%. The present value of \$2,000 to be received in one year would be

- A) \$1,000.                      B) \$1,200.                      C) \$1,600.                      D) \$1,800.

Answer: C

Diff: 2

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

8) Tom's Donuts can invest in a new espresso machine that costs \$300 and will yield expected profits of \$200 each year for two years. What is the present discounted value of the expected profits from this investment if the interest rate is 5%?

- A) \$185.93                      B) \$276.64                      C) \$371.89                      D) \$380.96

Answer: C

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

9) Tom's Donuts can invest in a new espresso machine that costs \$300 and will yield expected profits of \$200 each year for two years. At higher interest rates, the present discounted value of profits from the investment

- A) increases.  
B) decreases.  
C) is unchanged.  
D) indeterminate from the given information.

Answer: B

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

10) ABC Corp. is considering an investment project that costs \$500 today. It expects the project will yield income of \$200 at the end of years 1, 2, and 3. If the interest rate is 7%, the firm

- A) should undertake the investment.  
B) should forgo the investment.  
C) is just indifferent between undertaking the investment and not.  
D) indeterminate from the given information.

Answer: A

Diff: 3

Topic: Appendix: Calculating Present Value

Skill: Analytic

AACSB: Analytic Skills

- 11) ABC Corp. is considering an investment project that costs \$500 today. It expects the project will yield income of \$200 at the end of years 1, 2, and 3. The interest rate must be \_\_\_\_\_ for the firm to undertake the project.
- A) at least 11%
  - B) no more than 9%
  - C) exactly equal to 10%
  - D) indeterminate from the given information.

Answer: B

Diff: 3

Topic: *Appendix: Calculating Present Value*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) The present discounted value of a stream of future income decreases as the interest rate decreases.

Answer: FALSE

Diff: 2

Topic: *Appendix: Calculating Present Value*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) The present value of \$100 in one year is \$82 when the interest rate is 15%.

Answer: FALSE

Diff: 2

Topic: *Appendix: Calculating Present Value*

Skill: *Analytic*

AACSB: *Analytic Skills*

# Chapter 12 General Equilibrium and the Efficiency of Perfect Competition

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## 12.1 General Equilibrium Analysis

### 1 Multiple Choice

1) Examining the equilibrium conditions of individual markets and for households and firms separately is referred to as \_\_\_\_\_ analysis.

- A) partial equilibrium  
B) general equilibrium  
C) comparative static  
D) efficiency

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

2) Analyzing the impact of falling interest rates on the residential housing market is an example of a(n) \_\_\_\_\_ equilibrium analysis.

- A) specific  
B) isolated  
C) general  
D) partial

Answer: D

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

3) The government has recently imposed a quota on the amount of pineapples that United States citizens can import. You are asked to analyze how this will affect the price of pineapples and the price of cottage cheese, a complement to pineapples. This is an example of \_\_\_\_\_ equilibrium analysis.

- A) partial  
B) general  
C) interrelated  
D) substitute goods

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

4) The government has recently imposed a quota on the amount of pineapples that can be imported into the United States. The quota will \_\_\_\_\_ the price of pineapples and \_\_\_\_\_ the price of cottage cheese (a complement to pineapples).

- A) increase; will not change  
B) increase; decrease  
C) increase; increase  
D) decrease; decrease

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

5) Technological breakthroughs revolutionized the calculator industry during the 1970s. Studying the impact of these technological changes on the calculator industry alone would be an example of \_\_\_\_\_ equilibrium analysis.

- A) partial                      B) general                      C) market                      D) efficiency

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

6) General equilibrium analysis does NOT answer the question

- A) Are equilibriums in different markets compatible with one another?  
B) Can all markets simultaneously be in equilibrium?  
C) How will a change in one market affect another market?  
D) What market outcome is most desirable for the whole society?

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

7) It is essential to establish specific criteria to judge the performance of any economic system.

Two such criteria are

- A) efficiency and equity.  
B) profit opportunities and technological progress.  
C) efficiency and profit opportunities.  
D) technological progress and achieving general equilibrium.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

8) An economist investigates the impact that implementing an energy tax has on all industries and input markets. She does a(n) \_\_\_\_\_ equilibrium analysis.

- A) interrelated                      B) general  
C) interconnected                      D) business

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

9) Efficiency occurs when

- A) the economy is producing what people want at least possible cost.  
B) the economy has a fair and just distribution of income.  
C) all markets are in equilibrium.  
D) unemployment is low and prices are stable.

Answer: A

Diff: 2

Topic: General Equilibrium Analysis

Skill: Definition

- 10) Resources are allocated efficiently when
- A) the market produces what people want.
  - B) production occurs at least cost.
  - C) output is distributed in an equitable fashion.
  - D) Both (A) and (B) are correct.

Answer: D

Diff: 1

Topic: General Equilibrium Analysis

Skill: Conceptual

- 11) Firms stop producing tapes and start producing compact discs because people prefer compact discs to tapes. This will make
- A) the distribution of outcome more equitable.
  - B) the economy more stable.
  - C) for improved efficiency.
  - D) the economy less stable.

Answer: C

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 12) A new technology is developed for producing microwave ovens that reduces production costs by 10%. Which of the following is TRUE?
- A) Firms will continue to operate efficiently as long as no firm adopts this new technology.
  - B) Firms must adopt this new technology for the economy to remain efficient.
  - C) This new technology will not affect efficiency, but it will change the equilibrium price and quantity for this industry.
  - D) If firms do not adopt this new technology, then the economy will remain in general equilibrium, because firms will not change their price and output decisions.

Answer: B

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking



Refer to the information provided in Figure 12.1 below to answer the question that follows.

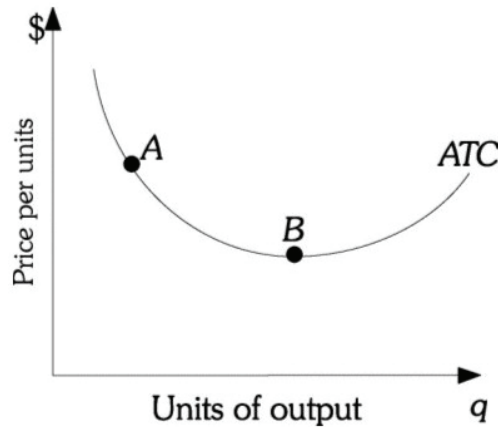


Figure 12.1

- 13) Refer to Figure 12.1. This competitive firm is currently producing an output where  $ATC$  is at point  $A$ . The firm's move toward an output where  $ATC$  will be at point  $B$  will make the economy
- A) more fair and the distribution of outcome more equitable.
  - B) more stable.
  - C) more efficient.
  - D) less stable.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

- 14) Refer to Figure 12.1. The firm is
- A) equally efficient when it produces at points  $A$  and  $B$ .
  - B) more efficient when it produces at point  $A$  than at point  $B$ .
  - C) more efficient when it produces at point  $B$  than at point  $A$ .
  - D) producing at least possible cost anywhere along the given  $ATC$  curve.

Answer: C

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

Refer to the information provided in Figure 12.2 below to answer the question that follows.

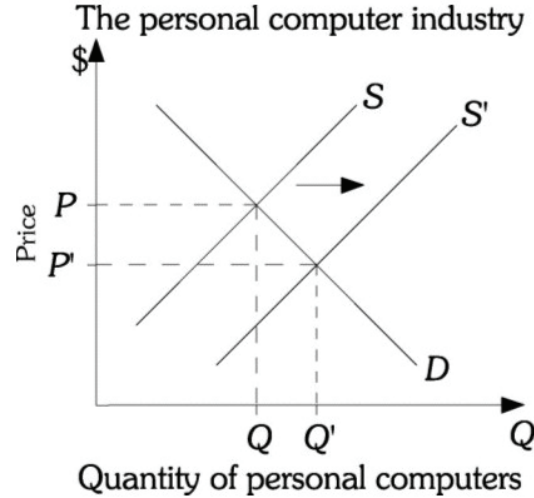


Figure 12.2

- 15) Refer to Figure 12.2. A technological advance causes the supply of personal computers to increase. The graph of this situation represents a
- A) general equilibrium analysis because it identifies what happens to both equilibrium price and quantity of personal computers.
  - B) partial equilibrium analysis because it considers only this one industry.
  - C) firm-specific analysis because only one firm would be affected by the technological advance.
  - D) technological analysis because the change resulted from a technological advance.

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 16) To conduct a general equilibrium analysis of a change in consumer preferences away from beef and toward chicken, you must consider
- A) changes in the equilibrium prices and quantities of beef and chicken.
  - B) changes in the amount of resources allocated to the production of beef and chicken.
  - C) changes in the price of resources allocated to the production of beef and chicken.
  - D) all of the above

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 17) A technological change in car production will
- A) affect only the markets for inputs used to produce cars.
  - B) affect only the way cars are produced.
  - C) have no effect on consumers.
  - D) affect input and output markets in the automobile industry and other related industries.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 18) A gas tax holiday would
- A) affect the market for gasoline.
  - B) affect the market for air travel.
  - C) affect the level of congestion on roads.
  - D) All of the above are correct.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 19) Assume that an economy producing two products, skateboards and in-line skates, is initially in equilibrium, and that skateboards and in-line skates are substitutes. If consumer preferences shift away from skateboards and toward in-line skates, which of the following will NOT occur?
- A) In the short run, firms producing skateboards will incur losses.
  - B) In the short run, firms producing in-line skates will earn a profit.
  - C) Additional capital will begin to flow into in-line skates production in the long run.
  - D) Additional capital will begin to flow into skateboard production in the long run.

Answer: D

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 20) Preferences have just shifted away from beef and into mutton. If you are a sheep rancher, the best profit-maximizing strategy is to
- A) shut down.
  - B) produce more mutton in order to earn profits in the short run.
  - C) shift some of your ranching capacity into cattle raising.
  - D) cut prices to increase market share.

Answer: B

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 21) Initially the beef and mutton markets are in equilibrium, then preferences shift away from beef and into mutton. If you are a cattle rancher, the best profit-maximizing strategy is to
- A) shut down.
  - B) increase output so as to increase your market share.
  - C) shift some of your ranching capacity into cattle raising.
  - D) decrease output so as to minimize short run losses..

Answer: D

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 22) Suppose there is a permanent shift of consumer preferences away from pretzels and toward potato chips. The most likely result would be in the
- A) short-run economic losses in the potato chip market.
  - B) long run a fall in the supply of potato chips.
  - C) short run a rise in the price of pretzels.
  - D) short-run profits in the potato chip market.

Answer: D

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 23) Scientists find that eating corn three times a day will prolong life. This leads to a shift in preferences away from wheat and toward corn. As we move from one equilibrium to another, we can predict that
- A) all related input markets are affected.
  - B) all related input markets but land are affected because they both use land.
  - C) labor markets are not affected because the wheat industry and the corn industry use laborers to drive tractors.
  - D) even if they use different technologies, no input markets are affected because they use the same inputs.

Answer: A

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 12.3 below to answer the question that follows.

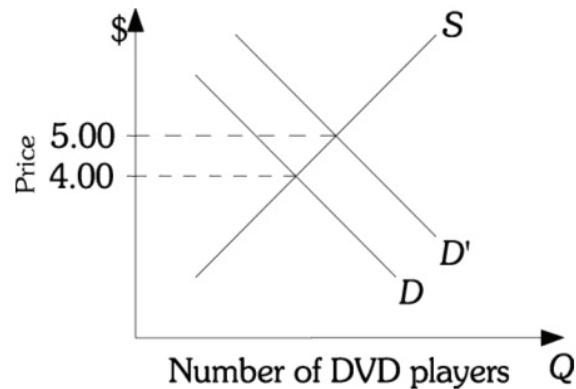


Figure 12.3

- 24) Refer to Figure 12.3. The DVD industry is a constant-cost industry. As the demand for DVD players shifts from  $D$  to  $D'$ , which of the following will NOT occur?
- A) More resources will be allocated to produce DVD players.
  - B) The demand for DVDs will increase.
  - C) If the market for DVD players is competitive the price will increase to \$5.00 in the short and long run.
  - D) If the market for DVD players is perfectly competitive, economic profits in this industry will increase in the short run, but will fall back to zero in the long run.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 25) Suppose that a town has two major hospitals. One of these hospitals is unionized and the union has just negotiated a 10% wage increase each year for the next three years. Which of the following is most likely to occur?
- A) The price of labor in the unionized hospital will increase, but there will be no changes in the price of labor in the nonunionized hospital.
  - B) The price of labor will change in both the union and nonunion hospitals, but no other input markets will be affected.
  - C) The price of labor will change in both the unionized and nonunionized hospitals. Employment of labor and other inputs is also likely to change in both hospitals.
  - D) The only effect will be that the price charged by the unionized hospital will increase to cover the additional costs of labor.

Answer: C

Diff: 3

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

- 1) Efficiency is the condition in which the economy is producing what people want at the least possible cost.

Answer: TRUE

Diff: 2

Topic: *General Equilibrium Analysis*

Skill: *Definition*

- 2) When one market reaches a new equilibrium, the general equilibrium condition has been satisfied.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

- 3) Partial equilibrium analysis is the process of examining the equilibrium conditions for households and firms combined for more than one but not all individual markets.

Answer: FALSE

Diff: 2

Topic: *General Equilibrium Analysis*

Skill: *Definition*

- 4) Both economists and mathematicians have shown the existence of at least one set of prices that will clear all markets in a system simultaneously, known as equilibrium price.

Answer: TRUE

Diff: 1

Topic: *General Equilibrium Analysis*

Skill: *Fact*

- 5) Input and output markets operate independently and thus should be analyzed as separate entities.

Answer: FALSE

Diff: 2

Topic: *General Equilibrium Analysis*

Skill: *Conceptual*

- 6) General equilibrium exists when all markets in an economy are simultaneously in equilibrium.

Answer: TRUE

Diff: 1

Topic: *General Equilibrium Analysis*

Skill: *Definition*

- 7) The large demand in the iPod market has had very little effect in the market for music downloads.

Answer: FALSE

Diff: 2

Topic: *General Equilibrium Analysis*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 8) The sharp decline in the housing market in 2008 resulted in an increase in wages for construction workers.

Answer: FALSE

Diff: 2

Topic: General Equilibrium Analysis

Skill: Conceptual

AACSB: Reflective Thinking

- 9) Free markets may not be efficient.

Answer: TRUE

Diff: 1

Topic: General Equilibrium Analysis

Skill: Conceptual

## 12.2 Allocative Efficiency and Competitive Equilibrium

### 1 Multiple Choice

- 1) \_\_\_\_\_ occurs when it is not possible to make some members of society better off without making some other members of society worse off.

A) Pareto optimality

B) Partial equilibrium

C) General equilibrium

D) Market failure

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 2) Pareto optimality occurs when

A) the distribution of income is equal.

B) it is not possible to make some members of society better off without making at least one other member of society worse off.

C) firms are forced to internalize the effects of all externalities.

D) it is possible to make one person better off without making someone else worse off.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 3) An economist estimates that the maintenance of a public park costs \$20,000 a year and that the park generates \$35,000 a year in revenue for merchants near it. From society's point of view, the maintenance of this park is

A) inefficient, because everyone in the community pays taxes to support the park, but only the merchants near the park benefit.

B) inefficient because the additional revenues generated by the park are so low.

C) potentially efficient because the value of the gains exceed the value of the losses.

D) potentially efficient because no one would be made worse off as a result of maintaining the park.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 4) Suppose a new government policy generates \$6,000 of benefits for local businesses and \$4,000 of costs. We can best describe the policy as
- A) Pareto efficient.
  - B) inefficient.
  - C) potentially efficient.
  - D) equitable.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

- 5) Suppose a policy change generates \$90,000 of benefits for low-income families and \$150,000 of costs for high-income families. We can best describe the change as
- A) Pareto efficient.
  - B) inefficient.
  - C) potentially efficient.
  - D) equitable.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 6) Suppose a policy change generates \$200,000 of benefits for low-income families and \$175,000 of costs for high-income and middle-class families. We can best describe the change as
- A) inefficient.
  - B) Pareto efficient.
  - C) potentially efficient.
  - D) equitable.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 7) \_\_\_\_\_ is a change that makes some people better off and nobody worse off.
- A) Government transfer program such as Social Security.
  - B) Reduction in interest rates.
  - C) Price floor that increases income to suppliers.
  - D) Voluntary exchange.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 8) Assume some gain and some lose as the result of a change. If we can demonstrate the value of the gains exceeds the value of the losses, then we say the change is
- A) potentially efficient.
  - B) inefficient.
  - C) unequivocally Pareto optimal.
  - D) technically efficient.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition



- 9) A voluntary exchange between Mike (the purchaser) and Wayne (the seller) occurs because
- A) Mike stands to gain and Wayne to lose.
  - B) Mike stands to lose and Wayne to gain.
  - C) they both gain from the transaction.
  - D) they had no choice.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 10) A household will buy a good as long as the
- A) good's price is greater than the maximum a consumer would be willing to pay for it.
  - B) utility from the good's consumption is greater than or equal to its market price.
  - C) good still provides the consumer with average utility.
  - D) good's use value is less than the price the seller charges for the good.

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 11) If a restaurant runs a special and sells a lobster dinner for \$5.00, Amy buys one lobster dinner a week. If lobster dinners are not on special and the price is \$10.00, Amy buys zero lobster dinners per week. Which of the following is TRUE?

- A) Amy's demand for lobster is inelastic.
- B) Amy's utility from a lobster dinner is less than \$5.00.
- C) The value of Amy's utility from a lobster dinner is at least \$5.00 and less than \$10.00.
- D) Amy's utility from a lobster dinner is greater than \$10.00.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 12.4 below to answer the question that follows.

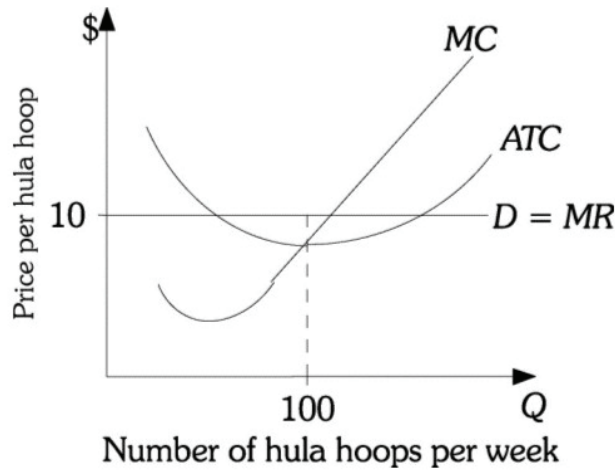


Figure 12.4

- 12) Refer to Figure 12.4. A firm produces hula hoops in a perfectly competitive market and currently produces and sells 100 per week. Which of the following is TRUE?
- A) Society would be better off if the firm produced more hula hoops because price is greater than marginal cost at the current production level.
  - B) Society would be better off if the firm produced fewer hula hoops because the firm's profits would increase if it reduced production.
  - C) Because the firm is minimizing  $ATC$ , it is producing hula hoops at the efficient level.
  - D) Because  $ATC$  is less than price, the firm should devote fewer resources to hula hoop production.

Answer: A

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

- 13) \_\_\_\_\_ is the cost of using resources to produce another unit of a good.
- A) Marginal revenue.
  - B) Marginal cost.
  - C) Price.
  - D) Total cost.

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Fact

- 14) A person who chooses not to be in the labor force reveals that
- A) his or her potential product in the market is zero.
  - B) either leisure or the value of nonpaid labor is worth more to him or her than the value that society places on his or her potential product in the market.
  - C) either leisure or the value of nonpaid labor is worth less to him or her than the value that society places on his or her potential product in the market.
  - D) either leisure or the value of nonpaid labor is worth zero to him or her.

Answer: B

Diff: 1

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Fact*

- 15) In making labor supply decisions households weigh
- A) the market wage against the value of capital inputs.
  - B) the market wage against the value of their marginal product of labor.
  - C) the market wage against the value of leisure and time spent in unpaid household production.
  - D) None of the above is correct.

Answer: C

Diff: 2

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 16) Marginal cost is a good measure of
- A) the social value of a marginal unit of a good.
  - B) the least costly way to produce all units of a good.
  - C) what society gives up by using resources to produce more of a good or service.
  - D) what society gains by using resources to produce more of a good or service.

Answer: C

Diff: 3

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 17) Absent market imperfections, when firms maximize profits and households maximize utility
- A) Pareto optimality has been obtained.
  - B) voluntary exchange will make both firms and households better off.
  - C) the outcome is inefficient.
  - D) individuals but not society maximize welfare.

Answer: A

Diff: 2

Topic: *Allocative Efficiency and Competitive Equilibrium*

Skill: *Definition*

- 18) With respect to private goods, a \_\_\_\_\_ system is one in which all possible trades that make some societal members better off without making others worse off have been exhausted.
- A) Pareto maximized
  - B) Pareto optimal
  - C) market
  - D) general equilibrium

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

- 19) You value your economics textbook at \$15. Someone else values it at \$30, and that person is willing to pay you \$20 for your textbook. Would selling your textbook to this person for \$20 be Pareto efficient?
- A) No, because you did not receive the maximum amount the other person would have been willing to pay for the textbook.
  - B) No, the person paid you \$20 for the book so his net benefit was \$10, whereas your net benefit was only \$5. For this change to be Pareto efficient, each of you should have the same net benefit.
  - C) Yes, because both of you are better off as a result of the trade.
  - D) Yes, because even though you gain from the trade and he loses, there is the potential for you to compensate him for his loss.

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 20) You value your favorite shirt at \$100. Someone else values it at \$160, and that person is willing to pay you \$120 for your shirt. Would selling your shirt to this person for \$120 be Pareto efficient?
- A) No, because you did not receive the maximum amount the other person would have been willing to pay for the shirt.
  - B) No, the person paid you \$120 for the shirt so his net benefit was \$40, while your net benefit was only \$20. For this change to be Pareto efficient, each of you should have the same net benefit.
  - C) Yes, because even though you gain from the trade and he loses, there is the potential for you to compensate him for his loss.
  - D) Yes, because both of you are better off as a result of the trade.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

- 21) Under perfect competition,
- A) resources are allocated among firms efficiently.
  - B) final products are distributed among households efficiently.
  - C) the system produces the goods and services consumers want.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 22) Which assumption leads to an efficient allocation of resources among firms?
- A) Factor markets are open and competitive.
  - B) All firms pay the same prices for identical inputs.
  - C) Firms behave so as to maximize their profits.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 23) In order to have an efficient distribution of final products to households,
- A) free and open markets are essential.
  - B) households must maximize their income.
  - C) the equity criterion must be satisfied.
  - D) All of the above are correct.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Reflective Thinking

- 24) The condition  $P = MC$  implies that \_\_\_\_\_ consumer surplus.
- A) consumers will get no
  - B) an individual who values the product at more than  $P$  will receive positive
  - C) an individual who values the product at less than  $P$  will receive positive
  - D) there is an infinite amount of

Answer: B

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

- 25) Under perfect competition, firms produce the efficient level of output because
- A) government regulates the output level that firms must produce.
  - B) firms earn only a normal profit in the long run.
  - C) firms can earn an economic profit in the long run.
  - D) price equals marginal cost.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

26) In perfect competition, \_\_\_\_\_ is the condition that ensures that firms produce the right things.

- A)  $MU_X = P_X$ .                      B)  $P = MC$ .                      C)  $P = ATC$ .                      D)  $MRP_L = ATC$ .

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Definition

AACSB: Analytic Skills

27) Under perfect competition the person that ends up with the marginal unit is the person that values it

- A) at an amount above its price.                      B) at an amount lower than its price.  
C) just at its price.                      D) above its marginal cost.

Answer: C

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

28) If  $P_X > MC_X$ , society gains by \_\_\_\_\_ X.

- A) producing more                      B) producing less  
C) raising the price of                      D) increasing the cost of producing

Answer: A

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

29) If  $P_X < MC_X$ , society gains by \_\_\_\_\_ X.

- A) producing more                      B) producing less  
C) lowering the price of                      D) increasing the cost of producing

Answer: B

Diff: 3

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

30) If society will gain by producing more X, then it must be the case that currently

- A)  $P_X = MC_X$ .                      B)  $P_X > MC_X$ .  
C)  $P_X < MC_X$ .                      D) either  $P_X > MC_X$  or  $P_X < MC_X$ .

Answer: B

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

AACSB: Analytic Skills

31) \_\_\_\_\_ reflects the minimum household willingness to pay and \_\_\_\_\_ reflects the opportunity cost of the resources needed to produce a good.

- A) Marginal utility; price
- B) Price; marginal cost
- C) Price; average total cost
- D) Demand; price

Answer: B

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Conceptual

32) Society will produce the efficient mix of output if \_\_\_\_\_ are equated for all firms.

- A) price and marginal cost
- B) price and average total cost
- C) marginal cost and average total cost
- D) price and marginal revenue

Answer: A

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium

Skill: Fact

33) Relating to the *Economics in Practice* on page 247: Subsidies for ethanol, a fuel produced from corn, have affected the market for

- A) corn.
- B) wheat.
- C) farm land.
- D) All of the above are correct.

Answer: D

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

34) Relating to the *Economics in Practice* on page 247: Ethanol subsidies have increased the supply of corn. As a result, demand for farm land has \_\_\_\_\_. Further, supply of other grains has \_\_\_\_\_.

- A) increased; increased
- B) decreased; decreased
- C) increased; decreased
- D) decreased; increased

Answer: C

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Analytic

AACSB: Reflective Thinking

35) Relating to the *Economics in Practice* on page 252: Ticket scalping is

- A) an example of the functioning market.
- B) unfair to the buyer who pays unreasonably high prices for the tickets.
- C) an example of greed on the part of scalpers.
- D) All of the above are correct.

Answer: A

Diff: 2

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Analytic

AACSB: Reflective Thinking

## 2 True/False

- 1) If after we change an allocation we can demonstrate that the value of the gains exceeds the value of the losses, then we say the change is potentially efficient.  
Answer: TRUE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Fact*
  
- 2) A government policy generates \$10,000 of benefits to underprivileged youth at a cost of \$5,000 to taxpayers. The policy results in a Pareto improvement.  
Answer: FALSE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Conceptual*  
AACSB: *Analytic Skills*
  
- 3) For a policy to be Pareto efficient it must make everyone at least a little better off.  
Answer: FALSE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Conceptual*
  
- 4) Absent externalities and public goods, a perfectly competitive system is efficient.  
Answer: TRUE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Conceptual*
  
- 5) A perfectly competitive system results in an efficient allocation of resources among firms and an equal distribution of final products among households.  
Answer: FALSE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Conceptual*
  
- 6) Efficiency and equity are synonymous.  
Answer: FALSE  
Diff: 1  
Topic: *Allocative Efficiency and Competitive Equilibrium*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
  
- 7) Relating to the *Economics in Practice* on page 252: Ticket scalping is welfare improving.  
Answer: TRUE  
Diff: 2  
Topic: *Allocative Efficiency and Competitive Equilibrium: Economics in Practice*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*



- 8) Relating to the *Economics in Practice* on page 252: Ticket scalping would be very simple to stop in the electronic age in which we live.

Answer: FALSE

Diff: 1

Topic: Allocative Efficiency and Competitive Equilibrium: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 12.3 The Source of Market Failure

### 1 Multiple Choice

- 1) Assume that the marginal cost of producing steel does not include the cost of the damage to the environment as a result of pollution. By producing where  $P = MC$ , the firm will be producing \_\_\_\_\_ the efficient amount of steel.
- A) exactly
  - B) more than
  - C) less than
  - D) sometimes more and sometimes less than

Answer: B

Diff: 3

Topic: The Sources of Market Failure

Skill: Conceptual

AACSB: Analytic Skills

- 2) \_\_\_\_\_ are sources of market failure.
- A) Private goods
  - B) Competitive activities
  - C) Externalities
  - D) All of the above are correct.

Answer: C

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

- 3) \_\_\_\_\_ is a source of market failure.
- A) An externality
  - B) A public good
  - C) Imperfect information
  - D) All of the above are correct.

Answer: D

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

- 4) Taxes and subsidies can be used by the government to \_\_\_\_\_ externalities.
- A) create
  - B) internalize
  - C) measure
  - D) analyze

Answer: B

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 5) Assume that the price underestimates the value that society places on the flu vaccine. If firms produce where  $P = MC$ , firms will be producing \_\_\_\_\_ the socially efficient amount of flu vaccine.
- A) exactly
  - B) more than
  - C) less than
  - D) sometimes more than and sometimes less than

Answer: C

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) When we misallocate resources or allocate them inefficiently, then there is(are)
- A) market failure.
  - B) external costs or benefits in production.
  - C) imperfect information in the market.
  - D) a public good involved.

Answer: A

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

- 7) Market failure occurs when firms
- A) that are incurring losses leave a market.
  - B) that are perfectly competitive produce where  $MR = MC$ .
  - C) misallocate resources or allocate them inefficiently.
  - D) are only able to earn a normal profit.

Answer: C

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

- 8) Imperfect competition occurs when firms
- A) do not maximize profit.
  - B) lose money.
  - C) have some control over price and competition.
  - D) do not have any control over price and competition.

Answer: C

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

- 9) The following market structure is an example of an imperfect market:
- A) monopoly.
  - B) oligopoly.
  - C) monopolistic competition.
  - D) All of the above are correct.

Answer: D

Diff: 1

Topic: *The Source of Market Failure*

Skill: *Conceptual*

- 10) In imperfectly competitive markets,
- A) the output is overproduced.
  - B) price is equal to marginal cost so as to maximize profits.
  - C) the price is higher than it would be in perfect competition.
  - D) All of the above are correct.

Answer: C

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 11) Monopolies
- A) are price takers.
  - B) are constrained by the market demand for their product.
  - C) set price so as to maximize their total revenue.
  - D) overproduce their product to maximize their profits.

Answer: B

Diff: 2

Topic: The Source of Market Failure

Skill: Conceptual

- 12) For a(n) \_\_\_\_\_ only one firm produces chocolate-covered ants.
- A) imperfect market
  - B) external benefit in production
  - C) external cost in consumption
  - D) social good

Answer: A

Diff: 2

Topic: The Sources of Market Failure

Skill: Definition

- 13) \_\_\_\_\_ if a perfectly competitive industry became monopolized.
- A) Price would decrease and output would increase
  - B) Price would increase and output would decrease
  - C) Both price and output would decrease
  - D) Both price and output would remain unchanged

Answer: B

Diff: 3

Topic: The Sources of Market Failure

Skill: Conceptual

AACSB: Analytic Skills

- 14) Assume an industry is currently a monopoly and the government breaks it up into a large number of small perfectly competitive firms. Absent any economies of scale, \_\_\_\_\_ and industry output should \_\_\_\_\_.
- A) price should fall; increase
  - B) price should increase; decrease
  - C) both price; increase
  - D) both price; decrease

Answer: A

Diff: 3

Topic: The Sources of Market Failure

Skill: Conceptual

AACSB: Analytic Skills

- 15) Suppose Microsoft is large enough to raise the market wage rate of computer programmers in the software industry by increasing its demand for them. This is a good example of a(n)
- A) external cost.
  - B) factor of production being a "public input."
  - C) programmer receiving external benefits.
  - D) imperfect market.

Answer: D

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 16) Suppose you know that the breakfast cereal industry is characterized by significant "barriers to entry." Which of the following is a correct inference?
- A) Economic profits in the breakfast cereal industry are likely to persist, *ceteris paribus*.
  - B) The breakfast cereal industry could be an unregulated, perfectly competitive industry.
  - C) The government must be artificially restricting entry into the breakfast cereal industry.
  - D) The breakfast cereal industry is producing a type of public good.

Answer: A

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 17) The equilibrium condition  $P = MC$  holds only
- A) if all markets are imperfectly competitive.
  - B) if all markets are perfectly competitive.
  - C) as long as all firms maximize profits.
  - D) for public sector produced goods.

Answer: B

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

- 18) For imperfectly competitive industries we expect a(n)
- A) Pareto optimal allocation of resources.
  - B) inefficient allocation of resources.
  - C) efficient allocation of resources, but an inequitable income distribution.
  - D) free-rider problem.

Answer: B

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

- 19) We refer to the whole class of goods that firms will underproduce or not produce at all in a completely unregulated market economy as \_\_\_\_\_ goods.
- A) free
  - B) Pareto
  - C) private
  - D) public

Answer: D

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

20) \_\_\_\_\_ is an example of a public good.

- A) An automobile
- B) National defense
- C) A restaurant meal
- D) A medical service

Answer: B

Diff: 1

Topic: The Sources of Market Failure

Skill: Fact

21) All of the following are true about public goods EXCEPT they:

- A) bestow collective benefits on members of society.
- B) are non-excludable since those who do not pay for them cannot be excluded from enjoying them.
- C) will be under supplied by the private sector.
- D) are only produced by government agencies.

Answer: D

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

22) Public goods are generally produced by

- A) the government.
- B) monopolies.
- C) perfectly competitive industries.
- D) freely functioning markets.

Answer: A

Diff: 1

Topic: The Source of Market Failure

Skill: Definition

23) Because we collectively consume public goods

- A) the government cannot produce them.
- B) they are illegal.
- C) they are very expensive, thus the private sector cannot provide them.
- D) firms in the private sector may not provide them because they cannot exclude those who do not pay.

Answer: D

Diff: 3

Topic: The Sources of Market Failure

Skill: Conceptual

24) We cannot exclude anyone from consuming the benefits of a \_\_\_\_\_ good.

- A) private
- B) Pareto
- C) public
- D) free

Answer: C

Diff: 2

Topic: The Sources of Market Failure

Skill: Definition

- 25) An example of a public good is
- A) an apple.
  - B) a public utility.
  - C) preservation of wetlands to form a national park.
  - D) a book.

Answer: C

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

- 26) We would classify which of the following as an external cost?
- A) As more firms began hiring computer programmers, the salaries of computer programmers increased and therefore the firm's production cost increased.
  - B) A private firm will not provide national defense since it is impossible to confine the benefits to only those individuals who pay for it.
  - C) You are unable to study at night because so much noise comes from the dorm room next door.
  - D) When you purchase a prescription drug you are not made fully aware of all possible side effects that may result from taking the drug.

Answer: C

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

- 27) Your next-door neighbor has a beautiful rose garden but you are allergic to roses. You cannot use your yard because rose pollen drifts into your yard. In this case, the rose garden is an example of a
- A) public good.
  - B) good that imposes an external cost.
  - C) good that provides an external benefit.
  - D) Pareto good.

Answer: B

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

- 28) Which of the following is an example of an external benefit?
- A) More people start to ride the bus because they become more public-spirited and, as a result, air pollution is reduced.
  - B) Firms are able to reduce their costs of production by using a more efficient technology.
  - C) The federal government spends a million dollars on improving national parks.
  - D) A firm gets permission to open a landfill on property that is adjacent to your home.

Answer: A

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

- 29) One reason to require licensing of medical practitioners is that medical care
- A) involves substantial externalities.
  - B) is so expensive.
  - C) is a public good.
  - D) buyers lack perfect information.

Answer: D

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 30) Which of the following help to correct for the market failure of imperfect information?
- A) Truth-in-advertising regulations
  - B) Used car warranties
  - C) Medical licensing
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 31) Imperfect information on the part of buyers and sellers
- A) will not stop the economy from achieving market efficiency, assuming the other conditions for market efficiency hold.
  - B) is no longer a problem because "truth-in-advertising" regulations have been instituted.
  - C) remains a barrier to achieving market efficiency, at least in some industries.
  - D) cannot persist in a market economy.

Answer: C

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

- 32) Bill sells Mary a worthless coin that Bill deviously told Mary "belonged to an ancient Persian king and is of enormous value to coin collectors." Economists would call this an
- A) efficient exchange, as any type of voluntary exchange promotes efficiency.
  - B) inefficient exchange, as at least one party used false market information.
  - C) efficient exchange, assuming Bill was not intentionally trying to trick Mary.
  - D) inefficient exchange because there were externalities involved.

Answer: B

Diff: 3

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Public goods are goods that we all agree are useful and therefore are all willing to pay for. This implies that there is no efficiency problem in the production of public goods.

Answer: FALSE

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Definition*

2) It is because firms consciously try to balance social costs and benefits that efficiency conditions of perfect competition come about.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

3) The existence of public goods can be a source of market failure.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

4)  $P$  equals  $MC$  for a profit-maximizing monopoly.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

5) An externality exists when the cost or benefit resulting from some activity or transaction is imposed or bestowed upon parties external to the activity or transaction.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Fact*

6) Imperfect markets include monopolies, oligopolies, and monopolistically competitive industries.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

7) Market failure results in an inefficient allocation of resources.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

8) Microsoft is an example of a perfectly competitive firm.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Conceptual*

9) Since a monopolist can set any price it wants, an increase in cost leaves a monopolist's profits unaffected.

Answer: FALSE

Diff: 2

Topic: *The Sources of Market Failure*

Skill: *Conceptual*



10) Air pollution is an example of a public bad.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

11) National defense is an example of an externality.

Answer: FALSE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

12) The life insurance industry is an example of an industry with imperfect information.

Answer: TRUE

Diff: 1

Topic: *The Sources of Market Failure*

Skill: *Definition*

## 12.4 Evaluating the Market Mechanism

### 1 Multiple Choice

- 1) The outcome of any free market is ultimately inequitable because
- A) the government underprovides public goods.
  - B) some people become very rich while others remain very poor.
  - C) nobody forces firms to take external costs into account.
  - D) periods of unemployment and inflation still occur.

Answer: B

Diff: 3

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) A freely functioning market
- A) may be inefficient due to market imperfections.
  - B) may be unfair due to significant income disparities that result.
  - C) may result in more or less efficiency than one with government intervention.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

### 2 True/False

- 1) Market failures may be corrected through government intervention.

Answer: TRUE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) Freely functioning markets in the real world result in efficient allocations of resources.

Answer: FALSE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

3) Even if a market outcome is efficient it may not be equitable.

Answer: TRUE

Diff: 2

Topic: *Evaluating the Market Mechanism*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

# Chapter 13 Monopoly and Antitrust Policy

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## 13.1 Imperfect Competition and Market Power

### 1 Multiple Choice

- 1) In imperfectly competitive markets
- A) there is no competition among firms.
  - B) some competition may exist among firms.
  - C) some competition may exist but only in price and not in other ways.
  - D) some competition may exist but only in other ways and not in price.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 2) A firm must be able to \_\_\_\_\_ competition if it is to exercise control over the price of its product.
- A) maximize                      B) increase                      C) not change                      D) limit

Answer: D

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 3) In an imperfectly competitive industry
- A) a single firm has no control over the price of its output.
  - B) a single firm has some control over the price of its output.
  - C) a single firm will charge whatever price it wants to charge.
  - D) the government will always regulate the output price.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 4) Imperfect competition
- A) means there is no competition in the market.
  - B) results in less efficient market outcomes.
  - C) should always be regulated by the government
  - D) All of the above are correct.

Answer: B

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Conceptual

- 5) Monopolies, oligopolies, and monopolistic competitive industries all
- A) earn positive profits in the long run.
  - B) have market power.
  - C) are completely unconstrained in their pricing.
  - D) raise price and quantity over what would occur in perfect competition in order to maximize their profits.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 6) Imperfect competition and market power
- A) are major sources of inefficiency.
  - B) result in higher output than in perfect competition.
  - C) are always the result of product differentiation.
  - D) result from diseconomies of scale.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 7) A monopoly is an industry with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output.
  - C) many firms each able to differentiate their product.
  - D) many firms each too small to impact the market price of its output.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 8) An oligopoly is an industry market structure with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output.
  - C) many firms each able to differentiate their product.
  - D) many firms each too small to impact the market price.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 9) Monopolistic competition is an industry market structure with
- A) a single firm in which the entry of new firms is blocked.
  - B) a small number of firms each large enough to impact the market price of its output.
  - C) many firms each able to differentiate their products.
  - D) many firms each too small to impact the market price of its output.

Answer: C

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 10) Market power refers to a firm's ability to
- A) raise price without losing all demand for its product.
  - B) charge any price it likes.
  - C) sell any amount of output it desires at the market-determined price.
  - D) monopolize a market completely.

Answer: A

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 11) A coffee manufacturer raises the price of its coffee by 12%, and the quantity demanded of its coffee falls by only 5%. This firm has
- A) no monopoly power in the output market.
  - B) some market power.
  - C) some output power.
  - D) not been able to prevent its competitors from competing with it on price.

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 12) We consider \_\_\_\_\_ LEAST likely to be a firm in an imperfectly competitive industry.
- A) a McDonalds in Houston, Texas
  - B) HawaiianTel Telephone Company
  - C) a corn farmer in Ohio
  - D) the only locally owned and operated bank in Portland, Oregon

Answer: C

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 13) When \_\_\_\_\_ substitutes exist, a monopolist has \_\_\_\_\_ power to raise price.
- A) more; more
  - B) more; less
  - C) fewer; less
  - D) no; infinite

Answer: B

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 14) The \_\_\_\_\_ broadly we define a market, the more difficult it becomes to find \_\_\_\_\_.
- A) more; substitutes
  - B) more; complements
  - C) less; substitutes
  - D) less; goods independent of each other

Answer: A

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

- 15) The demand for food will likely be price \_\_\_\_\_ while the demand for Brand X Burger will likely be price \_\_\_\_\_.
- A) elastic; elastic
  - B) elastic; inelastic
  - C) inelastic; elastic
  - D) inelastic; inelastic

Answer: C

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 16) The demand for Ben & Jerry's ice cream will likely be \_\_\_\_\_ the demand for dessert.
- A) more price elastic than
  - B) less price elastic than
  - C) equally price elastic as
  - D) indeterminate from the given information.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

- 17) In a monopolistic industry there is(are)
- A) many firms and free entry of new firms.
  - B) many firms and entry of new firms is blocked.
  - C) a single firm and free entry of new firms.
  - D) a single firm and entry of new firms is blocked.

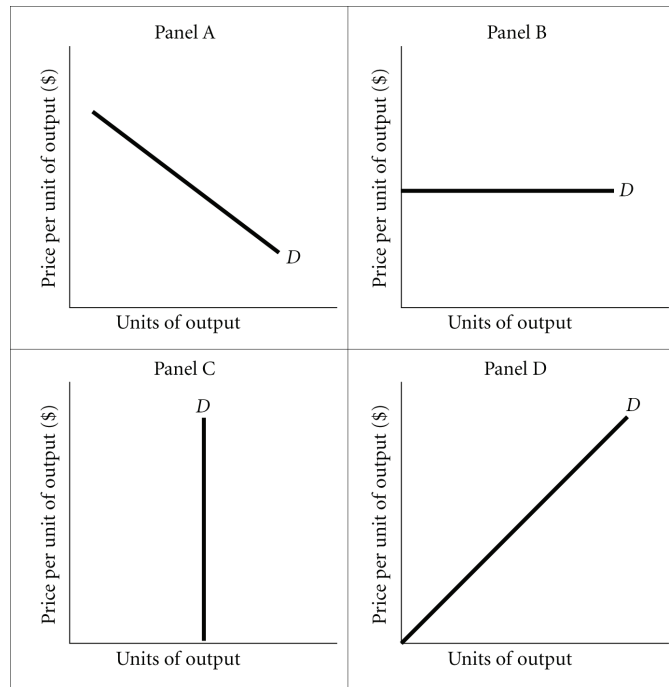
Answer: D

Diff: 1

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Fact

Refer to the information provided in Figure 13.1 below to answer the question that follows.



**Figure 13.1**

- 18) Refer to Figure 13.1. The demand curve facing an individual producer of wheat is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: B

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.1. The demand curve facing an electric company is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Figure 13.1. The demand curve facing Microsoft is most likely represented by  
 A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 2

Topic: Imperfect Competition and Market Power: Core Concepts

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 13.1. The demand curve for insulin is most likely represented by  
A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: C

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Firms with market power must decide all of the following EXCEPT  
A) how much to supply in each input market.  
B) how much to produce.  
C) how to produce it.  
D) what price to charge for their output.

Answer: A

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

## 2 True/False

- 1) We call a market where there is only one buyer for a good or service a monopoly.

Answer: FALSE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 2) In imperfect competition, competition takes place on more dimensions than in perfect competition.

Answer: TRUE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 3) There are a few firms selling differentiated products in a monopolistically competitive industry.

Answer: FALSE

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Definition*

- 4) The demand for Tyson chicken is more elastic than the demand for meat.

Answer: TRUE

Diff: 2

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Conceptual*

- 5) Imperfect competition results in inefficiency but greater equity than perfect competition.

Answer: FALSE

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*



- 6) A firm with market power has the ability to raise their price to any level they desire.

Answer: FALSE

Diff: 1

Topic: *Imperfect Competition and Market Power: Core Concepts*

Skill: *Fact*

## 13.2 Price and Output Decisions in Pure Monopoly Markets

### 1 Multiple Choice

- 1) Monopolists differ from perfectly competitive firms
- A) on the cost and demand sides of the profit equation.
  - B) on the cost side of the profit equation alone.
  - C) on the demand side of the profit equation alone.
  - D) on neither the cost nor demand sides of the profit equation.

Answer: C

Diff: 2

Topic: *Price and Output Decisions in Pure Monopoly Markets*

Skill: *Definition*

- 2) XYZ Computer Company has a monopoly on the sale of a specialized color printer. If it sells two of these printers, its total revenue is \$1,000 and if it sells three, its total revenue is \$1,300. The marginal revenue of the third color printer sold is
- A) \$100.
  - B) \$150.
  - C) \$300.
  - D) \$1,300.

Answer: C

Diff: 2

Topic: *Price and Output Decisions in Pure Monopoly Markets*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 3) For a monopolist to sell more units of output
- A) it must increase the price.
  - B) it must decrease the price.
  - C) demand must become more elastic.
  - D) the other competing firms must sell fewer units.

Answer: B

Diff: 1

Topic: *Price and Output Decisions in Pure Monopoly Markets*

Skill: *Fact*

- 4) One way that perfect competition and monopoly differ is that in
- A) perfect competition, there is no difference between firm and industry demand.
  - B) perfect competition, there is only one firm in the industry.
  - C) monopoly, the firm faces the market demand curve.
  - D) monopoly, the firm produces less than the total market quantity supplied.

Answer: C

Diff: 1

Topic: *Price and Output Decisions in Pure Monopoly Markets*

Skill: *Fact*

- 5) The market demand curve facing a monopoly is
- A) the only firm's demand curve.
  - B) the summation of all individual firms' demand curves.
  - C) nonexistent.
  - D) the marginal cost curve above minimum average variable cost.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 6) For a monopoly, the marginal revenue curve has \_\_\_\_\_ point(s) in common with the firm's demand curve.
- A) one
  - B) no
  - C) all
  - D) Indeterminate from the given information.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 7) For a perfectly competitive firm, the marginal revenue curve has \_\_\_\_\_ point(s) in common with the firm's demand curve.
- A) one
  - B) no
  - C) all
  - D) Indeterminate from the given information.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 8) Voss Calculator Company has a monopoly on the sale of graphing calculators. If it sells two of these calculators its total revenue is \$500, and if it sells three calculators its total revenue is \$800. The marginal revenue of the third calculator sold is
- A) \$100.
  - B) \$150.
  - C) \$300.
  - D) \$800.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 9) When a monopolist sells two units of output its total revenue is \$150. When it sells three units of output its total revenue, is \$180. When the monopolist sells three units of output, the price per unit is
- A) \$50.
  - B) \$60.
  - C) \$75.
  - D) \$90.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

10) When a monopolist sells two units of output its total revenue is \$600. When a monopolist sells three units of output its total revenue is \$690. When the monopolist sells three units of output, the price per unit is

- A) \$210.                      B) \$230.                      C) \$300.                      D) \$630.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

11) When a monopolist sells two units of output its total revenue is \$600. When a monopolist sells three units of output its total revenue is \$690. In order to sell three units of output instead of only two, the monopolist must

- A) decrease its price by \$30 per unit.  
B) decrease its price by \$70 per unit.  
C) make no change in price and increase output by one unit.  
D) decrease its price by \$90 per unit.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

12) Stereo Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. If Stereo Sound Unlimited's total revenue from installing 10 sound systems is \$20,000 and its total revenue from installing 11 sound systems is \$19,000, what is the marginal revenue of the eleventh sound system?

- A) -\$2,000                      B) -\$1,000                      C) \$2,000                      D) \$3,800

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

13) Hi Phi Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. If Hi Phi Unlimited's total revenue from installing 20 sound systems is \$30,000 and its total revenue from installing 21 sound systems is \$33,800, what is the marginal revenue of the twenty-first sound system?

- A) -\$2,000                      B) -\$1,000                      C) \$2,000                      D) \$3,800

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 14) Hi Phi Sound Unlimited has a monopoly over the installation of quadraphonic sound systems. Hi Phi Unlimited's total revenue from installing 20 sound systems is \$30,000 and its total revenue from installing 21 sound systems is \$33,800. The price of the 21st sound system is \_\_\_\_\_ the marginal revenue of that system.
- A) equal to
  - B) greater than
  - C) less than
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.3 below to answer the questions that follow.

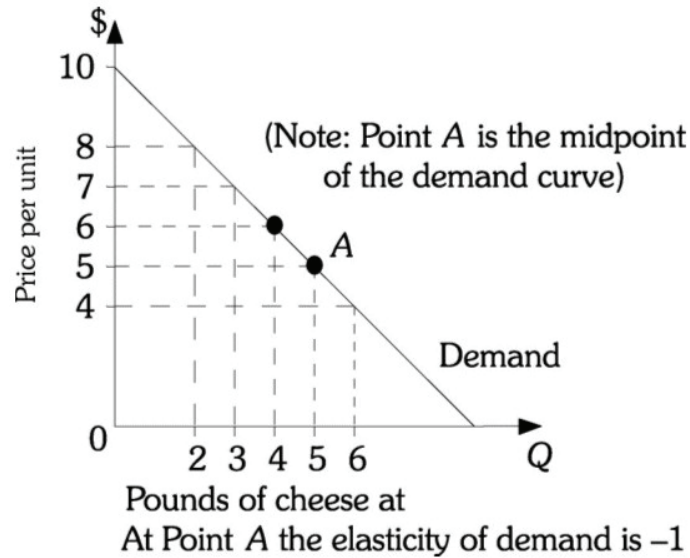


Figure 13.3

- 15) Refer to Figure 13.3. The marginal revenue of the fifth pound of cheese is
- A) \$1.
  - B) \$3.
  - C) \$6.
  - D) \$24.
- 16) Refer to Figure 13.3. The marginal revenue of the third pound of cheese is
- A) -\$5.
  - B) \$5.
  - C) \$7.
  - D) \$21.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Figure 13.3. The firm's total revenue will be maximized at a price of  
A) \$8.                                      B) \$6.                                      C) \$5.                                      D) \$4.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 13.3. The firm's marginal revenue will be positive at  
A) prices above \$5.                                      B) prices below \$5.  
C) all prices.                                      D) prices between \$4 and \$8.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.3. This firm's marginal revenue will be negative at  
A) prices above \$5.                                      B) prices below \$5.  
C) all prices.                                      D) prices between \$4 and \$8.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.4 below to answer the questions that follow.

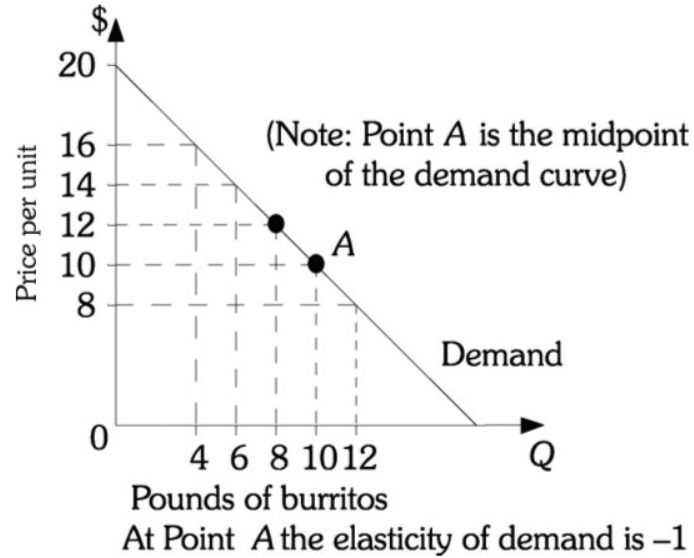


Figure 13.4

- 20) Refer to Figure 13.4. The marginal revenue of the sixth pound of burritos is  
 A) \$10.                      B) \$14.                      C) \$20.                      D) \$84.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Figure 13.4. The marginal revenue of the 10th pound of burritos is  
 A) \$2.                      B) \$4.                      C) \$10.                      D) \$100.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 22) Refer to Figure 13.4. This firm's total revenue will be maximized at a price of  
 A) \$12.                      B) \$10.                      C) \$8.                      D) \$6.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 23) Refer to Figure 13.4. This firm's marginal revenue will be positive at
- A) prices above \$20.
  - B) prices above \$10.
  - C) all prices.
  - D) prices between \$4 and \$8.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Figure 13.4. This firm's marginal revenue will be negative at
- A) prices below \$10.
  - B) prices above \$12.
  - C) all prices.
  - D) prices between \$4 and \$18.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 25) A monopolistic firm faces a(n) \_\_\_\_\_ demand curve.
- A) upward-sloping
  - B) downward-sloping
  - C) horizontal
  - D) vertical

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 26) For a monopolist to sell one more unit, it must
- A) raise the price of only the last unit produced.
  - B) lower the price of only the last unit produced.
  - C) raise the price of the last as well as all previous units produced.
  - D) lower the price of the last as well as all previous units produced.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 27) A monopolist maximizes total revenue when its marginal revenue is
- A) positive.
  - B) zero.
  - C) negative.
  - D) equal to price.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 28) A monopolist's price equals its marginal revenue only when
- A) output is zero.
  - B) total revenue is a maximum.
  - C) marginal revenue is zero.
  - D) the monopolist's demand schedule intersects the horizontal (quantity) axis.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 29) The shape of a monopolist's total revenue schedule is a
- A) straight line with positive slope passing through the origin.
  - B) straight line with negative slope.
  - C) curve bowed in to the quantity (horizontal) axis.
  - D) curve bowed out from the quantity (horizontal) axis.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 30) For a monopolist, price \_\_\_\_\_ marginal revenue.
- A) always equals
  - B) is less than
  - C) is greater than
  - D) is first greater than and then less than

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 31) When a demand curve is a downward sloping straight line, the slope of the marginal revenue curve is \_\_\_\_\_ the demand curve.
- A) always equal to the slope of
  - B) the same as the slope of
  - C) half as steep as
  - D) twice as steep as

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 32) When the demand curve is a downward sloping straight line, the quantity at which the demand curve intersects the horizontal (quantity) axis is \_\_\_\_\_ the quantity at which the marginal revenue curve intersects the horizontal (quantity) axis.
- A) equal to
  - B) less than
  - C) twice
  - D) four times

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 33) The Rare Bird Company has a monopoly in the sale of macaws in Iowa. When the Rare Bird Company sells three macaws its marginal revenue is \$50. When the Rare Bird Company sells four macaws its marginal revenue will be
- A) less than \$50.
  - B) greater than \$30.
  - C) equal to \$50.
  - D) greater than \$50 if demand is elastic and less than \$50 if demand is inelastic.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



- 34) For a monopolist, if total revenue increases as output increases, then marginal revenue is
- A) greater than the price.
  - B) zero.
  - C) positive.
  - D) negative.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 35) A monopolist will not produce if
- A) marginal revenue is declining.
  - B) price is less than average total cost but greater than average variable cost.
  - C) is in the inelastic portion of its demand curve, where marginal revenue is negative.
  - D) price is greater than average total cost.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 36) Suppose we know that a monopolist is maximizing profits. Which of the following is a correct inference? The monopolist has
- A) maximized its total revenue.
  - B) set price equal to its average cost.
  - C) maximized the difference between marginal revenue and marginal cost.
  - D) equated marginal revenue and marginal cost.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

Refer to the information provided in Figure 13.5 below to answer the questions that follow.

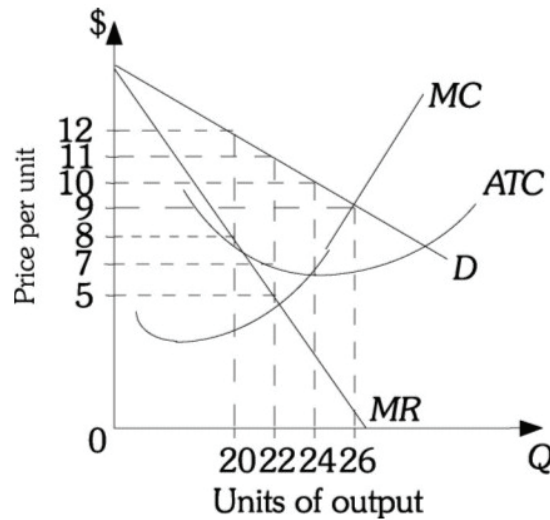


Figure 13.5

37) Refer to Figure 13.5. The profit-maximizing level of output for this monopolist is \_\_\_\_\_ units of output.

- A) 20                                      B) 22                                      C) 24                                      D) 26

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

38) Refer to Figure 13.5. The profit-maximizing price for this firm is

- A) \$5.                                      B) \$7.                                      C) \$9.                                      D) \$11.

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

39) Refer to Figure 13.5. If this firm produces the profit-maximizing quantity and sells it at the profit-maximizing price, the firm's profit will be

- A) \$0.                                      B) \$88.                                      C) \$154.                                      D) \$242.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

40) The XYZ Computer Company monopolizes the production of a specialized color printer. The XYZ Computer Company will find it profitable to increase the production of the printers as long as marginal cost is

- A) less than marginal revenue.
- B) equal to marginal revenue.
- C) greater than marginal revenue.
- D) positive.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

AACSB: Analytic Skills

41) The XYZ Computer Company monopolizes the production of a specialized color printer. The XYZ Computer Company will find it profitable to reduce output as long as marginal revenue is

- A) greater than marginal cost.
- B) equal to marginal cost.
- C) less than marginal cost.
- D) positive.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

AACSB: Analytic Skills

42) A profit-maximizing monopolist will produce output where

- A) marginal revenue is zero.
- B) marginal cost is minimized.
- C) marginal cost is equal to price.
- D) marginal revenue is equal to marginal cost.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

43) Verizon® has a monopoly over local telephone service. If Verizon® is producing where marginal revenue is greater than marginal cost, the firm

- A) could increase profits by reducing output.
- B) could increase profits by increasing output.
- C) is maximizing profits.
- D) must be earning zero profit.

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

44) A monopolist can choose both price and quantity simultaneously. The amount of output that it supplies depends \_\_\_\_\_ curve.

- A) only on its marginal cost
- B) only on its demand
- C) on its marginal cost and its demand
- D) on its average cost and its demand

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 45) A monopolist is currently producing output that maximizes its profits. In addition, if  $P > ATC > MC$ , then it is
- A) breaking even.
  - B) earning positive economic profits.
  - C) covering total variable costs but not total fixed costs.
  - D) covering total fixed costs but not total variable costs.

Answer: B

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 46) When a monopolist's marginal profit is negative, then it follows that
- A)  $MR > ATC$ .
  - B)  $MR = MC$ .
  - C)  $MR > MC$ .
  - D)  $MR < MC$ .

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 47) A monopolist's supply of a good is
- A) dependent on the monopolist's demand curve and its marginal cost curve.
  - B) given by the portion of the monopolist's marginal cost curve that lies above its average variable cost curve.
  - C) independent of the monopolist's demand curve.
  - D) given by the portion of the monopolist's average variable cost curve that lies above its marginal cost curve.

Answer: A

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 48) Because of a patent, Alcoa is the only manufacturer of soda cans with a stay-put tab. Alcoa can earn a profit on the sale of soda cans with stay-put tabs
- A) in the short run but not in the long run because new firms will enter the industry in the long run.
  - B) only in the long run because government regulations prevent monopolists from earning profits in the short run.
  - C) in the long run but not the short run because the monopolist will face competition in the short run.
  - D) in the long run because entry into the industry by new firms is blocked until the patent expires.

Answer: D

Diff: 3

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 49) When a monopolist incurs a loss in the short run, it will
- A) always shut down.
  - B) always produce where marginal cost equals marginal revenue.
  - C) produce as long as total revenue is sufficient to cover variable costs.
  - D) produce as long as total revenue is sufficient to cover fixed costs.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 50) In the long run, a monopoly
- A) will usually earn zero economic profits.
  - B) may earn positive economic profits due to entry barriers.
  - C) will never exit the industry.
  - D) results in an efficient outcome.

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 51) If a monopolist earns positive economic profits in the long run
- A) new firms will enter the market.
  - B) the monopolist expands production.
  - C) the industry supply curve shifts to the right.
  - D) the monopolist will not change its current behavior.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 52) A monopolist suffers a loss if its \_\_\_\_\_ schedule is everywhere above its \_\_\_\_\_ schedule.
- A) ATC; MC                      B) MC; AVC                      C) ATC; Demand                      D) Demand; ATC

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 53) A monopolist is NOT guaranteed positive economic profits solely because it is a monopoly since there may be no output for which
- A)  $TR = TVC$ .                      B)  $TR > TC$ .                      C)  $MC = MR$ .                      D)  $ATR < MR$ .

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 54) The Exclusive Gift Company monopolizes the sale of gold hula hoops. The company is currently setting marginal revenue equal to marginal cost and selling 50 gold hula hoops at a price of \$5,000 each. Total costs for the company are \$300,000 of which fixed costs are \$100,000. You are hired as an economic consultant to this company. You should advise this monopolist to
- A) shut down in the short run and exit the industry in the long run.
  - B) produce in the short run and expand capacity in the long run.
  - C) produce in the short run but exit the industry in the long run if conditions do not change.
  - D) shut down in the short run but expand capacity in the long run if conditions do not change.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.6 below to answer the question that follows.

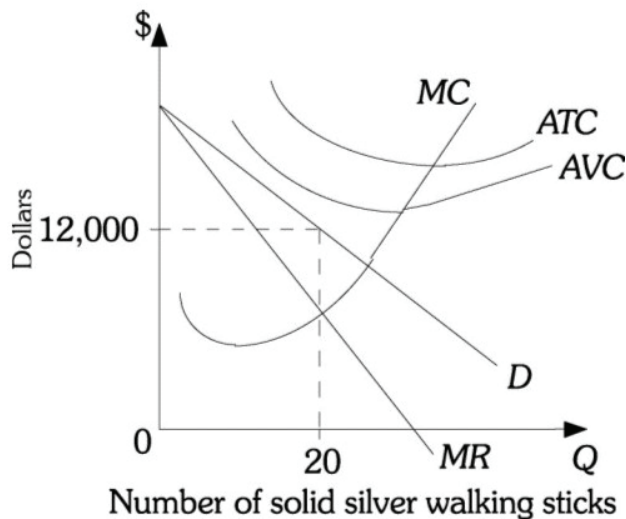


Figure 13.6

- 55) Refer to Figure 13.6. The Silver Exchange has a monopoly over the sale of solid silver walking sticks. The Silver Exchange has hired you as an economic consultant. You should advise this monopolist to
- A) shut down in the short run and exit the industry in the long run.
  - B) produce in the short run and expand capacity in the long run.
  - C) produce in the short run but exit the industry in the long run.
  - D) shut down in the short run but expand capacity in the long run.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 13.7 below to answer the questions that follow.

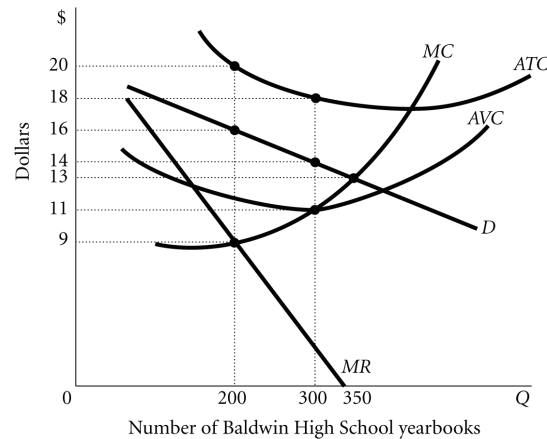


Figure 13.7

56) Refer to Figure 13.7. The Memory Company's profit-maximizing level of output is \_\_\_\_\_ high school yearbooks.

- A) 0                                      B) 200                                      C) 300                                      D) 350

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

57) Refer to Figure 13.7. The profit-maximizing price for the Memory Company's high school yearbook is

- A) \$0.                                      B) \$9.                                      C) \$16.                                      D) \$20.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

58) Refer to Figure 13.7. The Memory Company's maximum level of profit is

- A) -\$1,800.                                      B) -\$1,200.                                      C) -\$800.                                      D) \$0.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

59) Refer to Figure 13.7. The Memory Company's operating profit is

- A) -\$1,000.                                      B) -\$800.                                      C) \$800.                                      D) \$1,000.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 60) Relative to a competitively organized industry, a monopoly produces \_\_\_\_\_ output, charges \_\_\_\_\_ prices, and earns \_\_\_\_\_.
- A) more; higher; economic profits                      B) less; lower; economic profits  
C) less; lower; only a normal profit                      D) less; higher; economic profits

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 61) Relative to a monopolized industry, a competitively organized industry produces \_\_\_\_\_ output, charges \_\_\_\_\_ prices, and earns \_\_\_\_\_.
- A) more; higher; only a normal profit                      B) more; lower; economic profits  
C) more; lower; only a normal profit                      D) less; higher; economic profits

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 62) Relative to a competitively organized industry, firms acting collusively produce \_\_\_\_\_ output, charge \_\_\_\_\_ prices, and earn \_\_\_\_\_.
- A) more; higher; economic profits                      B) less, lower; economic profits  
C) less, lower; only a normal profit                      D) less, higher; economic profits

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



Refer to the information provided in Figure 13.8 below to answer the question that follows.

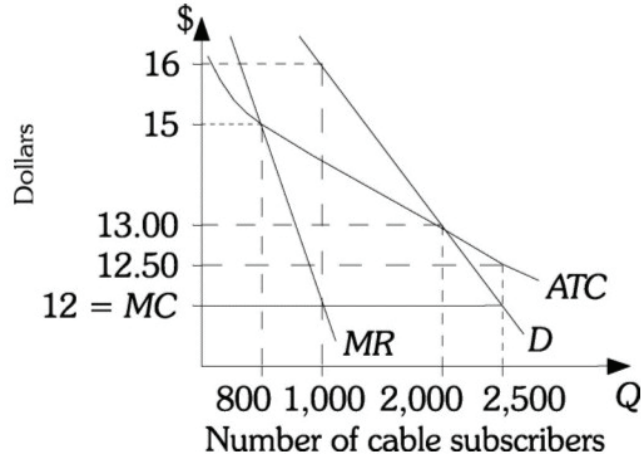


Figure 13.8

- 63) Refer to Figure 13.8. If the government regulates Armstrong Cable so they can earn only a normal return, the price would be set at  
 A) \$12.00.                      B) \$12.50.                      C) \$13.00.                      D) \$16.00.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 64) A \_\_\_\_\_ prevents new firms from entering and competing in a monopolistic industry.  
 A) barrier to entry                      B) collusive agreement  
 C) market power sharing agreement                      D) cartel agreement

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 65) \_\_\_\_\_ is(are) protected by barriers to entry, specifically \_\_\_\_\_.  
 A) State lotteries; government rules                      B) DeBeers Company; economies of scale  
 C) Cable companies; patents                      D) All of the above are correct.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 66) DeBeers' diamond monopoly results from
- A) economies of scale.
  - B) a patent.
  - C) a government franchise.
  - D) ownership of a scarce factor of production.

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 67) The \_\_\_\_\_ type of entry barrier allows an electric company to maintain a monopoly over electricity production.
- A) patent
  - B) economies of scale
  - C) diseconomies of scale
  - D) ownership of a scarce factor of production

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

Refer to the information provided in the Figure 13.2 below to answer the question that follows.

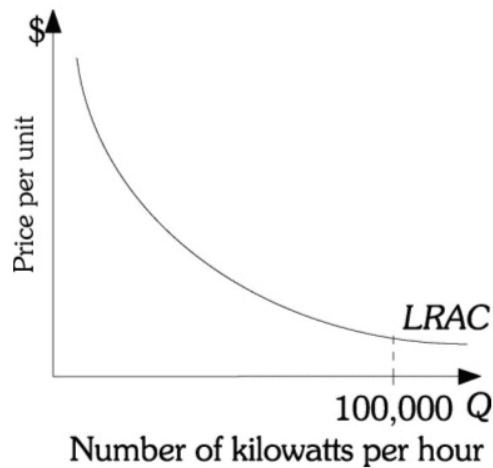


Figure 13.2

- 68) Refer to Figure 13.2. The only firm producing electricity has a long-run average total cost curve as shown. The market demand for electricity from all buyers is 100,000 kilowatts per hour. It makes economic sense for this firm to be the only producer of electricity because it has
- A) economies of scale in producing electricity.
  - B) a patent on the production process necessary to produce electricity.
  - C) control over a scarce factor of production.
  - D) a government franchise to produce electricity.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 69) Refer to Figure 13.2. Each electricity producer has the given LRAC curve. The total cost of producing 100,000 kilowatts per hour is minimized with \_\_\_\_\_ firm(s) in the industry.
- A) one
  - B) ten
  - C) one hundred
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 70) \_\_\_\_\_ present(s) a barrier to entry in the DVD player market.
- A) Economies of scale
  - B) Ownership of a scarce resource
  - C) Network externalities
  - D) A government franchise

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 71) Due to the network externalities in the game console market, we would expect this market to
- A) overproduce game consoles.
  - B) be highly concentrated.
  - C) be efficient.
  - D) be serviced by a natural monopoly.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Conceptual

- 72) Patents
- A) slow the flow of benefits from research and development to consumers.
  - B) are granted for a period of 10 years in the United States.
  - C) create monopolies and are thus inefficient.
  - D) All of the above are correct.

Answer: A

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 73) Which of the following are NOT barriers to entry?
- A) Government franchises
  - B) Patents
  - C) A consent decrees
  - D) Economies of scale

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 74) We call \_\_\_\_\_ a barrier to entry that grants exclusive use of an invented product or process to the inventor.
- A) a government franchise
  - B) a patent
  - C) economies of scale
  - D) the ownership of a scarce resource

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 75) Although patents are a \_\_\_\_\_, they also provide \_\_\_\_\_.
- A) collusive agreement; for free entry of new firms
  - B) collusive agreement; an incentive for invention and innovation
  - C) barrier to entry; for free entry of new firms
  - D) barrier to entry; an incentive for invention and innovation

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 76) We call a firm a(n) \_\_\_\_\_ when its *LRAC* curve is still declining when the *LRAC* intersects the market demand curve.
- A) perfect competitor
  - B) monopolistic competitor
  - C) oligopolist
  - D) natural monopolist

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 77) An industry that realizes such large economies of scale in producing its product that single-firm production of that good or service is most efficient is called a(n) \_\_\_\_\_ monopoly.
- A) fixed cost
  - B) economies of scale
  - C) patent
  - D) natural

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 78) It would be inefficient to break up a \_\_\_\_\_ monopoly.
- A) government created
  - B) price-fixing
  - C) cartelized
  - D) natural

Answer: D

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 79) For a monopoly to be a natural monopoly
- A) the firm must realize economies of scale at a scale that is close to total demand in the market.
  - B) the firm must realize economies of scale at a scale that is small relative to the market.
  - C) the firm must realize constant returns to scale over all output.
  - D) the firm's long-run average cost curve must continue to increase until it hits the market demand curve.

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Definition

- 80) The classic examples of natural monopolies over the years have been in
- A) agriculture.
  - B) auto manufacturing.
  - C) public utilities.
  - D) retail trade.

Answer: C

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

Refer to the information provided in Figure 13.11 below to answer the question that follows.

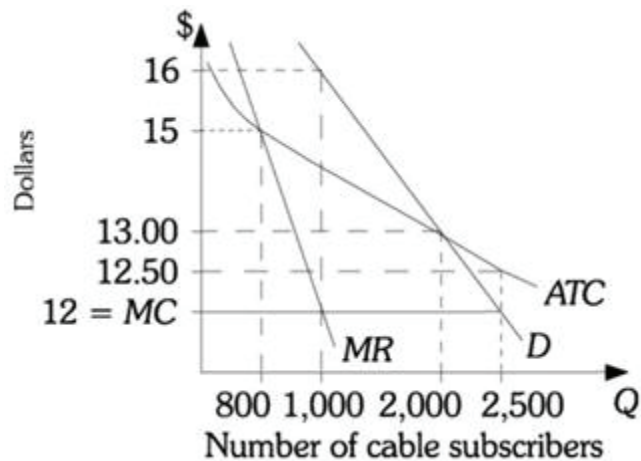


Figure 13.11

- 81) Refer to Figure 13.11. The figure shows a \_\_\_\_\_ monopoly.
- A) patent
  - B) natural
  - C) strategic resource
  - D) profit-maximizing

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 13.1 below to answer the questions that follow.

Table 13.1

Price (\$)	Quantity
4.00	100
3.50	200
3.00	300
2.50	400
2.00	500
1.50	600
1.00	700

82) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, what is its marginal revenue from the 200th unit it sells?

- A) \$2                      B) \$3                      C) \$3.50                      D) \$300

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

83) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, what is its marginal revenue from the 600th unit it sells?

- A) -\$1                      B) \$1                      C) \$1.50                      D) \$100

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

84) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, at what level of output is its total revenue maximized?

- A) 200                      B) 300                      C) 500                      D) 600

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

85) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table, its marginal revenue is positive

- A) at prices above \$2.00.                      B) at all prices.  
C) at prices below \$2.00.                      D) at all price but \$2.00.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

86) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the level of output that would maximize its profits?

- A) 200                      B) 400                      C) 500                      D) 600

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

87) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what price should it charge per unit of output so as to maximize its profits?

- A) \$2.00                      B) \$2.50                      C) \$3.00                      D) \$3.50

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

88) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the maximum profit the monopoly can earn?

- A) \$300                      B) \$600                      C) \$900                      D) \$1,000

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

89) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the most the monopoly would expend in rent-seeking activity?

- A) \$300                      B) \$600                      C) \$900                      D) \$1,000

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

90) Refer to Table 13.1. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$1 per unit of providing the product, what is the societal loss associated with the monopoly?

- A) \$0  
B) \$225  
C) \$450  
D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 13.2 below to answer the questions that follow.

Table 13.2

Price (\$)	Quantity
10.00	1
9.00	2
8.00	3
7.00	4
6.00	5
5.00	6
4.00	7

- 91) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$2 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.
- A) \$6; 5                      B) \$9; 2                      C) \$5; 6                      D) \$8; 3

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 92) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$4 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.
- A) \$6; 5                      B) \$7; 4                      C) \$5; 6                      D) \$9; 2

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

- 93) Refer to Table 13.2. If a monopoly faces the demand schedule given in the table and has a constant marginal and average cost of \$6 per unit of providing the product, then the monopoly maximizes its profits by charging \_\_\_\_\_ per unit and selling \_\_\_\_\_ units of output.
- A) \$6; 5                      B) \$7; 4                      C) \$5; 6                      D) \$8; 3

Answer: D

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills



Refer to Scenario 13.1 below to answer the questions that follow.

SCENARIO 13.1: The government of Catalina Island is currently inviting investors to bid for the exclusive right to provide cable television service to its residents. The market demand for this service is  $P = 55 - 0.01Q$ , where  $Q$  is the number of households that would subscribe to the cable service and  $P$  is the monthly fee charged to the subscribers. The associated marginal revenue curve is  $MR = 55 - 0.02Q$ . Fun Cable Company is interested in bidding for the right to provide cable service on Catalina Island. It has a constant average and marginal cost of \$5 for providing cable service to each household.

94) Refer to Scenario 13.1. If Fun Cable Company were to be awarded the exclusive right to provide cable service on Catalina Island, how many households would it service?

- A) 2500                      B) 2750                      C) 5500                      D) 5000

Answer: A

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

95) Refer to Scenario 13.1. If Fun Cable Company were to be awarded the exclusive right to provide cable service on Catalina Island, what price would it charge per household per month?

- A) \$5.00                      B) \$27.50                      C) \$30.00                      D) \$55.00

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

96) Refer to Scenario 13.1. If Fun Cable Company were to be awarded the exclusive right to provide cable service on Catalina Island, how much profit would it earn?

- A) \$0                      B) \$62,500                      C) \$75,000                      D) \$112,500

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

97) Refer to Scenario 13.1. What is the most Fun Cable Company would bid for the franchise?

- A) \$0                      B) \$62,500                      C) \$75,000                      D) \$112,500

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

98) Refer to Scenario 13.1. At what level of output (number of households) is Fun Cable Company's total revenue maximized?

- A) 2500
- B) 2750
- C) 5000
- D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Analytic

AACSB: Analytic Skills

99) Related to the *Economics in Practice* on page 272: Which of the following statements about the cable industry is(are) TRUE?

- A) The cable industry is an example of a monopolistically competitive industry.
- B) Cable service involves low fixed costs and high marginal costs.
- C) Cable companies often bundle programs in order to maximize their profits.
- D) All of the above are correct.

Answer: C

Diff: 2

Topic: Price and Output Decisions in Pure Monopoly Markets: Economics in Practice

Skill: Conceptual

100) Related to the *Economics in Practice* on page 272: The cable industry is best characterized as

- A) perfectly competitive
- B) a natural monopoly
- C) monopolistically competitive
- D) having diseconomies of scale

Answer: B

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets: Economics in Practice

Skill: Definition

## 2 True/False

1) Monopolists do not have supply curves that are independent of market demand.

Answer: TRUE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

2) The condition for profit-maximization for competitive firms and monopolies is the same: marginal revenue equals marginal cost. Hence, monopolies are efficient.

Answer: FALSE

Diff: 1

Topic: Price and Output Decisions in Pure Monopoly Markets

Skill: Fact

- 3) A monopolist's profit-maximizing level of output occurs where marginal revenue equals marginal cost.  
Answer: TRUE  
Diff: 2  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 4) The monopolist's profit-maximizing price will be above marginal cost, because at the profit maximizing level of output the monopolist's marginal revenue curve lies below its demand curve.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Fact*
- 5) A monopoly's supply curve is the portion of the firm's marginal cost curve that lies above its average variable cost curve.  
Answer: FALSE  
Diff: 2  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 6) Because the monopolist is the sole producer of a good, it can never incur a loss.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Fact*
- 7) No supply curve exists for a monopoly in the sense that a supply curve exists for a perfectly competitive firm.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 8) If an industry realizes significant economies of scale relative to the size of the market, it is most efficient for there to be a single firm in the industry.  
Answer: TRUE  
Diff: 2  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Conceptual*
- 9) In perfect competition, price is equal to marginal revenue while in monopoly price is greater than marginal revenue.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*

- 10) If a monopoly earns a loss in the short run and market conditions do not change, then it should exit the industry in the long run.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Conceptual*
- 11) The monopolist's total revenue curve is represented graphically by a positively sloped line.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Conceptual*
- 12) A monopoly earns total revenue of \$5000 when it sells 500 units of output and total revenue of \$5400 when it sells 600 units of output. Thus, the marginal revenue of the 600th unit is \$9.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Analytic*  
AACSB: *Analytic Skills*
- 13) The demand curve facing the monopoly is horizontal.  
Answer: FALSE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 14) Barriers to entry include network externalities and patents.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Definition*
- 15) To call a firm a natural monopoly the firm must realize economies of scale at a scale that is close to total demand in the market.  
Answer: TRUE  
Diff: 1  
Topic: *Price and Output Decisions in Pure Monopoly Markets*  
Skill: *Fact*

### 13.3 The Social Costs of Monopoly

#### 1 Multiple Choice

Refer to the information provided in Figure 13.9 below to answer the questions that follow.

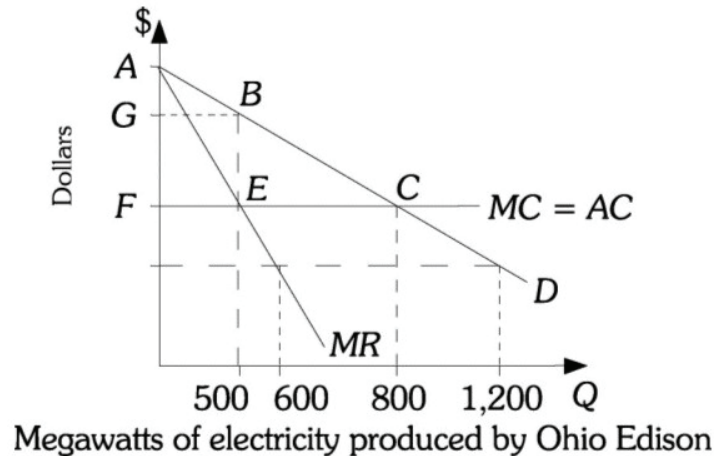


Figure 13.9

- 1) Refer to Figure 13.9. The amount of consumer surplus under monopoly equals area
- A) AFE.                      B) GAB.                      C) BEC.                      D) AFC.

Answer: B

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 2) Refer to Figure 13.9. From society's point of view the efficient level of electricity production is \_\_\_\_\_ megawatts.
- A) 500                      B) 600                      C) 800                      D) 1200

Answer: C

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Figure 13.9. If Ohio Edison is forced to produce the efficient level of electricity (instead of the monopoly level)
- A) the net social gain equals area BEC.  
 B) the monopolist loses profits equal to FBE.  
 C) consumers gain consumer surplus of AFC.  
 D) all of the above

Answer: A

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Figure 13.9. If competition is introduced into the market the net social gain may be greater than the area BEC to the extent that
- A) the firm may have engaged in rent-seeking behavior, the cost of which would also be avoided.
  - B) society may value the increase in consumer welfare on equity as well as efficiency grounds.
  - C) firms facing competition may have a greater incentive to cut costs and innovate which result in gains to society.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 5) Refer to Figure 13.9. If Ohio Edison is regulated to act as a perfectly competitive firm (instead of the monopoly level)
- A) output would increase from 500 to 600 units.
  - B) consumer surplus would increase by the area FGBC.
  - C) the firm will earn profits of BEC.
  - D) the net social gain to society equals ACF.

Answer: B

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 6) Refer to Figure 13.9. If Ohio Edison is forced to act as a perfect competitor (instead of the monopoly level), the net social gain is
- A) ACF.
  - B) FGBC.
  - C) BEC.
  - D) FABE.

Answer: C

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Refer to Figure 13.9. If this industry was originally perfectly competitive and becomes monopolized, the amount of consumer surplus transferred to Ohio Edison in the form of profits is
- A) FGBE.
  - B) BEC.
  - C) FGBC.
  - D) FABE.

Answer: A

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 8) Refer to Figure 13.9. If Ohio Edison engages in rent-seeking behavior to maintain their monopoly, the true net social cost of monopoly is
- A) *FGBC*.
  - B) *BEC* and the portion of area *FGBE* that pays for the rent-seeking behavior.
  - C) *AGB* and the portion of area *FGBE* that pays for the rent-seeking behavior.
  - D) *FAC*.

Answer: B

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 9) Refer to Figure 13.9. Ohio Edison would be willing to pay up to area \_\_\_\_\_ for rent-seeking activities to protect its monopoly power.
- A) *FAE*
  - B) *FGBE*
  - C) *FGBC*
  - D) *BEC*

Answer: B

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 10) Which of the following statements is TRUE of a monopolist?
- A) A monopoly faces the same pressures to cut costs as a competitive firm does.
  - B) A monopoly must use the most efficient technology or firms that do will drive it out of business.
  - C) A monopoly is protected from competition by barriers to entry.
  - D) A monopoly faces the same pressures to innovate as a competitive firm does.

Answer: C

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Fact*

- 11) From society's viewpoint, a monopolist produces too little because price is
- A) less than marginal cost.
  - B) less than average cost
  - C) greater than average cost.
  - D) greater than marginal cost

Answer: D

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Fact*

- 12) A bill pending before the Kansas State Legislature would prohibit private companies from selling health insurance and make the state the single payer of health care bills. Private health insurance companies that have made above normal profits have spent large sums of money trying to prevent the legislature from passing this bill into law. This is an example of
- A) government failure.
  - B) collusion.
  - C) an externality.
  - D) rent-seeking behavior.

Answer: D

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Definition*

13) AARP lobbies aggressively for the interests of retired persons. For example, AARP has been instrumental in obtaining medical benefits for senior citizens. Such behavior on the part of AARP is called \_\_\_\_\_.

A) government failure.

B) discrimination.

C) consumer loss.

D) rent-seeking behavior.

Answer: D

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Definition*

14) Government failure

A) leads to a more efficient allocation of resources.

B) leads to a less efficient allocation of resources.

C) occurs because households or firms do not act in their own self-interest.

D) occurs because government officials do not act in their own self-interest.

Answer: B

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Fact*

15) We know \_\_\_\_\_ as the notion that government becomes the tool of the rent seeker and makes the allocation of resources even less efficient than before and this is described in \_\_\_\_\_ theory.

A) rent-seeking; public choice

B) government failure; public choice

C) discrimination; conspiracy

D) collusion; conspiracy

Answer: B

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Definition*



Refer to the information provided in Figure 13.10 below to answer the questions that follow.

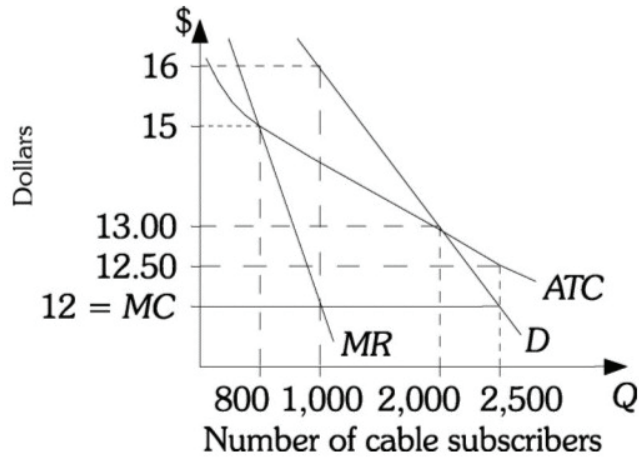


Figure 13.10

- 16) Refer to Figure 13.10. The monopoly profit maximizing number of subscribers and price are:  
 A) 800; \$15                      B) 1,000; \$16                      C) 2,200 \$13                      D) 2,500; \$12

Answer: B

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Figure 13.10. For Armstrong Cable the profit-maximizing number of subscribers is  
 A) 800.                                  B) 1,000.                                  C) 2,200.                                  D) 2,500.

Answer: B

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Figure 13.10. If Armstrong Cable is forced to sell the efficient level output, it will  
 A) incur a loss of \$7,250.                                  B) incur a loss of \$1,250.  
 C) earn a zero profit.                                          D) earn a profit of \$4,000.

Answer: B

Diff: 2

Topic: The Social Cost of Monopoly

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Figure 13.10. If the government imposed a price ceiling of \$12 on this firm, the firm would sell to
- A) 1,000 subscribers and earn a profit of \$4,000.
  - B) more than 2,500 subscribers so that price would equal average total cost.
  - C) 2,500 subscribers but would require a subsidy of \$1,250 to stay in business.
  - D) 2,200 subscribers and would require a subsidy of \$2,200 to stay in business.

Answer: C

Diff: 2

Topic: *The Social Cost of Monopoly*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) Government failure occurs when the government runs a budget deficit.

Answer: FALSE

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Definition*

- 2) Public choice theory states that government officials act in their own self-interest when setting policies and regulations.

Answer: TRUE

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Definition*

- 3) Farmers lobbying the government for agricultural price supports are engaging in rent-seeking behavior.

Answer: TRUE

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Definition*

- 4) One source of inefficiency associated with monopolies stems from their insulation from competition and thus reduced incentive to cut costs and innovate.

Answer: TRUE

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Conceptual*

- 5) When an industry is monopolized, the move from a competitive environment to a monopoly leads to a decrease in consumer surplus and an increase in industry profits in a one-to-one ratio.

Answer: FALSE

Diff: 1

Topic: *The Social Cost of Monopoly*

Skill: *Conceptual*

## 13.4 Price Discrimination

### 1 Multiple Choice

- 1) When monopolists perfectly price discriminate, they
- A) charge different prices to different buyers.
  - B) attempt to capture consumer surplus as profit.
  - C) can eliminate the deadweight loss to society of a monopoly.
  - D) All of the above are correct.

Answer: D

Diff: 2

Topic: Price Discrimination

Skill: Fact

- 2) A monopolist who has a horizontal ATC schedule and perfectly price discriminates
- A) leaves buyers a decreased but still positive amount of consumer surplus.
  - B) increases the amount of consumer surplus that is lost to the buyers and not gained by the monopolist.
  - C) appropriates all consumer surplus as profit.
  - D) does not change the amount of consumer surplus that buyers had before the monopolist perfectly price discriminated.

Answer: C

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

- 3) Why do price discriminating firms often offer lower prices to children and elderly?
- A) They have a lower willingness to pay than other consumers.
  - B) Their demand for goods and services tends to be less elastic than other consumers.
  - C) Such a strategy lowers the costs of the firm.
  - D) All of the above are correct.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

AACSB: Reflective Thinking

- 4) A monopolist who has a horizontal ATC schedule and charges the same monopoly price to all buyers
- A) appropriates more consumer surplus as profit than a perfect price discriminator does.
  - B) appropriates less consumer surplus as profit than a perfect price discriminator does.
  - C) appropriates less consumer surplus as profit than a perfectly competitive firm does.
  - D) does not lower the amount of consumer surplus that buyers have compared with what they would have if instead they faced a perfectly competitive firm.

Answer: B

Diff: 3

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 5) Which of the following is NOT an example of price discrimination?
- A) airlines charging lower prices to travelers who stay over a Saturday night
  - B) student discounts at movie theaters
  - C) back-to-school sales
  - D) discounted coffee for senior citizens at restaurants

Answer: C

Diff: 2

Topic: Price Discrimination

Skill: Conceptual

Refer to the information provided in Figure 13.12 below to answer the questions that follow.

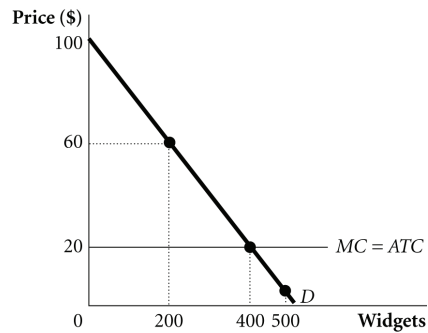


Figure 13.12

- 6) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How many widgets does the monopoly supply when they act so as to maximize their profits?
- A) 200
  - B) 400
  - C) 500
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How much surplus is realized by consumers?
- A) \$0
  - B) \$16,000
  - C) \$32,000
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 8) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. How much profit does the monopolist earn?
- A) \$0
  - B) \$16,000
  - C) \$32,000
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 13.12. Suppose a monopolist faces the demand and costs in the figure and is able to perfectly price discriminate. What is the societal loss from having a monopoly instead of a perfectly competitive industry supplying widgets?
- A) \$0
  - B) \$4,000
  - C) \$16,000
  - D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Price Discrimination

Skill: Analytic

AACSB: Analytic Skills

## 2 True/False

- 1) Monopolists use price discrimination to attempt to capture producer surplus and convert it to profits.

Answer: FALSE

Diff: 2

Topic: Price Discrimination

Skill: Definition

- 2) Monopolists who perfectly price discriminate produce the socially efficient level of output.

Answer: TRUE

Diff: 2

Topic: Price Discrimination

Skill: Fact

## 13.5 Remedies for Monopoly: Antitrust Policy

### 1 Multiple Choice

- 1) In 1890 the United States Congress
- A) created the Interstate Commerce Commission.
  - B) passed the Sherman Antitrust Act.
  - C) passed the Rule of Reason Act.
  - D) created the Federal Trade Commission.

Answer: B

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 2) In 1914 the United States Congress
- A) passed the Sherman Antitrust Act.
  - B) passed the Rule of Reason Act.
  - C) created the Federal Trade Commission.
  - D) created the Per Se Rule.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 3) The \_\_\_\_\_ Act declared monopoly and trade restraints illegal.
- A) Clayton
  - B) Federal Trade Commission
  - C) Sherman
  - D) Cellar-Kefauver

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 4) The \_\_\_\_\_ Act made tying contracts illegal and banned price discrimination.
- A) Clayton
  - B) Federal Trade Commission
  - C) Sherman
  - D) Cellar-Kefauver

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 5) The Sherman Antitrust Act of 1890
- A) made illegal every conspiracy in restraint of trade or commerce among the several states.
  - B) made tying contracts illegal.
  - C) limited mergers that would substantially lessen competition or tend to create a monopoly.
  - D) banned price discrimination.

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 6) The biggest problem with the Sherman Antitrust Act of 1890 was that it was unclear what
- A) "tying contracts" were.
  - B) "price discrimination" was.
  - C) specific acts were to be considered "restraints of trade."
  - D) "substantially lessen competition" meant.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 7) The criterion introduced by the Supreme Court in 1911 to determine whether a particular action was illegal or legal within the terms of the Sherman Act is called the
- A) Interstate Commerce Rule.
  - B) Clayton Act Rule.
  - C) Federal Trade Commission Rule.
  - D) Rule of Reason.

Answer: D

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 8) Congress established the \_\_\_\_\_ to investigate "...the organization, business conduct, practices, and management" of companies that engage in interstate commerce.
- A) Federal Trade Commission
  - B) Antitrust Division of the Justice Department
  - C) Interstate Commerce Commission
  - D) National Transportation Board

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 9) In the \_\_\_\_\_ the courts enunciated a rule declaring a particular action or outcome to be an intrinsic violation of antitrust law.
- A) rule of reason
  - B) per se rule
  - C) Wheeler-Lea Act
  - D) consent decree rule

Answer: B

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 10) The two different administrative bodies responsible for initiating actions on behalf of the U.S. government against individuals or companies violating antitrust laws are called the
- A) Antitrust Division of the Justice Department and the Federal Trade Commission.
  - B) Interstate Commerce Commission and the Federal Trade Commission.
  - C) Antitrust Division of the Justice Department and the Federal Utility Commission.
  - D) Interstate Commerce Commission and the Federal Utility Commission.

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 11) The Antitrust Division of the Justice Department
- A) is composed of five members appointed by the president and confirmed by the Senate for terms of seven years.
  - B) can issue cease-and-desist orders to offenders.
  - C) has established a set of trade regulations that make clear what practices it deems unfair and subject to action.
  - D) initiates action against antitrust law violators and decides which cases to prosecute.

Answer: D

Diff: 3

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 12) The \_\_\_\_\_ is(are) empowered to impose a number of \_\_\_\_\_ if it(they) find(s) antitrust law violations.
- A) Antitrust Division of the Justice Department; fines
  - B) Interstate Commerce Commission; fines
  - C) courts; remedies
  - D) Federal Trade Commission; remedies

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 13) Courts must approve \_\_\_\_\_, that is, formal agreements on remedies between all parties to an antitrust case.
- A) consent decrees
  - B) criminal actions
  - C) treble damages
  - D) private actions

Answer: A

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 14) In 2000 Microsoft was
- A) punished for violating the U.S. Antitrust laws by a fine exceeding one million dollars.
  - B) ordered to dispose of all of its subsidiary companies.
  - C) required to make its patents, trademarks, and trade secrets available to competitors.
  - D) found guilty of violating U.S. Antitrust laws.

Answer: D

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 15) In 1911 two major antitrust cases were brought before the Supreme Court involving
- A) Eastman Kodak and Standard Oil.
  - B) American Tobacco and United States Steel.
  - C) Standard Oil and American Tobacco.
  - D) United Shoe Machinery and United States Steel.

Answer: C

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact



- 16) Antitrust cases against Eastman Kodak, International Harvester, United Shoe Machinery, and United States Steel resulted in the firms
- A) being found not guilty of unreasonable conduct under the Sherman Act.
  - B) being fined and then dissolved.
  - C) settling their cases with consent decrees.
  - D) being found guilty of tying under the Clayton Act.

Answer: A

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 17) Related to the *Economics in Practice* on page 279: The U.S. Federal Trade Commission attempted to block the acquisition of Wild Oats by Whole Foods. Why?
- A) The government believed that the acquisition would lead to higher prices for consumers and better quality products.
  - B) The government believed that the acquisition would lead to lower profits for the two companies.
  - C) The government believed that the acquisition would lead to monopoly power for the company and reduced welfare for consumers.
  - D) All of the above are correct.

Answer: C

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice

Skill: Fact

- 18) Related to the *Economics in Practice* on page 279: The key issue surrounding the U.S. Federal Trade Commission's attempt to block the acquisition of Wild Oats by Whole Foods was
- A) whether the acquisition would lead to lower prices for consumers.
  - B) the definition of the market and thus whether or not there existed close substitutes for Whole Foods' products.
  - C) whether preventing the acquisition was fair to Whole Foods and Wild Oats.
  - D) None of the above are correct.

Answer: B

Diff: 2

Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice

Skill: Fact

## 2 True/False

- 1) The U.S. law that declared monopolies illegal is the Sherman Act of 1890.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

- 2) A *per se rule* is a rule enunciated by the courts declaring a particular action or outcome an intrinsic violation of antitrust law.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

3) The rule of reason is the criterion introduced by the courts for determining whether a firm's action was illegal under the Clayton Act.

Answer: FALSE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Definition

4) The Clayton Act was passed, in part, to strengthen the Sherman Act.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

5) The Clayton Act outlawed tying contracts, price discrimination, and all mergers.

Answer: FALSE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

6) Both American Tobacco and United States Steel were found guilty of antitrust violations under the Sherman Act.

Answer: FALSE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

7) Government led antitrust actions are far more common than private antitrust cases.

Answer: FALSE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy

Skill: Fact

8) Related to the Economics in Practice on page 279. Whole Foods was allowed to acquire Wild Oats because the judge felt that the merger would not harm consumers.

Answer: TRUE

Diff: 1

Topic: Remedies for Monopoly: Antitrust Policy: Economics in Practice

Skill: Fact

# Chapter 14 Oligopoly

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## 14.1 Market Structure in an Oligopoly

### 1 Multiple Choice

- 1) The music production industry is an example of a(n) \_\_\_\_\_ industry.
- |                                 |                  |
|---------------------------------|------------------|
| A) perfectly competitive        | B) monopolistic  |
| C) monopolistically competitive | D) oligopolistic |

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 2) Of the four oligopolistic markets below, in which is there considerable price competition?
- |                              |                                 |
|------------------------------|---------------------------------|
| A) music production industry | B) stent industry               |
| C) airline industry          | D) high-definition DVD industry |

Answer: A

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 3) In general, oligopolists compete
- |                                                  |
|--------------------------------------------------|
| A) on price alone.                               |
| B) on many dimensions except for price.          |
| C) on price, R&D, and marketing and advertising. |
| D) on quality alone.                             |

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 4) To determine their optimal strategy, oligopolists must \_\_\_\_\_ to their strategy.
- |                                               |
|-----------------------------------------------|
| A) anticipate the reaction of their customers |
| B) anticipate the reaction of their rivals    |
| C) anticipate the reaction of government      |
| D) both (A) and (B) are correct.              |

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 5) Strategic behavior characterizes a(n) \_\_\_\_\_ industry.
- |                                 |                  |
|---------------------------------|------------------|
| A) perfectly competitive        | B) monopolistic  |
| C) monopolistically competitive | D) oligopolistic |

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 6) A(n) \_\_\_\_\_ industry has a single, unique product and blocked entry.
- A) perfectly competitive
  - B) monopolistically competitive
  - C) monopolistic
  - D) oligopolistic

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Fact

- 7) A few firms each large enough to influence market price characterizes the \_\_\_\_\_ market structure.
- A) perfect competition
  - B) monopolistic competition
  - C) oligopoly
  - D) monopoly

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 8) Which of the following is the best example of an oligopolistic industry?
- A) grocery stores
  - B) automobiles
  - C) electric power
  - D) designer clothes

Answer: B

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 9) Products may be homogeneous or differentiated in the \_\_\_\_\_ market structure.
- A) perfectly competitive
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: D

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 10) A \_\_\_\_\_ industry has a relatively small number of firms that dominate a market.
- A) Cournot
  - B) contestable
  - C) concentrated
  - D) monopolistically competitive

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 11) Oligopoly is difficult to analyze because
- A) there is no price competition among oligopolistic firms.
  - B) of the complex interdependence that usually exists among oligopolistic firms.
  - C) price is NOT a decision variable for oligopolistic firms.
  - D) there is price competition among oligopolistic firms but no competition on product quality.

Answer: B

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Fact

- 12) The four largest firms account for approximately 90% of U.S. beer sales. The U.S. beer industry would be best classified as a(n)
- A) perfectly competitive industry.
  - B) monopolistically competitive industry.
  - C) oligopoly.
  - D) monopoly.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 13) In the \_\_\_\_\_ market structure, the behavior of any given firm depends on the behavior of the other firms in the industry.

- A) perfect competition
- B) monopoly
- C) monopolistic competition
- D) oligopoly

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 14) Oligopolistic firms are

- A) able to influence price only if the oligopolist's products are standardized.
- B) able to influence price only if the oligopolist's products are differentiated.
- C) able to influence price regardless of whether or not the product is differentiated or standardized by virtue of their size.
- D) unable to influence price regardless of whether or not the product is differentiated or standardized.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 15) Oligopoly's major distinguishing characteristic is that firms

- A) produce differentiated products.
- B) can influence the price of their product.
- C) enter the industry easily.
- D) are interdependent.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 16) According to the Five Forces Model, the five competitive forces that determine the level of competition and profitability in an industry are

- A) rivals, buyers, suppliers, substitutes, and potential entrants.
- B) rivals, consumers, labor, weather, and government.
- C) buyers, suppliers, government, foreign competition, and weather.
- D) rivals, government, foreign competition, labor, and weather.

Answer: A

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

17) The Five Forces Model helps illustrate the five competitive forces that determine the \_\_\_\_\_ in an industry.

- A) price and quality of output
- B) level of R&D and price of output
- C) level of competition and profitability
- D) profitability and degree of product differentiation

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

18) The share of industry output in sales or employment accounted for by the top firms is known as the \_\_\_\_\_.

- A) concentration ratio
- B) contestability ratio
- C) competitive index
- D) collusive level

Answer: A

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

19) The concentration ratio is generally calculated for \_\_\_\_\_ firms.

- A) two
- B) four
- C) ten
- D) all the firms in the industry

Answer: B

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

20) We define a market as perfectly contestable if entry into it

- A) is costless, but exit from it is costly.
- B) is costly, but exit from it is costless.
- C) and exit from it are both costly.
- D) and exit from it are both costless.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

21) Entry to and exit from a \_\_\_\_\_ market are \_\_\_\_\_.

- A) oligopolistic; costless
- B) perfectly competitive; costly
- C) perfectly contestable; costly
- D) perfectly contestable; costless

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Fact

22) In contestable markets, large oligopolistic firms end up behaving like

- A) monopolistically competitive firms.
- B) a monopoly.
- C) perfectly competitive firms.
- D) a cartel.

Answer: C

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 23) The conclusion that firms in oligopoly produce where price exceeds marginal cost is true for all models of oligopoly except the
- A) collusive oligopoly model.
  - B) kinked demand curve model.
  - C) Cournot model.
  - D) perfectly contestable market model.

Answer: D

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 24) Related to the *Economics in Practice* on page 286: Which of the forces from the Five Forces Model help explain why record labels are losing profits?
- A) substitutes
  - B) Suppliers and substitutes
  - C) Suppliers, substitutes, and buyers
  - D) Suppliers, substitutes, buyers, and potential entrants

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly: Economics in Practice

Skill: Fact

- 25) Related to the *Economics in Practice* on page 286: The way in which the music industry distributes, values, and defines its product has been significantly impacted by \_\_\_\_\_.
- A) the development of the iPod
  - B) the development of the compact disc
  - C) the artists in the industry
  - D) the oligopolistic nature of the industry

Answer: C

Diff: 1

Topic: Market Structure in an Oligopoly: Economics in Practice

Skill: Fact

## 2 True/False

- 1) The size of the firm alone is what differentiates oligopoly markets from the other three market structure types (perfect competition, monopoly, and monopolistic competition).

Answer: FALSE

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 2) In economics, the fact that the behavior of one firm depends on the behavior of other firms is the main thing that differentiates oligopoly markets from the other three market structure types (perfect competition, monopoly, and monopolistic competition).

Answer: TRUE

Diff: 2

Topic: Market Structure in an Oligopoly

Skill: Definition

- 3) Oligopolists compete on price but not quality.

Answer: FALSE

Diff: 1

Topic: Market Structure in an Oligopoly

Skill: Definition

- 4) Oligopolists have market power.  
Answer: TRUE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Definition
- 5) Traditionally, the music production industry has competed vigorously on price.  
Answer: FALSE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Fact
- 6) Traditionally, the stent industry has competed vigorously on R&D but not price.  
Answer: TRUE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Fact
- 7) Traditionally, the airline industry has competed vigorously on price.  
Answer: TRUE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Fact
- 8) The more homogeneous the products produced by oligopolists, the more their behavior will resemble that of the monopolist.  
Answer: TRUE  
Diff: 2  
Topic: Market Structure in an Oligopoly  
Skill: Conceptual
- 9) Markets in which entry and exit are costly are known as contestable markets.  
Answer: FALSE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Definition
- 10) The Five Forces Model illustrates the forces that determine the level of product differentiation and price competition in an industry.  
Answer: FALSE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Definition
- 11) The concentration ratio of an industry is an indicator of the size distribution of firms.  
Answer: TRUE  
Diff: 1  
Topic: Market Structure in an Oligopoly  
Skill: Definition



## 14.2 Oligopoly Models

### 1 Multiple Choice

1) An oligopolistic model in which firms produce exactly the same results as would exist if a monopolist controlled the entire industry is called the \_\_\_\_\_ model.

- A) Cournot  
B) price leadership  
C) maximin strategy  
D) collusive

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Definition

Refer to the information provided in Figure 14.7 below to answer the questions that follow.

Demand and cost conditions for the Chewing Gum Industry

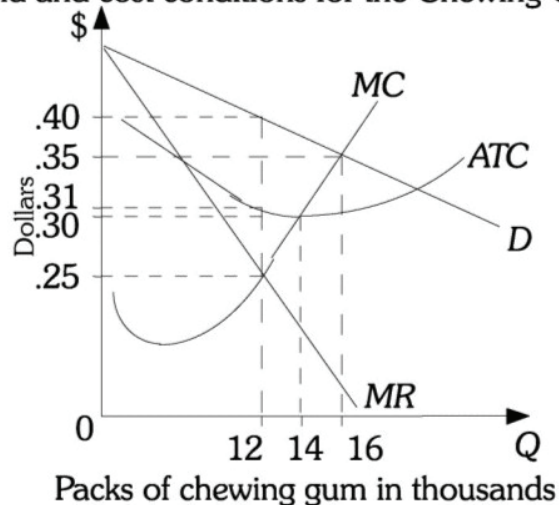


Figure 14.7

2) Refer to Figure 14.7. Six firms that produce chewing gum form a cartel. The cartel faces the market demand curve given by  $D$ . To maximize profits, the cartel should produce \_\_\_\_\_ packs of chewing gum and the price should be \_\_\_\_\_.

- A) 12,000; \$.25  
B) 12,000; \$.40  
C) 14,000; \$.30  
D) 16,000; \$.35

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 3) Refer to Figure 14.7. Six chewing gum producing firms form a cartel. The firms have identical cost structures. If the cartel produces the profit maximizing output level, each firm should produce
- A) 2,000 packs of chewing gum.
  - B) 6,000 packs of chewing gum.
  - C) 12,000 packs of chewing gum.
  - D) indeterminate output levels from this information.

Answer: A

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 4) Refer to Figure 14.7. Firms form a cartel that maximizes profits. The profits are
- A) \$0.
  - B) \$1,080.
  - C) \$1,800.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

AACSB: Analytic Skills

- 5) A colluding oligopoly will face market demand and produce up until the point at which
- A) price and marginal cost are equal and price will be set equal to marginal cost.
  - B) marginal revenue and marginal cost are equal and price will be set above marginal cost.
  - C) price and marginal revenue are equal and price will be set below marginal cost.
  - D) marginal revenue and marginal cost are equal and price will be set below marginal cost.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

- 6) Assume that oligopolistic firms collude by setting price and output to maximize total industry profit. If the government forces the oligopolists to stop colluding, they will \_\_\_\_\_ the price charged and \_\_\_\_\_ the total output produced.
- A) increase; increase
  - B) increase; decrease
  - C) decrease; increase
  - D) decrease; decrease

Answer: C

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

- 7) A group of firms explicitly colluding to make price and output decisions is called
- A) a concentrated industry.
  - B) an oligopoly.
  - C) a cartel.
  - D) price leadership.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

- 8) In an oligopolistic industry, the price firms charge and the quantity they produce would be the same as if the industry was a monopoly if
- A) the market is contestable.
  - B) the oligopolists behave as Cournot assumed.
  - C) one of the oligopolists acts as a dominant firm price leader.
  - D) the oligopolists collude.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 9) You read that 25 firms that grow and export peanuts to the United States decide to form a cartel. The cartel aims to raise the price of peanuts and reduce output to increase profits for the peanut growers. You predict that this cartel will probably
- A) not be successful because the number of firms is unmanageable and there are a number of good substitutes for peanuts.
  - B) not be successful because there are too few firms that are trying to organize the cartel.
  - C) be successful because the demand for peanuts is very elastic.
  - D) be successful because it will be very easy to enforce the rules among only 25 firms.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 10) A price-and-quantity-fixing agreement is known as
- A) game theory.
  - B) collusion.
  - C) price concentration.
  - D) price leadership.

Answer: B

Diff: 2

Topic: Oligopoly Models

Skill: Definition

- 11) \_\_\_\_\_ occurs when price- and quantity-fixing agreements among producers are implicit.
- A) Tacit collusion
  - B) A Cournot model
  - C) A price-leadership model
  - D) A monopoly

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 12) Tacit collusion
- A) is legal under the U.S. antitrust laws.
  - B) occurs when firms engage in formal agreements to reduce output and increase prices in their industry.
  - C) is more likely to be successful in increasing industry profits when there are a few, similar firms in the industry.
  - D) is more likely to effectively raise prices in the industry when demand is elastic.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

- 13) A weakness of the Cournot model is that
- A) it assumes that firms' actions are not interdependent.
  - B) it cannot explain how firms initially set price and quantity.
  - C) the pricing strategies that firms use are too complex.
  - D) it assumes that each firm doesn't anticipate the moves of its competition.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 14) When a new firm begins production in the Cournot model, it assumes its demand curve is
- A) the market demand less the amount the other firm is selling.
  - B) the market demand plus the amount the other firm is selling.
  - C) the same as the competing firm's demand curve.
  - D) one-half of the competing firm's demand curve.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 15) Which of the following is NOT an assumption of the Cournot model?
- A) There are two firms in an industry.
  - B) Each firm takes the output of the other firm as given.
  - C) The firms behave so as to maximize their profits.
  - D) If the first firm cuts price, the second firm will follow and if the first raises price, the second will not follow.

Answer: D

Diff: 2

Topic: Oligopoly Models

Skill: Fact

- 16) In the Cournot model the final level of output falls between the output that would prevail if the market were organized \_\_\_\_\_ and the output that would be set by a \_\_\_\_\_.
- A) competitively; monopoly
  - B) oligopolistically; monopoly
  - C) monopolistically; cartel
  - D) monopolistically competitive; cartel

Answer: A

Diff: 2

Topic: Oligopoly Models

Skill: Conceptual

- 17) A two firm oligopoly is known as a \_\_\_\_\_ .
- A) duopoly
  - B) cartel
  - C) monopoly
  - D) contestable market

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Definition

18) In the Cournot model, each firm's \_\_\_\_\_ shows the firm's optimal, profit-maximizing output as it depends on its rival's output.

- A) price leadership decision
- B) reaction function
- C) collusive response
- D) dominant strategy

Answer: B

Diff: 1

Topic: Oligopoly Models

Skill: Definition

19) The demand curve facing a dominant firm in the price leadership model is derived by subtracting the

- A) amount supplied by the smaller firms from market demand.
- B) amount supplied by the smaller firms from market supply.
- C) amount demanded by customers of the smaller firms from market supply.
- D) dominant firm's marginal cost curve from the industry's supply curve.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

20) An oligopoly with a dominant price leader will produce an output level that is \_\_\_\_\_ than the output level that would prevail if the industry were a monopoly and sells it at a price that is \_\_\_\_\_ than the price that would prevail if the industry were a monopoly.

- A) higher; higher
- B) higher; lower
- C) lower; lower
- D) lower; higher

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

21) An oligopoly with a dominant price leader will produce a level of output

- A) equal to what a monopolist would choose in the same industry.
- B) between that which would prevail under competition and that which a monopolist would choose in the same industry.
- C) between that which would prevail under competition and that which a monopolistic competitor would choose in the same industry.
- D) that would prevail under competition.

Answer: B

Diff: 3

Topic: Oligopoly Models

Skill: Conceptual

22) A form of oligopoly in which a dominant firm sets the price and all smaller firms in the industry follow the dominant firm's pricing policy is called

- A) the Cournot model.
- B) the contestable markets model.
- C) a cartel.
- D) the price-leadership model.

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 23) The price-leadership model does NOT assume the
- A) demand elasticity in response to an increase in price is different from the demand elasticity in response to a price cut.
  - B) industry is made up of one large firm and a number of smaller, competitive firms.
  - C) dominant firm maximizes profit.
  - D) dominant firm allows the smaller firms to sell all they want at the price the leader has set.

Answer: A

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 24) \_\_\_\_\_ occurs when a large, powerful firm drives smaller firms out of the market by temporarily selling at an artificially low price.
- A) A dominant strategy
  - B) A prisoner's dilemma
  - C) A maximin strategy
  - D) Predatory pricing

Answer: D

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 25) Predatory pricing is
- A) often effective and a relatively inexpensive means of eliminating competition.
  - B) legal under the U.S. antitrust laws.
  - C) the practice by which a large, powerful firm attempts to drive its competitors out of the market by temporarily setting an artificially low price.
  - D) generally more effective when barriers to entry exist.

Answer: C

Diff: 2

Topic: Oligopoly Models

Skill: Definition

## 2 True/False

- 1) An oligopoly with a dominant price leader will produce a level of output between that which would prevail under competition and that which a monopolist would choose in the same industry.

Answer: TRUE

Diff: 1

Topic: Oligopoly Models

Skill: Fact

- 2) Cartels, tacit collusion, and predatory pricing are all illegal under U.S. antitrust laws.

Answer: TRUE

Diff: 1

Topic: Oligopoly Models

Skill: Fact

3) Output in a Cournot duopoly is at a level between that in perfect competition and monopolistic competition.

Answer: FALSE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

4) The Cournot model assumes that the firms take their competitors output as fixed.

Answer: TRUE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Fact*

5) Cartels are more successful when members play by the rules and the industry faces an inelastic demand.

Answer: FALSE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

6) Under the collusion model, the outcome in an oligopoly is the same as a monopoly.

Answer: TRUE

*Diff: 1*

*Topic: Oligopoly Models*

*Skill: Conceptual*

## 14.3 Game Theory

### 1 Multiple Choice

Refer to the information provided in Table 14.1 below to answer the question that follows.

**Table 14.1**  
**B's Strategy**

		Raise Price	Don't Raise Price
A's Strategy	Raise Price	A's profit \$3,000 B's profit \$3,000	A's profit \$10,000 B's profit \$15,000
	Don't Raise Price	A's profit \$15,000 B's profit \$10,000	A's profit \$5,000 B's profit \$5,000

- 1) Refer to Table 14.1. Firm A's optimal strategy is
- A) to not raise the price of its product.
  - B) to raise the price of its product.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: C

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 2) Refer to Table 14.1. The Nash equilibrium in the game is \_\_\_\_\_.
- A) (Raise Price, Don't Raise Price)
  - B) (Don't Raise Price, Raise Price)
  - C) (Don't Raise Price, Don't Raise Price)
  - D) Both (A) and (B) are correct.

Answer: D

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 3) Refer to Table 14.1. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Raise Price, Don't Raise Price)
  - B) (Raise Price, Raise Price)
  - C) (Don't Raise Price, Raise Price)
  - D) (Don't Raise Price, Don't Raise Price)

Answer: D

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills



Refer to the information provided in Table 14.2 below to answer the question that follows.

		<b>Advertise</b>	<b>Don't Advertise</b>
<b>A's Strategy</b>	Advertise	A's profit \$100 million B's profit \$100 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$75 million
	Advertise	B's profit \$200 million	B's profit \$75 million
	Don't	A's profit \$50 million	A's profit \$75 million

- 4) Refer to Table 14.2. Firm A's dominant strategy is
- A) to advertise.
  - B) to not advertise.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 5) Refer to Table 14.2. What is the Nash equilibrium in the game?
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 6) Refer to Table 14.2. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Table 14.3 below to answer the question that follows.

**Table 14.3**  
**B's Strategy**

		Advertise	Don't Advertise
A's Strategy	Advertise	A's profit \$75 million B's profit \$75 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$100 million
	Advertise	B's profit \$200 million	B's profit \$100 million
	Don't		

- 7) Refer to Table 14.3. Firm A's dominant strategy is
- A) to advertise.
  - B) to not advertise.
  - C) dependent on what Firm B does.
  - D) indeterminate from this information, as no information is provided on Firm A's risk preference.

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 8) Refer to Table 14.3. What is the Nash equilibrium in the game?
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 9) Refer to Table 14.3. If both firms follow a maximin strategy, the equilibrium in the game is \_\_\_\_\_.
- A) (Advertise, Advertise)
  - B) (Don't Advertise, Don't Advertise)
  - C) (Don't Advertise, Advertise)
  - D) (Advertise, don't advertise)

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

- 10) Refer to Table 14.3. The result of this game is known as a \_\_\_\_\_.
- A) prisoner's dilemma
  - B) collusive outcome
  - C) repeated strategy
  - D) tit-for-tat outcome

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 11) Refer to Table 14.3. The result of this game is a prisoner's dilemma. In which of the following cases is it most likely that the firms will be able to overcome the prisoner's dilemma?
- A) repeated play
  - B) a single interaction
  - C) when both firms follow a maximin strategy
  - D) government intervention

Answer: A

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 12) The prisoner's dilemma game involves \_\_\_\_\_ players each with \_\_\_\_\_ strategies.
- A) two; two
  - B) two; three
  - C) three; two
  - D) three; three

Answer: A

Diff: 1

Topic: Game Theory

Skill: Fact

- 13) A \_\_\_\_\_ occurs if all players in a game play their best strategies given what their competitors do.
- A) dominant strategy
  - B) Nash equilibrium
  - C) prisoner's dilemma
  - D) tit-for-tat strategy

Answer: B

Diff: 3

Topic: Game Theory

Skill: Conceptual

- 14) A player chooses a maximin strategy to \_\_\_\_\_ gain the player can earn.
- A) minimize the minimum
  - B) maximize the maximum
  - C) maximize the minimum
  - D) minimize the maximum

Answer: C

Diff: 1

Topic: Game Theory

Skill: Fact

- 15) \_\_\_\_\_ is a repeated game strategy in which a player responds in kind to an opponent's play.
- A) Maximin
  - B) Tit-for-tat
  - C) Prisoner's dilemma
  - D) Price leadership

Answer: B

Diff: 1

Topic: Game Theory

Skill: Definition

- 16) Related to the *Economics in Practice* on page 296: From a game theoretic perspective, how would the California law allow car rental companies to fix prices?
- A) The law made it legal for the car rental firms to collude in their pricing.
  - B) The law allowed the firms to increase their rental rates and thus the firms were able to escape from the prisoner's dilemma in which they charged lower rates than would maximize their profits.
  - C) The law increased the minimum that firms could charge and thus the profit outcome from a maximin pricing strategy increased.
  - D) The law enabled rental car companies to change their advertising and thus mislead consumers as to the rental rates.

Answer: B

Diff: 2

Topic: *Game Theory; Economics in Practice*

Skill: *Fact*

## 2 True/False

- 1) Game theory enables economists to fully understand and predict the behavior of oligopolistic industries with more than two firms.

Answer: FALSE

Diff: 2

Topic: *Game Theory*

Skill: *Definition*

- 2) Firms are more likely to avoid a prisoner's dilemma when they interact repeatedly than when they rarely interact.

Answer: TRUE

Diff: 1

Topic: *Game Theory*

Skill: *Conceptual*

- 3) A maximin strategy will maximize the maximum payoff that can be earned.

Answer: FALSE

Diff: 1

Topic: *Game Theory*

Skill: *Definition*

- 4) When all players play their best strategy regardless of what their competitors are doing, they are following their dominant strategy.

Answer: FALSE

Diff: 1

Topic: *Game Theory*

Skill: *Definition*

- 5) Game theory was first developed by John Nash.

Answer: FALSE

Diff: 1

Topic: *Game Theory*

Skill: *Fact*

Refer to the information provided in Table 14.1 below to answer the question that follows.

**Table 14.1**  
**B's Strategy**

		Raise Price	Don't Raise Price
A's Strategy	Raise	A's profit \$3,000 B's profit \$3,000	A's profit \$10,000 B's profit \$15,000
	Price		
	Don't	A's profit \$15,000	A's profit \$5,000
	Raise	B's profit \$10,000	B's profit \$5,000

6) Refer to Table 14.1. Firm A does not have a dominant strategy.

Answer: TRUE

Diff: 1

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Table 14.2 below to answer the question that follows.

**Table 14.2**  
**B's Strategy**

		Advertise	Don't Advertise
A's Strategy	Advertise	A's profit \$100 million B's profit \$100 million	A's profit \$200 million B's profit \$50 million
	Don't	A's profit \$50 million	A's profit \$75 million
	Advertise	B's profit \$200 million	B's profit \$75 million
	Advertise		

7) Refer to Table 14.2. Firm A's dominant strategy is to not advertise.

Answer: FALSE

Diff: 2

Topic: Game Theory

Skill: Conceptual

AACSB: Analytic Skills

## 14.4 Oligopoly and Economic Performance

### 1 Multiple Choice

- 1) To the extent that oligopolies differentiate their products and advertise,
- A) there is overproduction from society's point of view.
  - B) they force themselves into deadlocks that waste resources.
  - C) there is the promise of new and exciting products.
  - D) they are also likely to price at marginal cost.

Answer: C

Diff: 13

Topic: Oligopoly and Economic Performance

Skill: Fact

- 2) The economist Joseph Schumpeter argued that industrial concentration, in which a relatively small number of firms control the market place, actually \_\_\_\_\_ the rate of \_\_\_\_\_.
- A) increased; market competitiveness                      B) increased; technological advance  
C) decreased; market competitiveness                      D) decreased; technological advance

Answer: B

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Fact

- 3) Which choice below is an argument that more technological change occurs in more competitive market structures?
- A) Most large, oligopolistic firms such as AT+T have done a great deal of research.  
B) Oligopolistic firms earn the profits to pay for research; competitive firms do not.  
C) Small firms are too "lean and mean" to support any research and development.  
D) The "high-tech revolution" grew out of many tiny start-up operations.

Answer: D

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual

- 4) Which model of oligopoly results in the greatest efficiency?
- A) contestable markets model                      B) Cournot model  
C) price leadership model                      D) collusion model

Answer: A

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual

- 5) Which of the following are benefits associated with the oligopoly model?
- A) allocative efficiency  
B) pricing at marginal cost  
C) product variety and innovation  
D) None of the above are benefits associated with the oligopoly model.

Answer: C

Diff: 2

Topic: Oligopoly and Economic Performance

Skill: Conceptual

## 2 True/False

- 1) All models of oligopoly involve pricing above marginal cost and output levels below the competitive level.

Answer: FALSE

Diff: 1

Topic: Oligopoly and Economic Performance

Skill: Conceptual

- 2) Industries may be oligopolistic due to economies of scale.

Answer: TRUE

Diff: 1

Topic: Oligopoly and Economic Performance

Skill: Conceptual

3) Evidence generally suggests that oligopolies inhibit technological advances.

Answer: FALSE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

4) Evidence shows that firms in more highly concentrated industries spend more on R&D than firms in less concentrated industries.

Answer: TRUE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

5) Schumpeter and Galbraith believed that concentrated industries had lower rates of technological advances than less concentrated industries.

Answer: FALSE

Diff: 1

Topic: *Oligopoly and Economic Performance*

Skill: *Fact*

## 14.5 The Role of Government

### 1 Multiple Choice

1) The Celler-Kefauver Act of 1950

A) declared every contract or conspiracy to restrain trade illegal.

B) outlawed specific monopolistic behaviors such as tying contracts, price discrimination, and unlimited mergers.

C) extended the language of the Federal Trade Commission Act to include "deceptive" as well as "unfair" competition methods.

D) extended the government's authority to ban vertical and conglomerate mergers.

Answer: D

Diff: 2

Topic: *The Role of Government*

Skill: *Fact*

2) The \_\_\_\_\_ Act extended the government's authority to ban vertical and conglomerate mergers.

A) Sherman

B) Clayton

C) Celler-Kefauver

D) Federal Trade Commission

Answer: C

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 3) The Herfindahl-Hirschman Index is
- A) calculated by summing the squared market share percentages of all firms in an industry.
  - B) calculated as the sum of the market shares of the top four firms.
  - C) calculated as the sum of the market shares for all firms in the industry.
  - D) not used by the government in considering mergers.

Answer: A

Diff: 1

Topic: *The Role of Government*

Skill: *Conceptual*

- 4) The government uses \_\_\_\_\_ figures contained in the Herfindahl-Hirschman Index (HHI) to help determine whether or not it will challenge a proposed merger.
- A) market share
  - B) firm size
  - C) barriers to entry
  - D) profit

Answer: A

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 5) If the Herfindahl-Hirschman Index of an industry is less than 1,000, then the Antitrust Division of the Justice Department
- A) will challenge any merger that would increase the index by over 100 points.
  - B) considers the industry unconcentrated.
  - C) considers the industry already concentrated.
  - D) will challenge any merger that raises the index by more than 50 points.

Answer: B

Diff: 2

Topic: *The Role of Government*

Skill: *Fact*

- 6) If there are two firms in an industry and each has 50 percent market share, then the Herfindahl-Hirschman Index equals
- A) 2,500.
  - B) 2,800.
  - C) 5,000.
  - D) 6,600.

Answer: C

Diff: 2

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 7) Economists no longer attack industry concentration with the same fervor they once did because
- A) the theory of contestable markets shows that even firms in highly concentrated industries can be pushed to produce efficiently under certain market circumstances.
  - B) the benefits of product differentiation and product competition are illusory.
  - C) small firms do the most research in the United States.
  - D) substantial economies of scale result in completely competitive market structures.

Answer: A

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*



- 8) What is the maximum value the HHI can take on?  
A) 1,000                      B) 5,000                      C) 10,000                      D) 100,000

Answer: C

Diff: 2

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 9) Industry A has two firms that each control 50 percent of the market. Industry B has three firms, where one firm controls 70 percent of the market and the other two firms control 15 percent of the market each. According to the HHI, which industry is more concentrated?  
A) Industry A  
B) Industry B  
C) Both industries are equally concentrated  
D) indeterminate from the given information.

Answer: B

Diff: 2

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

- 1) The government uses the four firm concentration ratio as a guideline to determine which proposed mergers are acceptable.

Answer: FALSE

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 2) In order to calculate the HHI, the government must first define the relevant market.

Answer: TRUE

Diff: 1

Topic: *The Role of Government*

Skill: *Conceptual*

- 3) The Celler-Kefauver Act gave the Justice Department the authority to monitor and enforce the merger provisions from the Clayton Act.

Answer: TRUE

Diff: 1

Topic: *The Role of Government*

Skill: *Fact*

- 4) An industry in which there are five firms each accounting for 20 percent of the market has an HHI of 100.

Answer: FALSE

Diff: 1

Topic: *The Role of Government*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 5) The U.S. beer industry has an HHI of 3525. If two beer producers propose a merger that would increase the industry HHI by 25 points, then the merger would be challenged.

Answer: FALSE

*Diff: 1*

*Topic: The Role of Government*

*Skill: Fact*

# Chapter 15 Monopolistic Competition

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## 15.1 Industry Characteristics

### 1 Multiple Choice

- 1) The hand soap industry is an example of a(n) \_\_\_\_\_ industry.
- A) perfectly competitive
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: C

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 2) All of the following are characteristics of monopolistically competitive industries EXCEPT:
- A) There are no barriers to entry
  - B) Strategic behavior
  - C) Product differentiation
  - D) A large number of firms

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Definition

- 3) Price is NOT a firm decision variable in a(n) \_\_\_\_\_ industry.
- A) perfectly competitively
  - B) monopolistic
  - C) monopolistically competitive
  - D) oligopolistic

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 4) There is easy entry of new firms into the \_\_\_\_\_ industries.
- A) perfectly competitive and monopolistically competitive
  - B) monopolistically competitive and oligopolistic
  - C) oligopolistic and monopolistic
  - D) monopolistic and perfectly competitive

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 5) Monopolistic competition differs from perfect competition primarily because
- A) in monopolistic competition, firms can differentiate their products.
  - B) in perfect competition, firms can differentiate their products.
  - C) in monopolistic competition, entry into the industry is blocked.
  - D) in monopolistic competition, there are relatively few barriers to entry.

Answer: A

Diff: 3

Topic: Industry Characteristics

Skill: Conceptual

- 6) In San Francisco there are many restaurants. Each restaurant is slightly different from every other restaurant. Restaurants are an example of which market structure?
- A) perfect competition
  - B) monopolistic competition
  - C) oligopoly
  - D) monopoly

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 7) The feature that distinguishes monopolistic competition from monopolies and oligopolies is that monopolistically competitive firms
- A) cannot influence market price by virtue of their size alone.
  - B) benefit from barriers to entry.
  - C) are price takers.
  - D) do not have price as a decision variable.

Answer: A

Diff: 2

Topic: Industry Characteristics

Skill: Conceptual

- 8) Monopolistically competitive firms have some market power
- A) by virtue of size alone.
  - B) by producing differentiated products.
  - C) because of barriers to entry into the industry.
  - D) because of barriers to exit from the industry.

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 9) Firms gain control over price in monopolistic competition by
- A) blocking entry of other firms into the industry.
  - B) producing a product for which there are no close substitutes.
  - C) differentiating their products.
  - D) colluding with other firms to set prices.

Answer: C

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 10) The feature that distinguishes monopolistic competition from perfect competition is that monopolistically competitive firms are
- A) large relative to the market.
  - B) price takers.
  - C) able to block the entry of other firms.
  - D) able to differentiate their products.

Answer: D

Diff: 3

Topic: Industry Characteristics

Skill: Conceptual

- 11) In a monopolistically competitive industry, firms are
- A) large relative to the total market.
  - B) small relative to the total market.
  - C) either large or small relative to the total market.
  - D) price takers.

Answer: B

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 12) Monopolistically competitive firms use a(n) \_\_\_\_\_ strategy to achieve market power.
- A) product differentiation
  - B) dominant
  - C) maximin
  - D) opportunistic behavior

Answer: A

Diff: 1

Topic: Industry Characteristics

Skill: Fact

## 2 True/False

- 1) A monopolistically competitive firm influences market price by virtue of its size.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 2) Firms in a monopolistically competitive industry are small relative to the total market.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 3) Monopolistically competitive firms are like perfectly competitive firms in that they both sell differentiated products.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Definition

- 4) The textile industry is a good example of a monopolistically competitive industry.

Answer: FALSE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

- 5) Monopolistically competitive firms engage in both price and quality competition.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Conceptual

6) Monopolistic competition is a common form of market structure in the United States.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Fact

7) Monopolistically competitive firms are unable to affect the market price of their output, but are able to control the price of their own output.

Answer: TRUE

Diff: 1

Topic: Industry Characteristics

Skill: Conceptual

## 15.2 Product Differentiation and Advertising

### 1 Multiple Choice

1) The case for advertising includes the fact that

A) it wastes society's scarce resources.

B) firms spend large sums of money to create meaningless differences among products.

C) it provides consumers with valuable information about product availability, quality, and price.

D) it creates wants that otherwise would not have existed.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

2) Monopolistically competitive firms use \_\_\_\_\_ to achieve market power.

A) their size

B) product differentiation

C) strategic behavior

D) predatory pricing

Answer: B

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Definition

3) In well functioning markets, the degree of product variety reflects all of the following

EXCEPT:

A) differences in consumers' tastes.

B) cost economies from standardization.

C) gains from network externalities.

D) gains from coordination.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 4) Product differentiation that makes the product better for some consumers and worse for others is
- A) always welfare decreasing.
  - B) vertical differentiation.
  - C) horizontal differentiation.
  - D) never undertaken by firms.

Answer: C

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 5) Product differentiation that makes the product better than a rival's product from everyone's perspective
- A) always increases welfare.
  - B) is known as vertical differentiation.
  - C) is known as horizontal differentiation.
  - D) makes the rival's product obsolete.

Answer: B

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 6) Monopolistically competitive firms can use product differentiation to do all of the following EXCEPT:
- A) gain market share.
  - B) erect barriers to entry for potential firms.
  - C) provide consumers with commitment devices.
  - D) gain complete control over the price of their product.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 7) Behavioral economics
- A) blends insights from sociology and economics.
  - B) suggests that too much variety may be welfare enhancing.
  - C) has contributed to microeconomics but not to macroeconomics.
  - D) suggest that consumers purchase health club memberships instead of paying per visit in an attempt to commit themselves to an exercise regime.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Conceptual

- 8) The Internet has had a significant influence on advertising in all of the following ways EXCEPT:
- A) The Internet allows firms to actively interact with customers.
  - B) The Internet has improved firms' ability to target specific markets.
  - C) The Internet has reduced the level and transparency of informational advertising.
  - D) The Internet has reduced spending on advertising.

Answer: C

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 9) The case for product differentiation does NOT include the assertion that
- A) products that satisfy a real demand survive.
  - B) standards of living rise with product innovation.
  - C) new products satisfy people with different preferences.
  - D) it wastes society's scarce resources.

Answer: D

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 10) The case against advertising includes the assertion that advertising
- A) causes firms to spend huge sums of money creating artificial differences among goods.
  - B) provides consumers with valuable information about product availability, quality, and price.
  - C) increases competition by decreasing barriers to entry of new firms into an industry.
  - D) ensures high quality and efficient production.

Answer: A

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Fact

- 11) All of the following EXCEPT \_\_\_\_\_ are arguments made by critics of advertising.
- A) Advertising's information content is minimal at best and deliberately deceptive at worst.
  - B) Advertising tries to change peoples' preferences and create wants that otherwise would not exist.
  - C) Advertising reduces competition by creating a barrier to entry for new firms into an industry.
  - D) Advertising can easily turn into productive competition that is often a positive sum game.

Answer: D

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

- 12) The right answer to the advertising debate is that
- A) advertising always leads to industry concentration.
  - B) advertising always leads to positive economic profits in an industry.
  - C) advertising always improves the functioning of the market.
  - D) There is no right answer.

Answer: D

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact



- 13) Related to the *Economics in Practice* on p. 308: Producers of Honest Tea stop adding sugar to their tea when the marginal utility of doing so is
- A) positive.
  - B) negative.
  - C) zero.
  - D) Indeterminate from the given information.

Answer: A

Diff: 1

Topic: Product Differentiation and Advertising: Economics in Practice

Skill: Fact

- 14) Related to the *Economics in Practice* on p. 308. Producers of Honest Tea add less sugar to their tea than the amount that would maximize consumer's total utility from sugar because
- A) the financial cost of the additional sugar is less than the additional revenue that the firm would earn.
  - B) producers are attempting to differentiate their product from the very sweet Snapple.
  - C) the marginal utility to the consumer from adding more sugar is very low (near zero) while the marginal health cost (added calories) is quite high.
  - D) producers are attempting to market their product to diabetics.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising: Economics in Practice

Skill: Fact

- 15) Related to the *Economics in Practice* on p. 312. In response to growing obesity rates, King County has
- A) required nutritional labeling for menu items in chain restaurants.
  - B) banned artificial trans fat in restaurant meals.
  - C) imposed a tax on high-fat foods.
  - D) Both (A) and (B) are correct.

Answer: C

Diff: 1

Topic: Product Differentiation and Advertising: Economics in Practice

Skill: Fact

## 2 True/False

- 1) Advertising's proponents say it functions basically to assist consumers to make informed, rational choices.

Answer: TRUE

Diff: 2

Topic: Product Differentiation and Advertising

Skill: Definition

- 2) The more significant are economies of scale in an industry, the more product variety will be observed.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

3) The more homogeneous are consumer's preferences, the less product variety will be observed.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

4) Vertical differentiation makes products better for some consumers and worse for others.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

5) One reason for selecting a section of microeconomics for which attendance is part of the grade (as opposed to one where it is not) is that it serves as a commitment device that will get you to attend class.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Conceptual

6) Behavioral economics uses insights from both psychology and economics.

Answer: TRUE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

7) Advertising serves no productive purpose and is thus welfare decreasing.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

8) Advertising provides consumers with product information and can promote competition. Thus, it is always welfare enhancing.

Answer: FALSE

Diff: 1

Topic: Product Differentiation and Advertising

Skill: Fact

## 15.3 Price and Output Determination in Monopolistic Competition

### 1 Multiple Choice

1) The demand schedule of a monopolistically competitive firm when compared to the demand schedule of a perfectly competitive firm is

A) more price elastic.

B) less price elastic.

C) perfectly price elastic.

D) perfectly price inelastic.

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

2) The demand facing a monopolistically competitive firm is \_\_\_\_\_ a monopolistic firm and \_\_\_\_\_ a perfectly competitive firm.

- A) as elastic as; less elastic than
- B) less elastic than; more elastic than
- C) more elastic than; less elastic than
- D) more elastic than; as elastic as

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

3) Unlike a monopolistic firm's product, a monopolistically competitive firm's product

- A) is homogeneous.
- B) is a unique product.
- C) has many close substitutes.
- D) has no close substitutes.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

4) A profit-maximizing firm in a monopolistically competitive market structure behaves much like a \_\_\_\_\_ firm in the short run.

- A) perfectly competitive
- B) monopolistic
- C) dominant
- D) Cournot duopolist

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

5) Little Joe's Pizzeria competes in the monopolistically competitive pizza delivery industry in a city. The firm raises its prices by 10% while all other pizzerias keep their prices the same. Which of the following is most likely to occur? Little Joe's Pizzeria will

- A) be unable to sell any pizzas because it was the only firm to raise price.
- B) lose some of its customers.
- C) increase its profits.
- D) serve an increased number of customers.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

6) A monopolistically competitive firm produces where

- A) marginal revenue equals price.
- B) its marginal revenue curve lies above its demand curve.
- C) its marginal revenue curve intersects the quantity axis.
- D) marginal revenue equals marginal cost.

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual



- 13) The Specialty Cake Store, a monopolistically competitive firm, is producing 200 decorated cakes per day and selling each cake for \$12. At that production level  $ATC$  is \$20,  $AVC$  is \$15,  $AFC$  is \$5, and both  $MR$  and  $MC$  are \$8. This firm should
- A) continue to produce 200 cakes, as price is greater than  $AFC$ .
  - B) increase output to the point where price equals marginal cost.
  - C) decrease output to the point where marginal cost equals average cost.
  - D) produce zero cakes and pay fixed costs.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 14) The Specialty Cake Store, a monopolistically competitive firm, is producing 200 decorated cakes per day and selling each cake for \$17. At that production level  $ATC$  is \$20,  $AVC$  is \$15,  $AFC$  is \$5, and both  $MR$  and  $MC$  are \$8. In the short run, this firm should
- A) continue to produce 200 cakes, as price is greater than  $AVC$ .
  - B) increase output to the point where price equals marginal cost.
  - C) decrease output to the point where price equals average total cost.
  - D) shutdown and produce zero cakes and pay fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 15) A monopolistically competitive firm
- A) can sell an infinite amount of output at the market-determined price.
  - B) must lower price to sell more output.
  - C) must raise price to sell more output.
  - D) sells a fixed amount of output regardless of price.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 16) The Do It Yourself Hardware Store is a monopolistically competitive firm. Its marginal revenue curve
- A) is identical to its demand curve.
  - B) lies below its demand curve intersecting the quantity axis at the same point at which the demand curve intersects it.
  - C) lies below its demand curve intersecting the quantity axis midway between the origin and the point at which the demand curve intersects it.
  - D) is below its demand curve if demand is elastic and above the demand curve if demand is inelastic.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 17) To maximize profit, a monopolistically competitive firm will produce where  
 A) marginal revenue equals price.                      B) price equals marginal cost.  
 C) price equals average total cost.                D) marginal revenue equals marginal cost.

Answer: D

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

Refer to the information provided in Figure 15.1 below to answer the questions that follow. Below are drawn cost curves for Dom's Barber Shop, a monopolistically competitive firm.

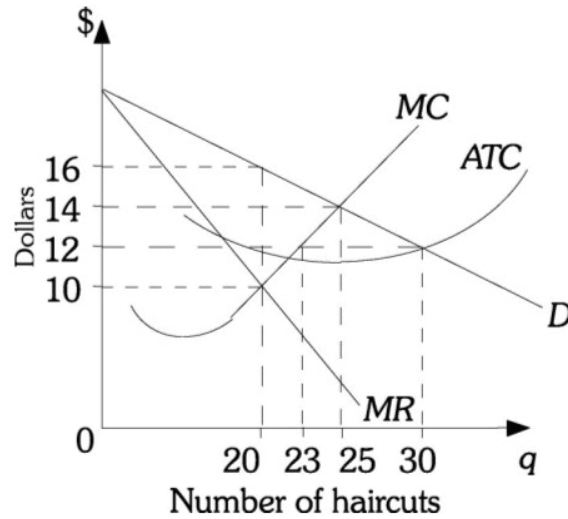


Figure 15.1

- 18) Refer to Figure 15.1. The profit-maximizing number of haircuts for Dom's Barber Shop is  
 A) 20.                                      B) 23.                                      C) 25.                                      D) 30.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 19) Refer to Figure 15.1. The profit-maximizing price for a haircut is  
 A) \$10.                                      B) \$12.                                      C) \$14.                                      D) \$16.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 20) Refer to Figure 15.1. If Dom's Barber Shop maximizes profits, it earns a profit of  
A) \$0.                                      B) \$80.                                      C) \$120.                                      D) \$320.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 21) Refer to Figure 15.1. If Dom's Barber Shop maximizes profits, its total revenue equals  
A) \$200.                                      B) \$320.                                      C) \$350.                                      D) \$360.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 22) Refer to Figure 15.1. If Dom's Barber Shop maximizes profits, its total costs are  
A) \$200.                                      B) \$240.                                      C) \$350.                                      D) \$360.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 23) Refer to Figure 15.1. From society's point of view, the efficient output level is \_\_\_\_\_ haircuts.  
A) 20                                              B) 23                                              C) 25                                              D) 30

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 24) Refer to Figure 15.1. In this industry in the long run  
A) firms will continue to earn economic profits.  
B) firms will enter until all firms earn a normal profit.  
C) product demand will decrease so that profits are decreased.  
D) the government will impose price controls to eliminate any economic profits.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual





28) Refer to Figure 15.2. If We Do Hair maximizes profits as a monopolistically competitive firm, its total revenue equals

- A) \$600.                      B) \$1,200.                      C) \$1,280.                      D) \$1,320.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

29) Refer to Figure 15.2. If We Do Hair maximizes profits as a monopolistically competitive firm, its total costs are

- A) \$660.                      B) \$800.                      C) \$960.                      D) \$1,200.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

30) Refer to Figure 15.2. From society's viewpoint, the efficient level of output is \_\_\_\_\_ perms.

- A) 40                      B) 50                      C) 60                      D) 80

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

31) Refer to Figure 15.2. In this monopolistically competitive industry in the long run

- A) firms will enter until all firms earn a normal profit.  
B) firms will continue to earn economic profits.  
C) demand for the product will decrease so that profits are decreased.  
D) the government will impose price controls to eliminate any economic profits.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

32) Mama Lena's, a frozen food producer, is a monopolistically competitive firm. The firm is currently selling frozen lasagna at a \$10 price. Mama Lena's marginal cost is \$5 and its marginal revenue is \$5. The firm should \_\_\_\_\_ to maximize profits.

- A) increase output to where price just equals marginal cost  
B) decrease output to where price just equals marginal cost  
C) continue to produce the same output level  
D) Indeterminate from the given information.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.3 below to answer the questions that follow.

Demand and cost conditions facing Gwen's Country Curtains

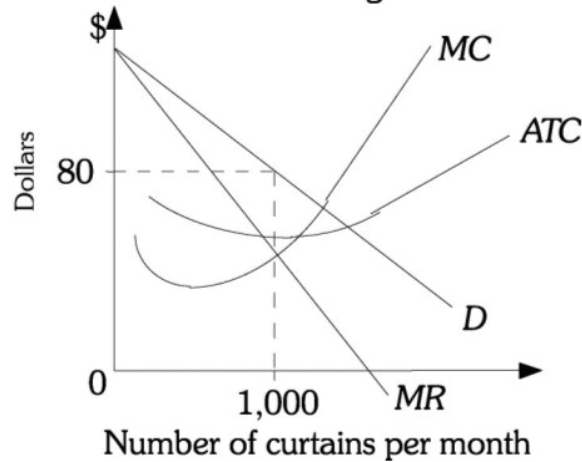


Figure 15.3

- 33) Refer to Figure 15.3. Gwen's Country Curtains is currently manufacturing and selling 1,000 pairs of curtains per month. The firm
- should reduce the number of pairs of curtains it produces and sells to maximize profit.
  - should raise the number of pairs of curtains it produces and sells to maximize profit.
  - should continue producing and selling 1,000 pairs of curtains; it is already maximizing profits.
  - could increase profits by either increasing or decreasing the number of pairs of curtains it manufactures and sells.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 34) Refer to Figure 15.3. In the long run, this monopolistic competitive firm should expect
- no changes; it will continue to make a profit.
  - some existing firms to exit the industry and the remaining firm profits to increase.
  - new firms to enter the industry until the competition eliminates all economic profits.
  - new firms to enter the industry and existing firm profits to increase.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.4 below to answer the questions that follow.

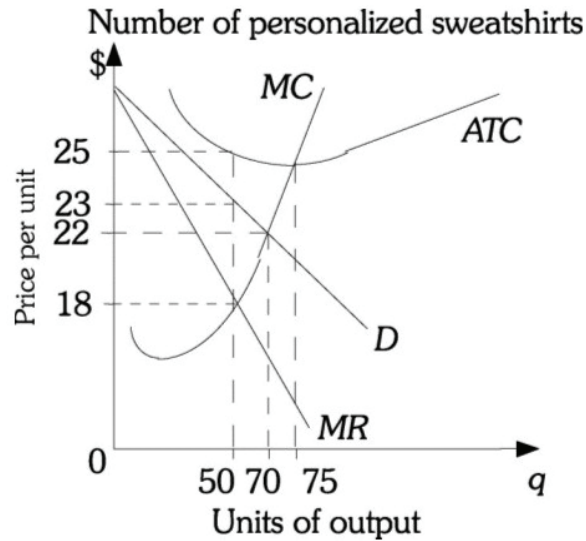


Figure 15.4

- 35) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. To maximize profits in the short run, the firm should produce \_\_\_\_\_ personalized sweatshirts.

A) 0                                      B) 50                                      C) 70                                      D) 75

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 36) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. To maximize profits in the short run, the firm should set a price of

A) \$18.                                      B) \$22.                                      C) \$23.                                      D) \$25.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 37) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$150 and is a monopolistically competitive firm. If the firm produces the profit-maximizing level of output and sells it at the profit-maximizing price, the firm's profit is

A) -\$250.                                      B) -\$150.                                      C) -\$100.                                      D) -\$50.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 38) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$75 and is a monopolistically competitive firm. To maximize profits in the short run, the firm should produce \_\_\_\_\_ personalized sweatshirts.
- A) 0                                      B) 50                                      C) 70                                      D) 75

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 39) Refer to Figure 15.4. Assume The Hand Made Shirt Shop has fixed costs of \$75 and is a monopolistically competitive firm. If the firm produces the profit-maximizing output level, its profit is
- A) -\$175.                                      B) -\$100.                                      C) -\$75.                                      D) \$0.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 40) Refer to Figure 15.4. In the long run in this monopolistically competitive industry
- A) some firms will leave the industry until the remaining firms earn a normal profit.  
B) some firms will leave the industry until the remaining firms earn positive economic profits.  
C) some firms will enter the industry and will increase the demand for the product.  
D) the government will subsidize the firms to eliminate any losses the firms incur.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 41) Refer to Figure 15.4. If the Hand Made Shirt Shop is monopolistically competitive, what is the profit-maximizing level of output for the firm?
- A) 0  
B) 50  
C) 70  
D) Indeterminate from the given information

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 42) Refer to Figure 15.4. If the Hand Made Shirt Shop is monopolistically competitive, what is the maximum level of fixed cost that would lead to the firm continuing to operate in the short run?
- A) \$100
  - B) \$1150
  - C) \$1250
  - D) The firm would continue to operate regardless of the level of fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 15.5 below to answer the questions that follow.

Demand and cost conditions facing the Custom Sweater Shop

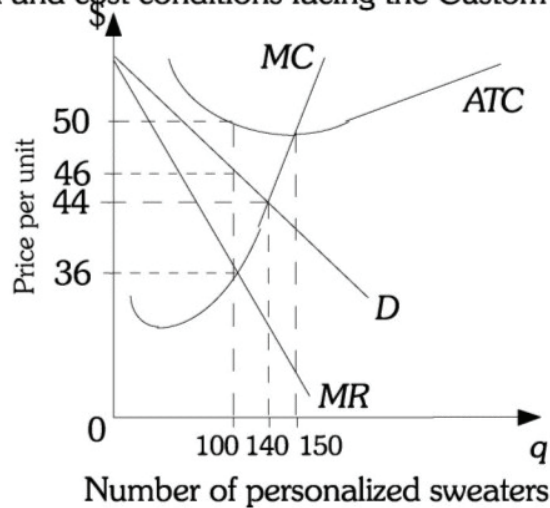


Figure 15.5

- 43) Refer to Figure 15.5. Assume The Hand Made Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. To maximize profits in the short run, the firm should produce \_\_\_\_\_ personalized sweaters.
- A) 0
  - B) 100
  - C) 140
  - D) 150

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

44) Refer to Figure 15.5. Assume The Hand Made Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. To maximize profits in the short run, the firm should set a price of

- A) \$36.                      B) \$44.                      C) \$46.                      D) \$50.

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

45) Refer to Figure 15.5. Assume The Hand Made Sweater Shop has fixed costs of \$500 and is a monopolistically competitive firm. If the firm produces the profit-maximizing level of output and sells it at the profit-maximizing price, the firm's profit is

- A) -\$500.                      B) -\$400.                      C) -\$350.                      D) -\$50.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

46) Refer to Figure 15.5. Assume The Hand Made Sweater Shop has fixed costs of \$275 and is a monopolistically competitive firm. To maximize profits in the short run, this firm should produce \_\_\_\_\_ personalized sweaters.

- A) 0                              B) 50                              C) 75                              D) 100

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

47) Refer to Figure 15.5. Assume The Hand Made Sweater Shop has fixed costs of \$275 and is a monopolistically competitive firm. If the firm produces the profit-maximizing output level, the firm's **operating** profit(loss) is

- A) -\$125.                      B) -\$100.                      C) -\$75.                      D) \$0.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

48) Refer to Figure 15.5. In the long run in this monopolistically competitive industry

- A) some firms will leave the industry until the remaining firms earn a positive economic profit.  
B) some firms will leave the industry until the remaining firms earn a normal profit.  
C) some firms will enter the industry and increase the demand for the product.  
D) the government will subsidize the firms to eliminate any losses the firms incur.

Answer: B

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 49) Refer to Figure 15.5. If the Custom Sweater Shop is monopolistically competitive, what is the profit-maximizing level of output for the firm?
- A) 0
  - B) 100
  - C) 140
  - D) Indeterminate from the given information

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 50) Refer to Figure 15.5. If the Custom Sweater Shop is monopolistically competitive, what is the maximum level of fixed cost that would lead to the firm continuing to operate in the short run?
- A) \$400
  - B) \$4600
  - C) \$5000
  - D) The firm would continue to operate regardless of the level of fixed costs.

Answer: A

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 51) If firms in a monopolistically competitive industry are incurring losses, in the long run
- A) investment in this industry will increase to reduce production costs.
  - B) firms will leave this industry until the remaining firms are earning a normal profit.
  - C) firms will leave this industry until the firms that remain are earning a positive economic profit.
  - D) the government will subsidize the losses incurred by these firms so as to maintain competition in the industry.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 52) As new firms enter a monopolistically competitive industry, the demand curve facing each existing firm will
- A) shift to the left and become more elastic because there are now more substitutes for its product.
  - B) shift to the left and become less elastic because there are now more substitutes for its product.
  - C) not be affected because the new firms do not produce a perfect substitute for its product.
  - D) shift to the left, but the elasticity of demand will not be affected.

Answer: A

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 53) If firms in a monopolistically competitive industry are earning economic profits, then in the long run
- A) these firms can continue earning economic profits because entry into the industry is blocked.
  - B) new firms producing close substitutes will enter the industry and the entry will continue until economic profits are eliminated.
  - C) new firms producing the exact same product will enter the industry and the entry will continue until economic profits are eliminated.
  - D) the government will most likely regulate firms in this industry to reduce these economic profits.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 54) As new firms enter a monopolistically competitive industry
- A) the demand and marginal revenue curves facing each firm begin to shift to the right.
  - B) the demand curve facing each firm begins to shift to the right but the marginal revenue curve remains constant.
  - C) the demand and marginal revenue curves facing each firm begin to shift to the left.
  - D) the demand curve facing each firm shifts to the left, but the marginal revenue curve remains constant.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 55) For a monopolistically competitive firm in long-run equilibrium
- A) the demand curve must intersect the average total cost curve at the *ATC* curve minimum.
  - B) the demand curve must be tangent to the average total cost curve at the *ATC* curve minimum.
  - C) at the profit-maximizing quantity, the demand curve must intersect the average total cost curve.
  - D) at the profit-maximizing quantity, the demand curve must be tangent to the average total cost curve.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual



Refer to the information provided in Figure 15.6 below to answer the questions that follow.

Demand and cost conditions facing Trollio's T-shirts

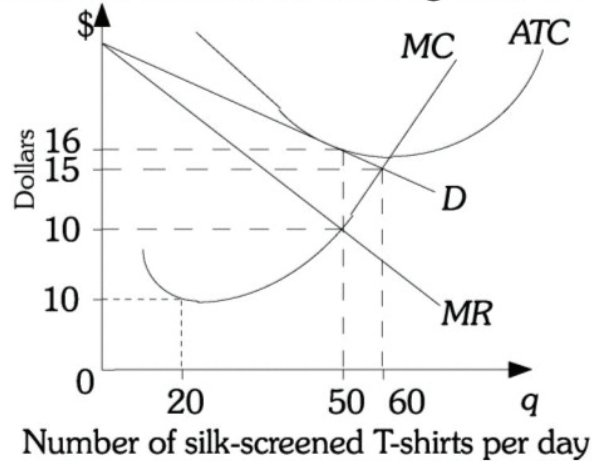


Figure 15.6

- 56) Refer to Figure 15.6. If Trollio's T-shirts is in long-run equilibrium it is producing \_\_\_\_\_ silk-screened T-shirts and selling each T-shirt at a price of \_\_\_\_\_.
- A) 20; \$5                      B) 50; \$10                      C) 50; \$16                      D) 60; \$15

Answer: C

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 57) Refer to Figure 15.6. If Trollio's T-shirts is producing 50 silk-screened T-shirts and selling each T-shirt at \$16, then in the long run this firm should
- A) exit the industry, as it is earning a zero economic profit.  
 B) increase output to 60 silk-screened T-shirts.  
 C) reduce output to try to increase profits.  
 D) continue to produce 50 silk-screened T-shirts and sell each T-shirt for \$16.

Answer: D

Diff: 3

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

AACSB: Analytic Skills

- 58) In long-run monopolistic competitive equilibrium, there can be
- A) economic profits but not losses.                      B) economic profits or losses.  
 C) no economic profits but losses.                      D) neither economic profits nor losses.

Answer: D

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

59) Monopolistically competitive firms prevent the efficient use of resources because in long-run equilibrium

- A) price is less than marginal cost.
- B) price is greater than marginal cost.
- C) price is equal to marginal cost.
- D) marginal cost is greater than average total cost.

Answer: B

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

60) When monopolistically competitive firms earn \_\_\_\_\_ profits, other firms \_\_\_\_\_ the industry in the long run.

- A) positive economic; enter
- B) normal; enter
- C) negative economic; enter
- D) normal; exit

Answer: A

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

61) Firms will \_\_\_\_\_ a monopolistically competitive market until \_\_\_\_\_ are eliminated.

- A) enter; losses
- B) enter; profits
- C) exit; short-run profits
- D) exit; long-run profits

Answer: B

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

62) When  $MR = MC$  and  $P = ATC$  for a monopolistically competitive firm, the firm is in

- A) short-run disequilibrium.
- B) long-run disequilibrium.
- C) long-run equilibrium.
- D) neither short-run nor long-run equilibrium.

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

63) In long-run equilibrium for a monopolistically competitive firm, the firm's demand curve is \_\_\_\_\_ its average total cost curve.

- A) above
- B) below
- C) just tangent to
- D) either above or below

Answer: C

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 64) When some firms exit a monopolistically competitive industry, the demand curves of the remaining firms in the industry
- A) do not change.
  - B) shift to the left.
  - C) shift downward.
  - D) shift to the right.

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 65) In long-run equilibrium for a monopolistically competitive industry \_\_\_\_\_ firms earn \_\_\_\_\_ economic profits.
- A) some; positive
  - B) some; negative
  - C) no; normal
  - D) no; positive or negative

Answer: D

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

## 2 True/False

- 1) A monopolistically competitive firm maximizes profit by producing where marginal revenue equals marginal cost.

Answer: TRUE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 2) Since a monopolistically competitive firm has a monopoly over the particular product it produces, the monopoly guarantees the firm a profit in the long run.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Fact

- 3) In general, the demand curve facing the monopolistically competitive firm is more elastic than the demand curve facing the monopoly.

Answer: TRUE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

- 4) In general, the demand curve facing the monopolistically competitive firm is more elastic than the demand curve facing the perfectly competitive firm.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

5) Average total cost is minimized in long run equilibrium for a monopolistically competitive firm.

Answer: FALSE

Diff: 1

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

6) If a monopolistically competitive firm is producing an output level where its marginal cost is equal to its marginal revenue but it still earns a loss, then it should always shutdown in the short run.

Answer: FALSE

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

7) In long run equilibrium for a monopolistically competitive firm, economic profit equals zero and thus the outcome is efficient.

Answer: FALSE

Diff: 2

Topic: Price and Output Determination in Monopolistic Competition

Skill: Conceptual

## 15.4 Economic Efficiency and Resource Allocation

### 1 Multiple Choice

1) Compared to a perfectly competitive firm having the same cost curves, a monopolistically competitive firm \_\_\_\_\_ output and \_\_\_\_\_ prices.

A) reduces; raises

B) raises; reduces

C) reduces; reduces

D) raises; raises

Answer: A

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

2) We know that monopolistically competitive firms prevent the efficient use of resources because they produce where

A)  $P > ATC$ .

B)  $P > MC$ .

C)  $MR > P$ .

D)  $P = MC$ .

Answer: B

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 3) Monopolistically competitive firms in long-run equilibrium produce at \_\_\_\_\_ the optimal scale.
- A) more than
  - B) exactly
  - C) less than
  - D) sometimes more and sometimes less than

Answer: C

Diff: 1

Topic: Economic Efficiency and Resource Allocation

Skill: Fact

- 4) Monopolies can earn positive economic profits in the long run while monopolistically competitive firms cannot due to
- A) economies of scale in monopolies but not in monopolistic competition.
  - B) barriers to entry in monopoly but not in monopolistic competition.
  - C) market power of monopolies while monopolistically competitive firms have no market power.
  - D) the less elastic demand faced by monopolies as compared to monopolistically competitive firms.

Answer: B

Diff: 1

Topic: Economic Efficiency and Resource Allocation

Skill: Fact

## 2 True/False

- 1) Monopolistically competitive firms fail to fully realize their economies of scale.

Answer: TRUE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 2) Monopolistically competitive firms experience "excess capacity" in the short run but not in the long run.

Answer: FALSE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

- 3) The long run equilibrium for a monopolistically competitive firm is efficient because its profits equal zero in the long run.

Answer: FALSE

Diff: 2

Topic: Economic Efficiency and Resource Allocation

Skill: Conceptual

# Chapter 16 Externalities, Public Goods, Imperfect Information, and Social Choice

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## 16.1 Externalities and Environmental Economies

### 1 Multiple Choice

- 1) The field of environmental economics is concerned with
- A) externalities.
  - B) public goods.
  - C) government inefficiency.
  - D) economies of scale.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 2) Traffic congestion is an example of a(n)
- A) economy of scale.
  - B) externality.
  - C) public good.
  - D) government failure.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 3) LoJacks convey \_\_\_\_\_ to third parties.
- A) positive externalities
  - B) negative externalities
  - C) economies of scale
  - D) public goods

Answer: A

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Fact

- 4) A cost or benefit resulting from some activity that is imposed or bestowed on third parties is
- A) a market failure.
  - B) an externality.
  - C) a public good.
  - D) logrolling.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economies

Skill: Definition

- 5) An externality is
- A) a cost or benefit resulting from some activity or transaction that is imposed or bestowed on parties outside the activity or transaction.
  - B) the total cost to society of producing an additional unit of a good or service.
  - C) the amount a consumer pays to consume an additional amount of a particular good.
  - D) a problem intrinsic to public goods: The good or service is so costly that its provision generally does not depend on whether or not any single person pays.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 6) An example of \_\_\_\_\_ is a steel mill generating air pollution.
- A) a positive production externality
  - B) a negative production externality
  - C) a public good
  - D) the free-rider problem

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 7) A well-maintained house and yard is an example of
- A) a positive externality.
  - B) a negative externality.
  - C) a public good.
  - D) logrolling.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 8) Assuming no externalities exist, if a good's price is less than its marginal cost, then the benefits consumers derive are \_\_\_\_\_ than the cost of resources needed to produce it and \_\_\_\_\_ should be produced.
- A) greater; less
  - B) greater; more
  - C) less; less
  - D) less; more

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 9) Assuming there are no externalities, if a firm produces an output level where the benefits to consumers exceed the cost to suppliers to produce it, then price is
- A) equal to marginal cost.
  - B) greater than marginal cost.
  - C) less than marginal cost.
  - D) less than marginal revenue.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 10) Assuming there are no externalities, if a firm produces an output level where the benefits to consumers are less than the cost to suppliers to produce it, then price is
- A) equal to marginal cost.
  - B) greater than marginal cost.
  - C) less than marginal cost.
  - D) less than marginal revenue.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the information provided in Figure 16.1 below to answer the questions that follow.

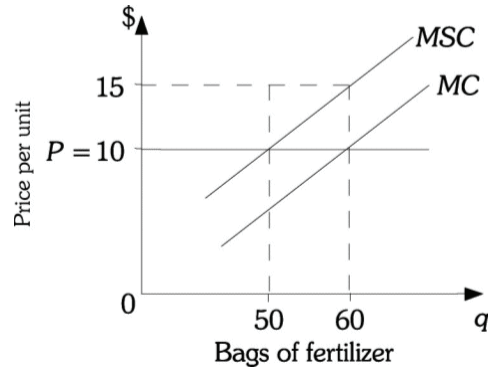


Figure 16.1

- 11) Refer to Figure 16.1. The efficient amount of fertilizer is
- A) zero because any level of production involves an external cost.
  - B) 50 bags.
  - C) 60 bags.
  - D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 16.1. Absent government intervention, how much fertilizer will be produced?
- A) zero because any level of production involves an external cost.
  - B) 50 bags.
  - C) 60 bags.
  - D) indeterminate from this information.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills



13) Refer to Figure 16.1. What is the total damage imposed as a result of producing the market (unregulated) level of fertilizer?

- A) \$250                      B) \$300                      C) \$500                      D) \$600

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

14) Refer to Figure 16.1. What is the total damage imposed as a result of producing the efficient level of fertilizer?

- A) \$0                              B) \$250                      C) \$300                      D) \$500

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

15) Refer to Figure 16.1. The marginal damage cost imposed as a result of producing fertilizer is

- A) \$5.00 per bag of fertilizer.                      B) \$10.00 per bag of fertilizer.  
C) \$15.00 per bag of fertilizer.                      D) indeterminate from this information.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

16) Refer to Figure 16.1. To force this firm to produce the efficient level of output, the government should impose a tax of

- A) \$5.00 per bag of fertilizer.  
B) \$10.00 per bag of fertilizer.  
C) \$15.00 per bag of fertilizer.  
D) an amount that is indeterminate from this information.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

Refer to the information provided in Figure 16.2 below to answer the questions that follow.

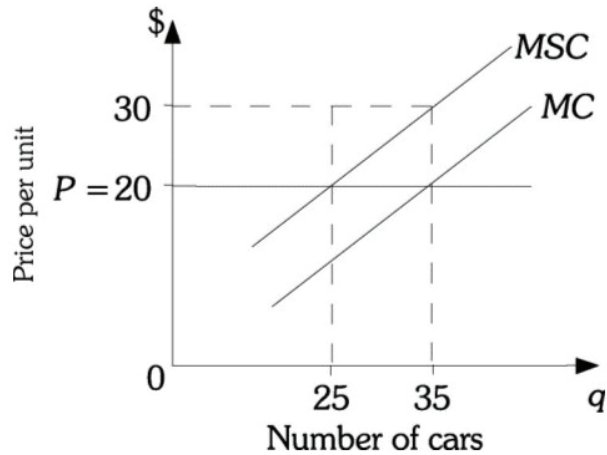


Figure 16.2

17) Refer to Figure 16.2. The marginal damage cost imposed as a result of producing automobiles is

- A) \$5.00 per car.
- B) \$10.00 per car.
- C) \$15.00 per car.
- D) indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

18) Refer to Figure 16.2. To force this firm to produce the efficient level of output, the government should impose a tax of

- A) \$5.00 per car.
- B) \$10.00 per car.
- C) \$15.00 per car.
- D) an amount that is indeterminate from this information.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

19) Refer to Figure 16.2. The efficient amount of cars is

- A) 25.
- B) 35.
- C) zero because any production results in an external cost.
- D) indeterminate from the information given.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

20) Refer to Figure 16.2. The unregulated (market) amount of cars is

- A) 25.
- B) 35.
- C) zero because any production results in an external cost.
- D) indeterminate from the information given.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

21) Refer to Figure 16.2. What is the total damage imposed as a result of producing the market (unregulated) level of fertilizer?

- A) \$250
- B) \$350
- C) \$500
- D) \$700

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

22) Refer to Figure 16.2. What is the total damage imposed as a result of producing the efficient level of fertilizer?

- A) \$0
- B) \$250
- C) \$350
- D) \$500

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

23) The total cost to society of producing an additional unit of a good or service is the marginal \_\_\_\_\_ cost.

- A) external
- B) damage
- C) social
- D) private

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Definition

24) If a profit-maximizing competitive firm does not have to compensate society for a negative externality, the firm will choose to produce where

- A) price equals marginal cost.
- B) price equals marginal social cost.
- C) marginal cost equals marginal social cost.
- D) marginal revenue equals marginal social cost.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact



29) Refer to Table 16.1. his salt processing firm is perfectly competitive and IS forced to take damage costs into account. If the market price of the product is \$30 a ton and the firm behaves as a profit-maximizer, how much total damage will result?

- A) \$0                                      B) \$20                                      C) \$30                                      D) \$50

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

30) Refer to Table 16.1. To force this salt processing firm to produce the efficient level of output, the government should impose a tax

- A) of \$10 per ton.  
 B) of \$12.50 per ton.  
 C) of \$40 per ton.  
 D) that depends on the level of output that the firm produces to maximize profits.

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

Refer to the data provided in Table 16.2 below to answer the following questions.

Table 16.2

Tons of Glass	MC	MSC
1	20	40
2	30	50
3	40	60
4	50	70
5	60	80

31) Refer to Table 16.2. The marginal damage costs imposed on society from processing 4 tons of glass are

- A) \$2.50 per ton of glass.                                      B) \$10 per ton of glass.  
 C) \$20 per ton of glass.                                      D) indeterminate from this output.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

32) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is NOT forced to take damage costs into account. If the market price of glass is \$50 a ton, the firm will produce \_\_\_\_\_ tons of glass.

- A) 0                                      B) 2                                      C) 3                                      D) 4

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

33) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and is NOT forced to take damage costs into account. If the market price of glass is \$50 a ton and the firm behaves as a profit-maximizer, then total damage will be \_\_\_\_\_ .

- A) \$40                      B) \$80                      C) \$220                      D) \$1000

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

34) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and IS forced to take damage costs into account. If the market price of the product is \$50, the firm will produce \_\_\_\_\_ tons of glass.

- A) 0                      B) 2                      C) 3                      D) 4

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

35) Refer to Table 16.2. This glass-recycling firm is perfectly competitive and IS forced to take damage costs into account. If the market price of the product is \$50 a ton and the firm behaves as a profit-maximizer, then total damage will be \_\_\_\_\_ .

- A) \$0                      B) \$40                      C) \$50                      D) \$90

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

36) Refer to Table 16.2. To force this glass-recycling firm to produce the efficient level of output, the government should impose a tax

- A) of \$10 per ton.  
B) of \$12.50 per ton.  
C) of \$20 per ton.  
D) that depends on the level of output that the firm produces to maximize profits.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

37) If firms do NOT account for external costs of production, then marginal

- A) cost equals marginal social cost.  
B) cost is less than marginal social cost.  
C) cost is greater than marginal social cost.  
D) social cost is zero.

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

38) If firms do NOT have to account for external costs in production, then they will produce an output level that is \_\_\_\_\_ the efficient level.

A) at

B) below

C) above

D) either above or below

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

39) If perfectly competitive firms do NOT account for external costs of production, then at the equilibrium level of output

A)  $P = MC = MSC$ .

B)  $P = MC$  and  $P < MSC$ .

C)  $P = MC$  and  $P > MSC$ .

D)  $P > MC$  and  $P = MSC$ .

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

40) We assume the marginal benefit of consumption \_\_\_\_\_ as we consume more units of a good.

A) remains constant

B) increases

C) decreases

D) could either increase or decrease

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

Refer to the information provided in Figure 16.3 below to answer the questions that follow.

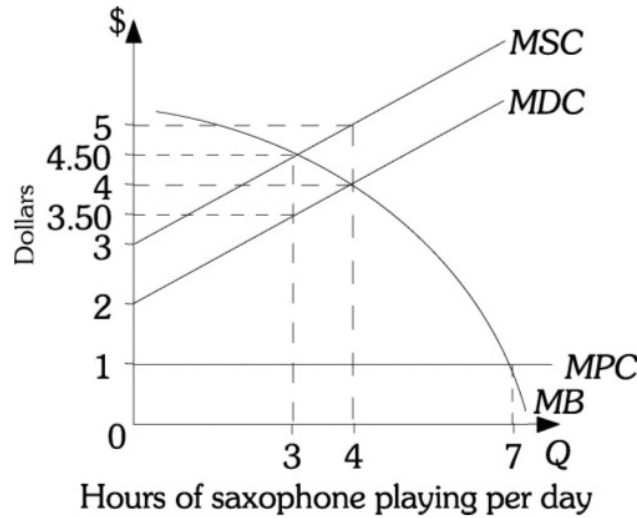


Figure 16.3

- 41) Refer to Figure 16.3. When Bill plays his saxophone he imposes costs on his wife. If Bill does not take these costs into consideration, he will play his saxophone for \_\_\_\_\_ hours per day.
- A) zero                                      B) three                                      C) four                                      D) seven

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 42) Refer to Figure 16.3. If Bill is forced to take into consideration the costs he imposes on his wife by playing the saxophone, he will play his saxophone for \_\_\_\_\_ hours per day.
- A) zero                                      B) three                                      C) four                                      D) seven

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 43) Refer to Figure 16.3. Bill and his wife are able to bargain with one another so that Bill plays his saxophone for the efficient number of hours. This is an example of \_\_\_\_\_ theorem.
- A) Arrow's impossibility                                      B) the free-rider  
C) the drop-in-the-bucket                                      D) the Coase

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual



44) The amount that a consumer pays to consume an additional unit of a particular good is the marginal \_\_\_\_\_ cost.

- A) private                      B) damage                      C) positive                      D) social

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

45) Marginal private cost is the \_\_\_\_\_ unit of a good.

- A) additional cost to society resulting from a consumer consuming one more  
B) additional cost to society resulting from a privately owned firm producing one more  
C) amount that a consumer pays to produce an additional  
D) amount that a consumer pays to consume an additional

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

46) Marginal damage cost is the additional \_\_\_\_\_ unit of a good.

- A) harm done by increasing the level of an externality-producing activity by one  
B) cost to society resulting from a privately owned firm producing one more  
C) amount a consumer pays to produce an additional  
D) cost to society resulting from a consumer consuming one more

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

47) The marginal private cost to a firm of producing the 10th unit of output is \$100. The marginal social cost of the 10th unit of output is \$125. The marginal damage cost of the 10th unit of output is

- A) \$5.00.                      B) \$25.00.                      C) \$50.00.                      D) \$250.00.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

48) The marginal private cost to a firm of producing the 10th unit of output is \$100. The marginal damage cost of the 10th unit of output is \$25. The marginal social cost of the 10th unit of output is

- A) \$25  
B) \$75.  
C) \$125.  
D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills



- 53) Refer to Figure 16.4. If the firm maximizes profits and the government does not require it to take damages into account, it will produce \_\_\_\_\_ units of output.  
A) 0                                      B) 6                                      C) 15                                      D) 20

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 54) Refer to Figure 16.4. At 20 units of output there are external \_\_\_\_\_ per unit.  
A) costs of \$2                              B) benefits of \$2                              C) costs of \$6                              D) benefits of \$6

Answer: A

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

AACSB: Analytic Skills

- 55) If the government taxes a steel company by an amount equal to the damages of each marginal ton of steel, then the steel company's marginal cost curve is the same as the marginal \_\_\_\_\_ cost curve.  
A) damage                                      B) social                                      C) private                                      D) benefit

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 56) If a firm's production process generates external costs, the firm will produce the socially efficient level of output if the government imposes a tax equal to the marginal  
A) damage cost.                              B) private cost.                              C) benefit.                                      D) social cost.

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 57) In the presence of negative externalities, \_\_\_\_\_ is produced and in the presence of positive externalities, \_\_\_\_\_ is produced.  
A) too little of the good; too much of the good  
B) too much of the good; too little of the good  
C) too much of the good; the right amount of the good  
D) the right amount of the good; too little of the good

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual

58) If the government wishes to encourage firms to internalize externalities, they should \_\_\_\_\_ activities resulting in negative externalities and \_\_\_\_\_ activities resulting in positive externalities

A) tax; subsidize

B) subsidize; tax

C) ban; generate

D) place an injunction against; tax

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual

Refer to Scenario 16.1 below to answer the questions that follow.

SCENARIO 16.1: The marginal benefit for a particular food is described by  $MB = 30 - q$ , where  $q$  refers to the quantity of the food. The marginal cost of producing the food is described by  $MC = 2q$ . There is a negative externality associated with food production and the marginal social cost of food production is  $MSC = 4q$ .

59) Refer to Scenario 16.1. The marginal damage cost is \_\_\_\_\_ .

A)  $MDC = 2q$

B)  $MDC = 6q$

C)  $MDC = 8q$

D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

60) Refer to Scenario 16.1. The competitive output level is \_\_\_\_\_ and the competitive price is \_\_\_\_\_.

A) 10 units of food; \$20

B) 6 units of food; \$24

C) 0 units of food; \$0

D) 4.29 units of food; \$25.71

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

61) Refer to Scenario 16.1. The efficient output level is \_\_\_\_\_ and the efficient price is \_\_\_\_\_.

A) 10 units of food; \$20

B) 6 units of food; \$24

C) 0 units of food; \$0

D) 4.29 units of food; \$25.71

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 62) When the government taxes a firm that generates external costs, the firm will produce
- A) more output than before the tax was imposed in order to continue maximizing profits.
  - B) the same output as before the tax was imposed in order to continue maximizing profits.
  - C) fewer units of output than before the tax was imposed in order to continue maximizing profits.
  - D) either more or fewer units of output than before the tax was imposed depending upon what happens to the profit maximizing level of output.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 63) Price will \_\_\_\_\_ and output will \_\_\_\_\_ once government makes a firm internalize a negative externality.
- A) increase; decrease
  - B) increase; increase
  - C) decrease; decrease
  - D) decrease; increase

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 64) When government imposes a tax on a firm that generates external costs, the \_\_\_\_\_ the tax.
- A) firm always bears
  - B) consumer always bears
  - C) firm and the consumer usually bear
  - D) government only bears

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 65) If a tax is imposed on externality-producing activities by perfectly competitive firms so that the market is producing the efficient level of output, then
- A)  $P = MSC$  and  $MDC = 0$ .
  - B)  $P = MSC$  and  $MDC > 0$ .
  - C)  $P = MC$  and  $MDC = 0$ .
  - D)  $P = MC$  and  $MDC > 0$ .

Answer: B

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 66) For production to be at the efficient level of output, marginal \_\_\_\_\_ must equal \_\_\_\_\_.
- A) damage cost; zero
  - B) benefit; marginal private cost
  - C) social cost; zero
  - D) benefit; marginal social cost

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 67) Taxes on a producing firm's spillovers are
- A) designed to make it easier for economists to measure spillovers.
  - B) intended to lead to a zero level of output.
  - C) meant to force decision makers to consider the full costs of their actions.
  - D) designed primarily as a way to raise money so that the government can compensate the victims of the externality.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 68) If a tax is placed on perfectly competitive firms that impose external costs on society, the firm's marginal cost curve will shift \_\_\_\_\_ and the industry supply curve will shift to the \_\_\_\_\_.
- A) down; left                      B) down; right                      C) up; right                      D) up; left

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 69) Suppose that you rent a house next to a factory. The factory emits a chemical into the air that smells like sweaty feet. You now have to spend \$300 more per month on air fresheners because the firm pollutes the air. You could move to another house far enough away from the factory, but the rent for that house is \$200 more than you now pay. The efficient solution to this problem is that
- A) the factory owner should compensate you \$300 so that you can pay for the additional expenses you incur.
  - B) you should move to the new house because the additional rent on that new house is less than the additional expenses you incur from living next to the factory.
  - C) the factory owner should reimburse you \$100, the difference between your expenses and the higher rent on the new house.
  - D) the firm should be able to continue to pollute because only one person is being harmed by the factory's pollution.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 70) If a subsidy is granted to perfectly competitive firms that provide external benefits to society, the firm's marginal cost curve will shift \_\_\_\_\_ and the industry supply curve will shift to the \_\_\_\_\_.
- A) down; left                      B) down; right                      C) up; right                      D) up; left

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 71) The market will produce \_\_\_\_\_ of education when we don't consider its external benefits.
- A) an efficient level
  - B) more than an efficient level
  - C) less than an efficient level
  - D) zero units

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 72) If the production of a good generates external benefits, the government could increase efficiency by \_\_\_\_\_ production of the good to \_\_\_\_\_.
- A) taxing; reduce the amount produced
  - B) subsidizing; increase the amount produced
  - C) regulating; reduce the amount produced
  - D) requiring; be licensed

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 73) You spend \$300 every month to keep your lawn and garden maintained. Your neighbor has told you that she derives \$50 a month in enjoyment from being able to look at your beautiful yard. Which of the following is TRUE?
- A) You are spending too much on your yard, because your neighbor derives only \$50 worth of benefits.
  - B) You should refuse to spend anything on your yard unless your neighbor pays you \$50 a month.
  - C) If you took into consideration the benefits your neighbor derived, the efficient level of lawn maintenance would be greater than \$300 a month.
  - D) If you took into consideration the benefits your neighbor derived, the efficient level of lawn maintenance would be less than \$300 a month.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 74) When a perfectly competitive firm weighs price and marginal cost and no externalities exist, it is weighing the full benefits to \_\_\_\_\_ of additional production against the full costs to \_\_\_\_\_ of that production.
- A) society; society
  - B) buyers; sellers
  - C) sellers; buyers
  - D) government; government

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 75) An external cost is
- A)  $MSC + MC$ .
  - B)  $MSC - MC$ .
  - C)  $MSC/MC$ .
  - D)  $MSC * MC$ .

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

76) If firms do not have to account for external costs of production, then they will \_\_\_\_\_ compared with the efficient values.

- A) underproduce and underprice
- B) underproduce and overprice
- C) overproduce and underprice
- D) overproduce and overprice

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Conceptual

77) The Coase theorem states that

- A) the private sector will fail to produce an efficient amount of a public good because of the free-rider problem.
- B) under certain conditions, private parties can arrive at an efficient solution without government involvement.
- C) if there are external costs in production, the government must intervene in the market to assure that the market produces an efficient level of output.
- D) public goods should be produced up to the point where the additional benefit received by society equals the additional cost of producing the good.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

78) If private bargaining to resolve an externality is to result in an efficient outcome

- A) rights must be protected by liability rules.
- B) there must be tradable pollution rights.
- C) there must be direct regulation of externalities.
- D) the initial assignment of rights must be clear to both parties.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Fact

79) Which of the following conditions is NOT necessary for the Coase theorem to apply?

- A) The basic rights of the individuals must be clearly understood.
- B) There must be no impediments to bargaining.
- C) Only a few people can be involved.
- D) Liability rules must be established and enforced.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

80) \_\_\_\_\_ protect property rights.

- A) Taxes and subsidies.
- B) Bargaining and negotiation.
- C) Injunctions and liability rules.
- D) Rivalry and excludability.

Answer: C

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Conceptual



- 81) The Coase theorem will apply only if
- A) the courts can be used to determine the amount of compensation that must be made to the damaged party.
  - B) the amount of compensation that must be made to the damaged party is small.
  - C) the number of people involved is small.
  - D) an individual who is not affected by the externality can negotiate a settlement between the parties imposing the externality and the parties that are harmed by the externality.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Definition

- 82) Your roommate has the right to play her stereo during the day. But you find the best time to study is during the day, and the stereo playing makes it hard for you to concentrate. You tell your roommate that you will do her laundry every week if she does not play the stereo during the day and she agrees to this. This is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) fallacy of composition.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 83) There are 1,000 families in a neighborhood that are affected by noise pollution from a local factory. The noise level is within legal limits, but could be reduced further if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. A committee starts to collect donations to pay for the improvements. Which of the following is most likely to occur?
- A) Because there are relatively few families involved and the individual contribution is so small, all families will voluntarily contribute.
  - B) Because each individual contribution is so small and individuals will benefit from the reduction in noise whether they contribute or not, most people will not contribute and the firm will not make the improvements.
  - C) Even if the families raise \$5,000, the firm will not reduce its noise pollution since it is within legal limits.
  - D) The courts will force the firm to spend the \$5,000 regardless of whether or not the families contribute the money.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 84) There are 10 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. Since there are no legal restrictions governing the factory's noise the negotiations fail. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) problem that arises when property rights are not defined.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 85) There are 10,000 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. Since there are so many families they fail to come to a resolution to which they will all agree. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) problem that arises when property rights are not defined.

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 86) There are 1,000 families in a neighborhood that are affected by noise pollution from a local factory. The noise could be reduced if the company spent \$5,000 on technological improvements. The company agrees to make these improvements if the affected families contribute the \$5,000. However, because individuals will benefit from the reduction in noise whether they contribute or not, most people will not contribute and the firm will not make the improvements.. This outcome is an example of the
- A) free rider problem.
  - B) drop-in-the-bucket problem.
  - C) Coase theorem.
  - D) collective action problem (that arises when there are too many parties involved).

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 87) You accidentally run into your next door neighbor's fence and destroy it. Your neighbor sues you and you are required to pay \$1,000 to repair the fence. This is an example of
- A) the Coase theorem.
  - B) a liability rule.
  - C) an injunction.
  - D) the free-rider problem.

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

88) You love Christmas and elaborately decorate your home and yard. It is such a spectacle that hundreds of people drive by your house each day to enjoy the display. The noise and traffic disturb your neighbors who sue you and you are required to take down your display permanently. This is an example of

A) the Coase theorem.

B) a liability rule.

C) an injunction.

D) the free-rider problem.

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Conceptual

89) \_\_\_\_\_ is(are) an example of selling externality rights.

A) Auctioning the right to buy a car each year

B) Direct regulation of externalities

C) Having the damaged party avoid the damage

D) Government imposed taxes and subsidies

Answer: A

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the information provided in Figure 16.5 below to answer the questions that follow.

Los Angeles International Airport (LAX) is located next to Playa Del Rey. The noise from air traffic negatively affects individuals living in Playa Del Rey, however, this cost is not considered by airlines or air travelers. The airlines feel they have a right to use the airspace while the individuals living in Playa Del Rey feel they have the right to quiet. The following diagram depicts the marginal costs and marginal benefits associated with air travel.

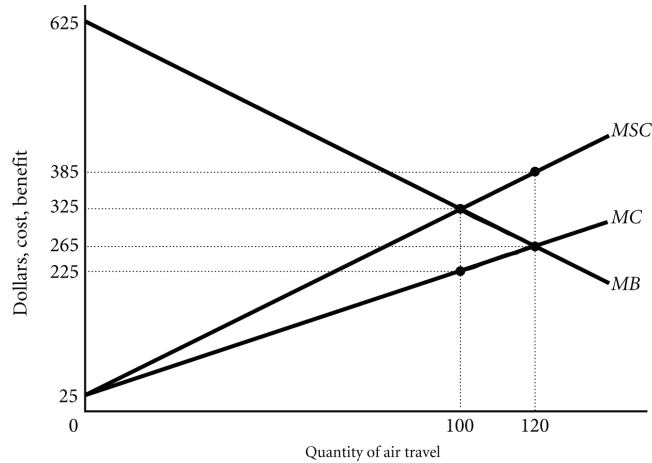


Figure 16.5

- 90) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines. No negotiations occur between the parties. The resulting level of air travel is \_\_\_\_\_.
- A) 0 units
  - B) 100 units
  - C) 120 units
  - D) Indeterminate from the given information.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 91) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines. No negotiations occur between the parties. The marginal damage cost associated with the resulting level of air travel is \_\_\_\_\_.
- A) \$25
  - B) \$120
  - C) \$265
  - D) \$385

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

92) Refer to Figure 16.5. Suppose the government assigns property rights to the airlines, then the airlines and the residents engage in negotiations. The resulting efficient level of air travel is \_\_\_\_\_.

- A) 0 units
- B) 100 units
- C) 120 units
- D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

93) Refer to Figure 16.5. The marginal damage cost associated with the efficient level of air travel is \_\_\_\_\_.

- A) \$0
- B) \$100
- C) \$225
- D) \$265

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

94) Refer to Figure 16.5. The marginal damage cost \_\_\_\_\_ as the quantity of air travel increases.

- A) increases
- B) decreases
- C) remains constant
- D) becomes negative

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

95) Refer to Figure 16.5. Suppose the government assigns property rights to the residents of Playa Del Rey. No negotiations occur between the parties. The resulting level of air travel is \_\_\_\_\_.

- A) 0 units
- B) 100 units
- C) 120 units
- D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 96) Refer to Figure 16.5. Suppose the government assigns property rights to the residents of Playa Del Rey, then the airlines and the residents engage in negotiations. The resulting efficient level of air travel is \_\_\_\_\_.
- A) 0 units
  - B) 100 units
  - C) 120 units
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

- 97) Governments often \_\_\_\_\_ activities that generate external \_\_\_\_\_.
- A) tax; benefits
  - B) subsidize; benefits
  - C) subsidize; costs
  - D) simultaneously tax and subsidize; costs

Answer: B

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Conceptual

- 98) My neighbor \_\_\_\_\_ is an example of an external benefit.
- A) smokes a cigarette in my presence
  - B) plays loud music on his radio that I can hear
  - C) dumps hazardous chemicals on a stream that passes through my property
  - D) keeps the leaves from his trees away from my yard

Answer: D

Diff: 1

Topic: Externalities and Environmental Economics

Skill: Fact

- 99) When the government pays for part of my university education, it is
- A) internalizing an external cost.
  - B) using taxes to discourage an external cost.
  - C) subsidizing an external benefit.
  - D) using direct regulation to discourage an external cost.

Answer: C

Diff: 2

Topic: Externalities and Environmental Economics

Skill: Fact

Refer to the data provided in Table 16.3 below to answer the following questions.

Table 16.3 shows the situation facing two firms, both of which are polluting. Assume that each firm emits 5 units of pollution.

**Table 16.3**

Firm A	Firm A	Firm A	Firm B	Firm B	Firm B
Reduction of Pollution by Firm A	MC of reducing pollution for Firm A	TC of reducing pollution for Firm A	Reduction of Pollution by Firm B	MC of reducing pollution for Firm B	TC of reducing pollution for Firm B
1	\$4	\$4	1	\$8	\$8
2	6	10	2	12	20
3	9	19	3	16	36
4	13	32	4	20	56
5	18	50	5	24	80

100) Refer to Table 16.3. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are not allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$30                      B) \$55                      C) \$58                      D) \$130

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

101) Refer to Table 16.3. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$0                      B) \$30                      C) \$52                      D) \$55

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

102) Refer to Table 16.3. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, how many permits will be traded between the two firms?

- A) A will buy two permits from B                      B) B will buy two permits from A  
 C) A will buy one permit from B                      D) B will buy one permit from A

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 16.4 below to answer the following questions.

Table 16.4 shows the situation facing two firms, both of which are polluting. Assume that each firm emits 5 units of pollution.

**Table 16.4**

Firm A	Firm A	Firm A	Firm B	Firm B	Firm B
Reduction of Pollution by Firm A	MC of reducing pollution for Firm A	TC of reducing pollution for Firm A	Reduction of Pollution by Firm B	MC of reducing pollution for Firm B	TC of reducing pollution for Firm B
1	\$1	\$1	1	\$8	\$8
2	3	4	2	12	20
3	6	10	3	16	36
4	10	20	4	20	56
5	15	35	5	24	80

103) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are not allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$24                                      B) \$56                                      C) \$76                                      D) \$115

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

104) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, what is the total cost of the pollution reduction?

- A) \$24                                      B) \$40                                      C) \$43                                      D) \$81

Answer: C

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

105) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits, how many permits will be traded between the two firms?

- A) A will buy two permits from B                                      B) B will buy two permits from A  
 C) A will buy one permit from B                                      D) B will buy one permit from A

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills



106) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits and all possible trades are made, Firm A will reduce its pollution by a total of \_\_\_\_\_ units.

- A) 2                                      B) 3                                      C) 4                                      D) 5

Answer: D

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

107) Refer to Table 16.4. Suppose the government wants to reduce the total amount of pollution from the current level of 10 to 4. To do this, the government caps each firm's emissions at 2 units and issues 2 permits to each firm. If firms are allowed to trade permits and all possible trades are made, Firm B will reduce its pollution by a total of \_\_\_\_\_ unit(s).

- A) 0                                      B) 1                                      C) 2                                      D) 3

Answer: B

Diff: 3

Topic: Externalities and Environmental Economics

Skill: Analytic

AACSB: Analytic Skills

108) Related to the *Economics in Practice* on page 326: Crying babies on airplane impose a negative externality on those sitting around them. Which of the following policies would help to internalize the externality?

- A) Provide discount tickets for babies and young children.
- B) Evenly disperse the babies and young children throughout the plane so as to minimize the impact of their crying on any one passenger.
- C) Impose a minimum flying age of 5 years old.
- D) Charge a higher ticket fee for babies and young children (under 5 years of age) than for all other passengers.

Answer: D

Diff: 2

Topic: Externalities and Environmental Economics: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

109) Related to the *Economics in Practice* on page 326: Crying babies on airplane impose a negative externality on those sitting around them. Which of the following policies would NOT help to reduce the externality?

- A) Provide discount tickets for babies and young children.
- B) Segregate families with young children in the back of the plane and provide discounted tickets to those passengers willing to sit in the rows just in front of them.
- C) Impose a minimum flying age of 5 years old.
- D) Charge a higher ticket fee for babies and young children (under 5 years of age) than for all other passengers.

Answer: A

Diff: 2

Topic: Externalities and Environmental Economics: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

- 110) Related to the *Economics in Practice* on page 331: The Kyoto Protocol is an international treaty aimed at
- A) reducing behavior that leads to negative externalities.
  - B) encouraging behavior that leads to positive externalities.
  - C) reducing the production of public goods.
  - D) encouraging free trade.

Answer: A

Diff: 2

Topic: *Externalities and Environmental Economics: Economics in Practice*

Skill: *Fact*

AACSB: *Reflective Thinking*

- 111) Related to the *Economics in Practice* on page 331: Global warming is NOT
- A) widely accepted as occurring and its costs are known with certainty.
  - B) the result of unconstrained negative externalities.
  - C) the focus of the Kyoto Protocol.
  - D) the result of increases in the amount of greenhouse gases in the atmosphere whose main source is the burning of fossil fuels.

Answer: A

Diff: 2

Topic: *Externalities and Environmental Economics: Economics in Practice*

Skill: *Fact*

AACSB: *Reflective Thinking*

## 2 True/False

- 1) Ronald Coase argued that property rights should always be assigned to the party that is harmed by a negative externality.

Answer: FALSE

Diff: 1

Topic: *Externalities and Environmental Economics*

Skill: *Fact*

- 2) An efficient outcome can always be reached by requiring the individual who produces the externality to fully compensate individuals for any damage inflicted.

Answer: FALSE

Diff: 1

Topic: *Externalities and Environmental Economics*

Skill: *Fact*

- 3) According to the Coase theorem, bargaining will bring the contending parties to the correct solution only if the rights are initially assigned to the party causing the externality.

Answer: FALSE

Diff: 2

Topic: *Externalities and Environmental Economics*

Skill: *Definition*

- 4) In any case where there is a negative externality, it is better to form a government agency to solve the problem.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 5) If there are no externalities, producing where price is greater than marginal cost is inefficient because for every unit produced, consumers derive benefits that are less than the cost of the resources needed to produce it.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 6) Subsidies can be used to internalize positive externalities.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Conceptual
- 7) Acid rain is an example of a negative externality.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 8) Marginal damage cost is the difference between marginal social cost and marginal cost.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 9) For the Coase Theorem to work three conditions must be satisfied: the basic rights must be clearly understood, there must be no impediments to bargaining, and only a few parties are involved.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Conceptual
- 10) Liability rules are laws that require party A to compensate party B for damages imposed.  
Answer: TRUE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition

- 11) Externalities always involve the imposition of costs on parties outside an activity or transaction.  
Answer: FALSE  
Diff: 2  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 12) Marginal social cost is the difference between the marginal cost and the marginal damage cost.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 13) Marginal damage costs are easily measured.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact
- 14) Taxes, tradeable pollution permits, and direct regulation of pollution are all market approaches to dealing with pollution.  
Answer: FALSE  
Diff: 2  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 15) An injunction is a court order that forbids the continuation of behavior that leads to benefits.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Definition
- 16) When a firm imposes an external social cost, the government should impose a tax exactly equal to the marginal social cost to ensure that the efficient level of output will be produced.  
Answer: FALSE  
Diff: 1  
Topic: Externalities and Environmental Economics  
Skill: Fact

## 16.2 Public (Social) Goods

### 1 Multiple Choice

- 1) Public goods are \_\_\_\_\_ in consumption and their benefits are \_\_\_\_\_.  
A) rival; excludable  
B) nonrival; excludable  
C) nonrival; nonexcludable  
D) rival; nonexcludable

Answer: C  
Diff: 2  
Topic: Public (Social) Goods  
Skill: Definition

- 2) Public goods represent a market failure because
- A) they are provided by firms with market power.
  - B) positive externalities are created through their production.
  - C) by their very nature they are nonexcludable and nonrival which makes it difficult for the private sector to supply them profitably.
  - D) there is incomplete information regarding their quality.

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 3) Private goods are \_\_\_\_\_ in consumption and their benefits are \_\_\_\_\_.
- A) rival; excludable
  - B) nonrival; excludable
  - C) nonrival; nonexcludable
  - D) rival; nonexcludable

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 4) Which of the following contains most of the characteristics of a public good?
- A) education
  - B) trash collection
  - C) a public library
  - D) national defense

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 5) A radio signal broadcast through the air is \_\_\_\_\_ in consumption and listeners are \_\_\_\_\_.
- A) rival; excludable
  - B) nonrival; excludable
  - C) nonrival; nonexcludable
  - D) rival; nonexcludable

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 6) A television signal sent by cable is \_\_\_\_\_ in consumption and viewers are \_\_\_\_\_.
- A) rival; excludable
  - B) nonrival; excludable
  - C) nonrival; nonexcludable
  - D) rival; nonexcludable

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 7) If one person's enjoyment of the benefits of a good does not interfere with another's consumption of it, the good is
- A) excludable.
  - B) nonexcludable.
  - C) rival in consumption.
  - D) nonrival in consumption.

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Definition

- 8) If you cannot prevent at a low cost another person from enjoying the benefits of a good that you produced, the good is
- A) excludable.
  - B) nonexcludable.
  - C) rival in consumption.
  - D) nonrival in consumption.

Answer: B

Diff: 1

Topic: Public (Social) Goods

Skill: Definition

- 9) Because people enjoy the benefits of public goods whether they pay for them or not, people are usually unwilling to pay for them. This is known as the \_\_\_\_\_ problem.
- A) drop-in-the-bucket
  - B) nonexcludable
  - C) nonrival
  - D) free-rider

Answer: D

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 10) The free-rider problem arises when
- A) people feel their contribution is so small relative to the total amount needed that it won't make a difference whether they contribute or not.
  - B) people realize they will still receive the benefits of a good whether they pay for it or not.
  - C) the government produces a good or service.
  - D) there is a surplus of the product in the market.

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

- 11) You will still be able to get public broadcasting whether or not you contribute to their fund-raising campaign, so you decide not to contribute. This is an example of the \_\_\_\_\_ problem.
- A) public good
  - B) free-rider
  - C) rival in consumption
  - D) drop-in-the-bucket

Answer: B

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 12) A national campaign is asking for contributions of \$1.00 per citizen to fund the building of the September 11th memorial in New York City. The total cost of the memorial is estimated to be \$260 million. You decide not to contribute, because your contribution would be small relative to the total that it won't make any difference whether you contribute or not. This is an example of the
- A) nonexcludable problem.
  - B) nonrival in consumption problem.
  - C) free-rider problem.
  - D) drop-in-the-bucket problem.

Answer: D

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

- 13) For private goods, market demand is the \_\_\_\_\_ summation of individual demand curves and for public goods, market demand is the \_\_\_\_\_ summation of individual demand curves.

A) horizontal; vertical  
 B) vertical; horizontal  
 C) horizontal; horizontal  
 D) vertical; vertical

Answer: A

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

Refer to the information given in Table 16.5 below to answer the question that follows.

Units of Public Good	Person A's Willingness to Pay	Person B's willingness to Pay
1	\$50	\$60
2	30	50
3	0	30

- 14) Refer to Table 16.5. A point on the market demand curve for this public good would be: at a price of \_\_\_\_\_ quantity demanded would be \_\_\_\_\_.

A) \$30; 5  
 B) \$50; 3  
 C) \$100; 1  
 D) \$110; 1

Answer: D

Diff: 2

Topic: Public (Social) Goods

Skill: Analytic

AACSB: Analytic Skills

- 15) Assume there are two people in a society. Person A is willing to pay \$70 to have one unit of a public good produced and Person B is willing to pay \$80 to have one unit of a public good produced and \$70 to have two units produced. As a result, society would be willing to pay a price of \_\_\_\_\_ of this public good.

A) \$150 for 1 unit  
 B) \$100 for 3 units  
 C) \$100 for 1 unit  
 D) \$80 for 5 units

Answer: A

Diff: 2

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 16) The marginal cost of producing 25 units of a public good is \$100. There are two individuals in the society. Person A is willing to pay \$40 for 25 units of the public good. If 25 units of the public good are provided, how much must Person B be willing to pay?

A) \$0  
 B) \$40  
 C) \$60  
 D) \$75

Answer: C

Diff: 2

Topic: Public (Social) Goods

Skill: Analytic

AACSB: Analytic Skills

- 17) Education is a \_\_\_\_\_ good that creates a \_\_\_\_\_ externality.
- A) public; positive
  - B) private; positive
  - C) public; negative
  - D) private; negative

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Fact

- 18) At the optimal level of provision for a public good, the government must know
- A) the marginal revenue of selling the good.
  - B) the supply curve of the government.
  - C) everyone's preferences.
  - D) the price elasticity of demand of each buyer.

Answer: C

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

- 19) Once a public good is produced, everyone
- A) can consume a different amount depending on their willingness to buy the good.
  - B) consumes the same amount and everyone's willingness to pay is the same.
  - C) consumes the same amount, but the willingness to pay will be different for different individuals.
  - D) can consume a different amount and pay different prices for the product.

Answer: C

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 20) When it comes to public goods, it is important to remember \_\_\_\_\_ .
- A) that government intervention necessarily solves the market failure
  - B) only one level of output can be realized and consumers are willing to pay different amounts for that level
  - C) the free rider problem is difficult to overcome, but the drop-in-the-bucket problem is not
  - D) all goods provided by the government are public goods

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Conceptual



Refer to the information provided in Figure 16.6 below to answer the question that follows.

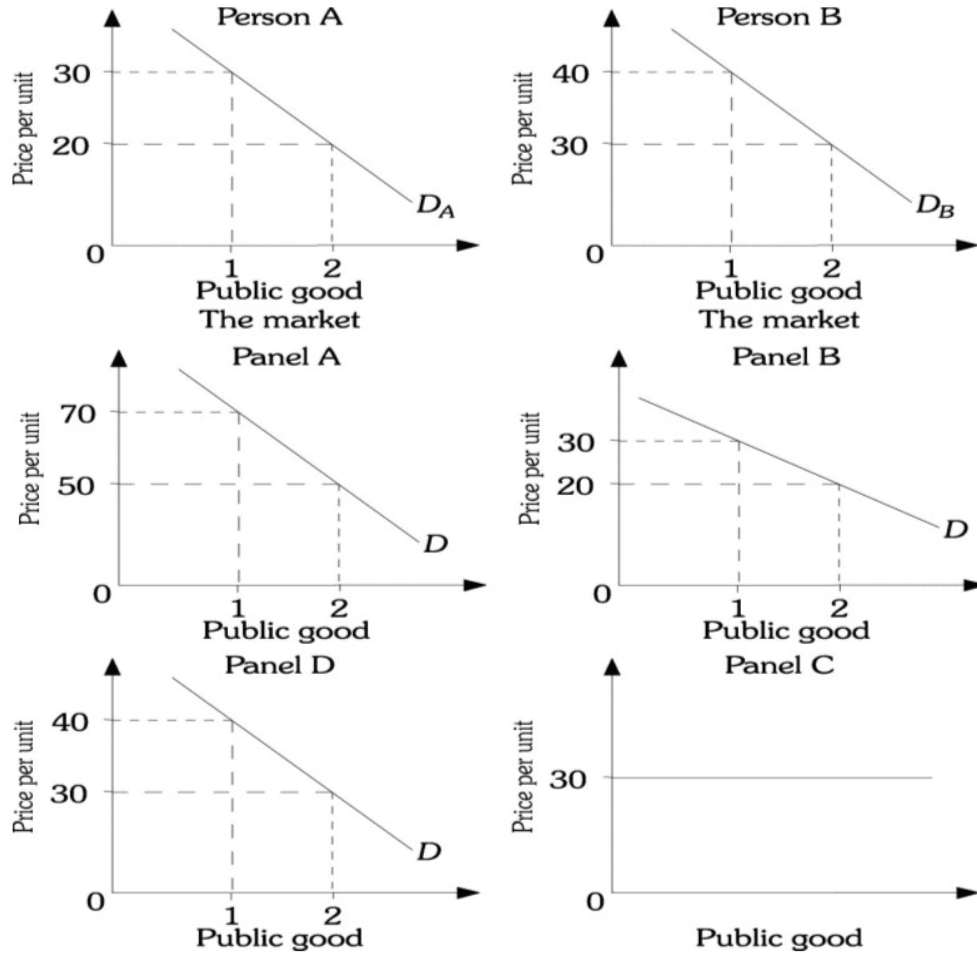


Figure 16.6

- 21) Refer to Figure 16.6. In the top portion of the figure are the demand curves of two people in this society for a public good. Which of the panels represents the market demand curve for the public good?

A) Panel A                      B) Panel B                      C) Panel C                      D) Panel D

Answer: A

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 22) The optimal level of provision of public goods is where society's total willingness to pay per unit is equal to the \_\_\_\_\_ cost of producing the good.

A) total                      B) average                      C) variable                      D) marginal

Answer: D

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

- 23) If the marginal cost of producing a public good is greater than society's total willingness to pay per unit, then
- A) the optimal amount of the public good is being produced.
  - B) less than the optimal amount of the public good is being produced.
  - C) more than the optimal amount of the public good is being produced.
  - D) the amount of output being produced could be either greater than or less than the optimal amount.

Answer: C

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

Refer to the information given in Table 16.6 below to answer the question that follows.

Number of Police Officers	Tim's Willingness to Pay	Al's Willingness to Pay
1	\$100	\$60
2	80	20
3	50	10

- 24) Refer to Table 16.6. Assume that the marginal cost of hiring a police officer is \$60. If A and B are the only two people in the society, the optimal number of police officers is
- A) 1.
  - B) 2
  - C) 3.
  - D) indeterminate from this information.

Answer: C

Diff: 3

Topic: Public (Social) Goods

Skill: Conceptual

AACSB: Analytic Skills

- 25) Samuelson's theory of public expenditure demonstrates that
- A) government is inefficient and will always engage in too much spending.
  - B) an optimal (or most efficient) level of output exists for every public good.
  - C) an efficient mix of public goods is produced when local land/housing prices and taxes come to reflect consumer preferences.
  - D) through government regulation of private industry the optimal level of public good provision is achieved.

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

26) According to \_\_\_\_\_, an efficient mix of public goods is produced when local land/housing prices and taxes reflect consumer preferences.

- A) Samuelson's theory
- B) the Tiebout hypothesis
- C) the Theory of Public Choice
- D) the Coase theorem

Answer: B

Diff: 2

Topic: Public (Social) Goods

Skill: Definition

## 2 True/False

1) Every good that the government provides is an example of a public good.

Answer: FALSE

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

2) At the optimal level of public goods provision, society's total willingness to pay per unit is equal to the marginal cost of producing the good.

Answer: TRUE

Diff: 1

Topic: Public (Social) Goods

Skill: Fact

## 16.3 Social Choice

### 1 Multiple Choice

1) The idea that we cannot devise a voting scheme that respects individual preferences and gives consistent, non-arbitrary results is known as

- A) the impossibility theorem.
- B) the independence of irrelevant alternatives.
- C) logrolling.
- D) the Tiebout hypothesis.

Answer: A

Diff: 2

Topic: Social Choice

Skill: Definition

2) Which of the following is an example of the impossibility theorem?

- A) voting paradox
- B) logrolling
- C) free rider problem
- D) social choice

Answer: A

Diff: 1

Topic: Social Choice

Skill: Definition

- 3) Social choice involves all of the following EXCEPT
- A) deciding what society wants.
  - B) aggregating over individual preferences.
  - C) understanding the incentives facing politicians and public servants.
  - D) consistently efficient decisions through the use of majority rule voting.

Answer: D

Diff: 1

Topic: Social Choice

Skill: Definition

- 4) You and two friends are going to the movies and are going to one of three movies: A, B, or C. You prefer movie A to movie B and movie B to movie C. One of your friends prefers movie B to movie C and movie C to movie A. Your other friend prefers movie C to movie A and movie A to movie B. The three of you decide to use majority rule voting to decide which movie you will see. If you first have a vote between movies A and B and then between the winner of that vote and movie C, then movie \_\_\_\_\_ will win. However, if you first vote between movies A and C and then between the winner of that vote and movie B, then movie \_\_\_\_\_ will win. This is an example of the \_\_\_\_\_.
- A) C; B; voting paradox
  - B) B; C; impossibility theorem
  - C) A; C; voting paradox
  - D) A; B; majority rule voting

Answer: A

Diff: 2

Topic: Social Choice

Skill: Conceptual

AACSB: Analytic Skills

- 5) Voting as a mechanism for public choice is associated with a number of problems including
- A) majority rule voting can lead to contradictory and inconsistent results.
  - B) logrolling.
  - C) disengaged voters with very little incentive to inform themselves of the issues.
  - D) All of the above.

Answer: D

Diff: 2

Topic: Social Choice

Skill: Conceptual

- 6) Logrolling occurs when
- A) congressional representatives trade votes.
  - B) voters are limited to voting on bundles of goods.
  - C) voters are uninformed about issues and thus simply vote with a given party.
  - D) lumberjacks roll logs downhill to their trucks.

Answer: A

Diff: 1

Topic: Social Choice

Skill: Definition

## 2 True/False

- 1) In the presence of market failure, government involvement will lead to efficient outcomes.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Conceptual

- 2) Logrolling is a questionable practice that always leads to decidedly inefficient results

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Conceptual

- 3) The impossibility theorem, demonstrated by Paul Samuelson, shows that it is impossible to have public officials behave in a manner consistent with the best interests of society.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Definition

- 4) The voting paradox demonstrates that positional voting systems can lead to contradictory and inconsistent results.

Answer: FALSE

Diff: 1

Topic: Social Choice

Skill: Definition

- 5) The public choice field in economics views public officials as having a significant capacity to make inefficient choices and to produce bureaucratic waste.

Answer: TRUE

Diff: 1

Topic: Social Choice

Skill: Definition

- 6) Industries that lobby public officials for favorable treatment, softer regulation, and or antitrust exemption are engaged in rent-seeking.

Answer: TRUE

Diff: 1

Topic: Social Choice

Skill: Definition

## 16.4 Government and the Market

### 1 Multiple Choice

- 1) Markets fail to produce an efficient allocation of resources, but governments also fail because
- A) the managers of government agencies are trying to maximize the profit of their agency and they ignore the implications that this has on other departments.
  - B) the optimal level of public goods may be too expensive for the society to produce.
  - C) elected officials will act selflessly for the good of society and ignore their own self-interest.
  - D) the measurement of social damages and benefits is difficult and imprecise.

Answer: D

Diff: 1

Topic: Government and the Market

Skill: Fact

- 2) Relevant questions with respect to government include all of the following EXCEPT:
- A) How much government involvement?
  - B) What kind of government involvement?
  - C) Should there be government?
  - D) How can government efficiency be improved?

Answer: A

Diff: 2

Topic: Government and the Market

Skill: Conceptual

### 2 True/False

- 1) Governments will likely achieve the optimal level of public goods, but not the correct amount of control over externalities.

Answer: FALSE

Diff: 1

Topic: Government and the Market

Skill: Conceptual

- 2) In the presence of externalities and public goods, we get closer to the efficient allocation of resources through government intervention than by leaving everything to the market.

Answer: TRUE

Diff: 2

Topic: Government and the Market

Skill: Conceptual



- 5) For a given individual, as their income increases, their utility from that income
- A) increases at an increasing rate.
  - B) decreases at a decreasing rate.
  - C) increases at a decreasing rate.
  - D) decreases at an increasing rate.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 6) The sum of the utilities from each possible outcome of a situation weighted by the probability of that outcome is called
- A) expected utility.
  - B) total utility.
  - C) marginal utility.
  - D) expected value.

Answer: A

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

Refer to the information provided in Figure 17.1 below to answer the questions that follow.

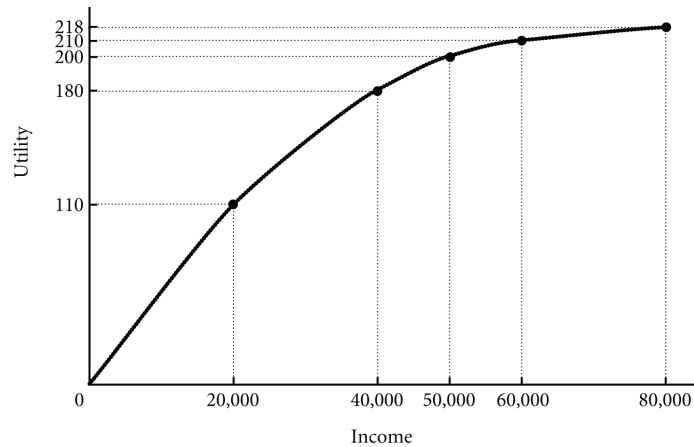


Figure 17.1

- 7) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. John's expected value from the first job offer is \_\_\_\_\_ and is \_\_\_\_\_ from the second job offer.
- A) \$50,000; \$80,000
  - B) \$50,000; \$50,000
  - C) \$50,000; \$30,000
  - D) \$25,000; \$50,000

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills



- 8) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. John's expected utility from the first job offer is \_\_\_\_\_ and it is \_\_\_\_\_ from the second job offer.
- A) 200; 218                      B) 200; 110                      C) 200; 164                      D) 100; 164

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 17.1. John has two job offers when he graduates from college. John views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$50,000. The second offer is at a fixed salary of \$20,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. If John takes the offer that maximizes his expected utility and is he is risk averse, then
- A) John will take the first offer.  
B) John will take the second offer.  
C) John is indifferent between the offers -- both yield the same expected utility.  
D) Indeterminate from the given information -- we cannot say what John will do.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Figure 17.1. Suppose John's utility from income is given in the figure. From this we would say that John is
- A) risk neutral.                      B) risk averse.                      C) risk loving.                      D) a risk taker.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 11) Mark has two job offers when he graduates from college. Mark views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$45,000. The second offer is at a fixed salary of \$25,000 plus a possible bonus of \$40,000. Mark believes that he has a 50–50 chance of earning the bonus. If Mark takes the offer that maximizes his expected utility and he is risk loving, then
- A) Mark will take the first offer.  
B) Mark will take the second offer.  
C) Mark is indifferent between the offers -- both yield the same expected utility.  
D) Indeterminate from the given information -- we cannot say what Mark will do.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 12) Mark has two job offers when he graduates from college. Mark views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$45,000. The second offer is at a fixed salary of \$25,000 plus a possible bonus of \$40,000. Mark believes that he has a 50–50 chance of earning the bonus. If Mark takes the offer that maximizes his expected utility and he is risk neutral, then
- A) Mark will take the first offer.
  - B) Mark will take the second offer.
  - C) Mark is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information -- we cannot say what Mark will do.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 17.2 below to answer the questions that follow.

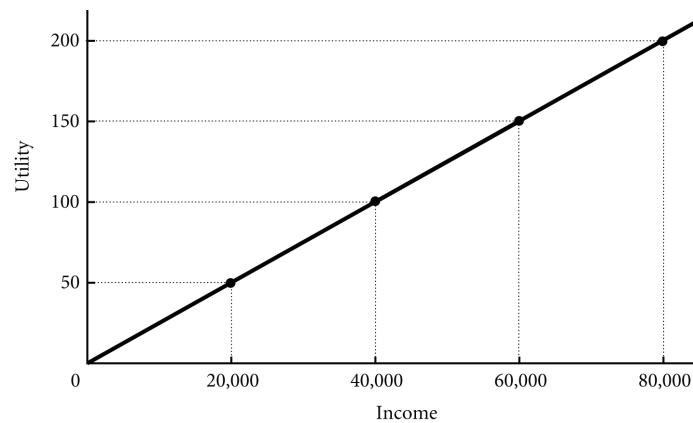


Figure 17.2

- 13) Refer to Figure 17.2. Suppose Sam's utility from income is given in the diagram. From this we would say that Sam is
- A) risk neutral.
  - B) risk loving.
  - C) risk averse.
  - D) a risk taker.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 14) Refer to Figure 17.2. Sam has two job offers when he graduates from college. Sam views the offers as identical, except for the salary terms. The first offer is at a fixed annual salary of \$60,000. The second offer is at a fixed salary of \$30,000 plus a possible bonus of \$60,000. John believes that he has a 50–50 chance of earning the bonus. If John takes the offer that maximizes his expected utility and he is risk averse, then
- A) Sam will take the first offer.
  - B) Sam will take the second offer.
  - C) Sam is indifferent between the offers -- both yield the same expected utility.
  - D) Indeterminate from the given information -- we cannot say what Sam will do.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

Refer to the data provided in Table 17.1 below to answer the following questions. The table shows the relationship between income and utility for Jane.

Table 17.1

Income	Total Utility
\$0	0
\$20,000	25
\$40,000	45
\$60,000	60
\$80,000	70

- 15) Refer to Table 17.1. From the table, we can see that Jane is
- A) risk averse.
  - B) risk loving.
  - C) risk neutral.
  - D) We cannot determine Jane's attitude toward risk from the table.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Table 17.1. Suppose Jane has a 1/3 chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. On average, such a contract would cost the insurance company \_\_\_\_\_ per insured person.
- A) \$20,000
  - B) \$30,000
  - C) \$40,000
  - D) \$60,000

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 17) Refer to Table 17.1. Suppose Jane has a  $\frac{1}{3}$  chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Jane's utility with the policy is
- A) 45 and her expected utility without the policy is 40.
  - B) 45 and her expected utility without the policy is 45.
  - C) 60 and her expected utility without the policy is 40.
  - D) 20 and her expected utility without the policy is 45.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 17.1. Suppose Jane has a  $\frac{1}{3}$  chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$60,000. Jane has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. Such an insurance policy would be worth \_\_\_\_\_ to Jane?
- A) \$0
  - B) \$20,000 or less
  - C) more than \$20,000 but less than \$40,000
  - D) \$40,000 or more

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

**Refer to the data provided in Table 17.2 below to answer the following questions. The table shows the relationship between income and utility for Sue.**

**Table 17.2**

<b>Income</b>	<b>Total Utility</b>
<b>\$0</b>	<b>0</b>
<b>\$20,000</b>	<b>20</b>
<b>\$40,000</b>	<b>40</b>
<b>\$60,000</b>	<b>60</b>
<b>\$80,000</b>	<b>80</b>

- 19) Refer to Table 17.2. From the table, we can see that Sue is
- A) risk averse.
  - B) risk loving.
  - C) risk neutral.
  - D) We cannot determine Jane's attitude toward risk from the table.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, Sue will double her money (\$80,000) but if they lose she loses her entire salary (\$0). This bet can be characterized as

- A) risk neutral.                      B) an unfair bet.                      C) a fair bet.                      D) risk loving.

Answer: C

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

21) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, Sue will double her money (\$80,000) but if they lose she loses her entire salary (\$0). Sue's utility if she does not take the bet is

- A) 40 and her expected utility from the bet is 80.  
B) 40 and her expected utility from the bet is 40.  
C) 40 and her expected utility from the bet is 0.  
D) 80 and her expected utility from the bet is 20.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

22) Refer to Table 17.2. Sue earns \$40,000 annually. She has the opportunity to bet her entire salary on the upcoming super bowl. If Sue takes the bet, she will pick the Patriots. She believes that the Patriots have a 50–50 chance of winning the game. If the Patriots win, then Sue will win \$81,000. However, if they lose she loses her entire salary (\$0). Will Sue take the bet?

- A) Yes  
B) No  
C) Maybe  
D) Indeterminate from the given information.

Answer: A

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

Refer to the data provided in Table 17.3 below to answer the following questions. The table shows the relationship between income and utility for Terri.

Table 17.3

Income	Total Utility
\$0	0
\$20,000	10
\$40,000	25
\$60,000	45
\$80,000	75

- 23) Refer to Table 17.3. From the table, we can see that Terri is
- A) risk averse.
  - B) risk loving.
  - C) risk neutral.
  - D) We cannot determine Jane's attitude toward risk from the table.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 24) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$80,000. Jane has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Terri's utility with the policy is
- A) 56.25 and her expected utility without the policy is 45.
  - B) 45 and her expected utility without the policy is 56.25.
  - C) 45 and her expected utility without the policy is 18.75.
  - D) 18.75 and her expected utility without the policy is 37.5.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 25) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$80,000. Terri has the opportunity to purchase disability insurance which will pay her her full salary in the event she becomes disabled. Such an insurance policy be worth \_\_\_\_\_ to Jane.
- A) \$0
  - B) less than \$20,000 but more than \$0
  - C) \$20,000 or more
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 26) Refer to Table 17.3. Suppose Terri has a 25% chance of becoming disabled in any given year. If she does become disabled, she will earn \$0. If Jane does not become disabled, she will earn her usual salary of \$80,000. Jane has the opportunity to purchase disability insurance for \$20,000 which will pay her her full salary in the event she becomes disabled. Would Terri purchase such a policy?
- A) Yes
  - B) No
  - C) Maybe
  - D) Indeterminate from the given information.

Answer: B

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 27) The maximum price a risk-averse person will pay to avoid taking a risk is known as the
- A) risk premium.
  - B) risk aversion fee.
  - C) payoff.
  - D) expected value.

Answer: A

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

## 2 True/False

- 1) Consider the following game. You pick a card from a deck and each time you select an ace, you get \$260. For all other cards pay \$13. This game is a fair bet.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Analytic

AACSB: Analytic Skills

- 2) Expected value and expected utility are synonyms.

Answer: FALSE

Diff: 1

Topic: Decision Making Under Uncertainty: The Tools

Skill: Definition

- 3) If a game is a fair bet, then people will be willing to play the game regardless of the payoffs.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

- 4) Marginal utility of income does not diminish for a risk averse individual.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

5) A diagram of an individual's utility from income will be a line with a constant slope if the individual is risk neutral.

Answer: TRUE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

6) A diagram of an individual's utility from income will be a line with an increasing slope if the individual is risk averse.

Answer: FALSE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

7) In general, risk averse individuals experience diminishing marginal utility from income.

Answer: TRUE

Diff: 2

Topic: Decision Making Under Uncertainty: The Tools

Skill: Conceptual

## 17.2 Asymmetric Information

### 1 Multiple Choice

1) The following statements about asymmetric information are all true EXCEPT:

- A) Asymmetric information occurs when one party to a transaction has relevant information to the transaction that the other party does not have.
- B) Asymmetric information creates market failures because it makes it harder for individuals to engage in transactions that in the presence of perfect information would take place.
- C) Asymmetric information can only be solved through government intervention.
- D) Asymmetric information occurs in the market for used cars and in the insurance market.

Answer: C

Diff: 2

Topic: Asymmetric Information

Skill: Conceptual

2) Adverse selection and moral hazard arise because of \_\_\_\_\_ .

- A) asymmetric information
- B) selection problems
- C) risk aversion
- D) mechanism designs for dealing with informational problems

Answer: A

Diff: 1

Topic: Asymmetric Information

Skill: Definition



- 3) You are in the market for a used 2006 Honda Accord. You know that half of the 2006 Accords are lemons and half are peaches. If you could be assured that the Accord you were buying were a peach, you would be willing to pay up to \$10,000. On the other hand, you would only be willing to pay \$2,000 for a lemon. You have no ability to discern whether any particular Accord is a lemon or a peach. Sellers of Accords, on the other hand, are likely to know whether their particular car is a lemon or a peach. Suppose sellers of lemons will sell their cars for \$1,500 or more and peach sellers will be willing to sell their cars for \$8,500 or more. If you are risk neutral, you are willing to offer \_\_\_\_\_ and \_\_\_\_\_ are willing to sell you their car.
- A) \$2,000 for a car of unknown quality; lemon owners only
  - B) \$5,000 for a car of unknown quality; lemon owners only
  - C) \$6,000 for a car of unknown quality; lemon owners only
  - D) \$8,500 for a car of unknown quality; both lemon and peach owners

Answer: C

Diff: 2

Topic: *Asymmetric Information*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 4) You are in the market for a used 2006 Honda Accord. You know that half of the 2006 Accords are lemons and half are peaches. If you could be assured that the Accord you were buying were a peach, you would be willing to pay up to \$10,000. On the other hand, you would only be willing to pay \$2,000 for a lemon. You have no ability to discern whether any particular Accord is a lemon or a peach. Sellers of Accords, on the other hand, are likely to know whether their particular car is a lemon or a peach. Suppose sellers of lemons will sell their cars for \$1,500 or more and peach sellers will be willing to sell their cars for \$8,500 or more. Over time the price in the market for 2006 Accords will
- A) be between \$8,500 and \$10,000 for peaches and between \$1,500 and \$2,000 for lemons and both lemons and peaches will be traded.
  - B) be between \$8,500 and \$10,000 and only peaches will be traded.
  - C) be between \$1,500 and \$2,000 for lemons and only lemons will be traded.
  - D) be between \$1,500 and \$10,000 and both lemons and peaches will be traded.

Answer: C

Diff: 2

Topic: *Asymmetric Information*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 5) As a result, of adverse selection problems in the health insurance market, it is likely that over time \_\_\_\_\_ .
- A) fewer healthy people will be insured
  - B) fewer unhealthy people will be insured
  - C) fewer healthy and unhealthy people will be insured
  - D) more healthy people will be insured

Answer: A

Diff: 2

Topic: *Asymmetric Information*

Skill: *Conceptual*

- 6) Universal health coverage, lemon laws, and dealer warranties are all examples of tools used to reduce
- A) moral hazard.
  - B) risk premiums.
  - C) market efficiency.
  - D) adverse selection.

Answer: D

Diff: 1

Topic: Asymmetric Information

Skill: Conceptual

- 7) If a buyer or seller enters into an exchange with another party who has more information, there is \_\_\_\_\_ .
- A) symmetric information and moral hazard
  - B) asymmetric information and adverse selection
  - C) a negative externality imposed
  - D) a free-rider problem

Answer: B

Diff: 1

Topic: Asymmetric Information

Skill: Definition

- 8) In the market for used motorcycles there are high- and low-quality motorcycles. Potential buyers cannot determine prior to purchase whether a motorcycle is high- or low-quality. The following statement that best describes what is likely to happen in this market is:
- A) The price of a used motorcycle will be very close to the value of a high-quality motorcycle, which will encourage people to sell high-quality motorcycles.
  - B) The price of a used motorcycle will be between the buyer and seller values for low-quality motorcycles. This will encourage people to withdraw high-quality motorcycles from the market.
  - C) This is an example of adverse selection, as the buyer will have more information about the quality of the used motorcycle than the seller will.
  - D) Over time the market price of a used motorcycle will increase, as there is more of an incentive for owners of high-quality motorcycles to sell than owners of low-quality motorcycles.

Answer: B

Diff: 3

Topic: Asymmetric Information

Skill: Conceptual

- 9) Life insurance companies require that prospective policy holders have a medical check-up before the companies will sell the policy because of a(n)
- A) moral hazard problem in which the insured could be healthy and live longer than expected.
  - B) moral hazard problem in which the insured could be unhealthy and die sooner than expected.
  - C) adverse selection problem in which the insured could be healthy and live longer than expected.
  - D) adverse selection problem in which the insured could be unhealthy and die sooner than expected.

Answer: D

Diff: 3

Topic: Asymmetric Information

Skill: Conceptual

- 10) You cause an automobile liability insurance company to face a moral hazard problem when you take \_\_\_\_\_ you buy automobile liability insurance from the company.
- A) less driving precautions after
  - B) more driving precautions after
  - C) less driving precautions before
  - D) the same driving precautions before and after

Answer: A

Diff: 2

Topic: Asymmetric Information

Skill: Fact

- 11) A lender faces a(n) \_\_\_\_\_ problem if borrowers with a greater chance of defaulting on their loans get loans from the lender.
- A) adverse selection
  - B) moral hazard
  - C) external cost
  - D) free-rider

Answer: A

Diff: 1

Topic: Asymmetric Information

Skill: Definition

- 12) A lender faces a(n) \_\_\_\_\_ problem when the lender lends funds to a borrower for a specific purpose and the borrower then opportunistically uses the funds for another purpose.
- A) adverse selection
  - B) moral hazard
  - C) external cost
  - D) free-rider

Answer: B

Diff: 1

Topic: Asymmetric Information

Skill: Definition

- 13) Education is a strong market signal in the job market because
- A) it tells employers that you have gained skills that will be useful in the work place.
  - B) education is costly to obtain.
  - C) education is less costly to obtain for highly productive individuals who are also likely to be highly productive in the work place.
  - D) firms can easily verify your level of education.

Answer: C

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

- 14) Market signals are
- A) an actions taken by buyers and sellers to communicate quality in the presence of perfect information.
  - B) only strong if obtaining the signal is more costly for individuals with valued traits than for those with non-valued traits.
  - C) used to differentiate those who will drive equally carefully whether or not they have auto insurance from those who drive less carefully when they have insurance.
  - D) used to distinguish between high and low quality and help correct the adverse selection problem.

Answer: D

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

- 15) Warranties, education, extracurricular activities are all examples of \_\_\_\_\_ .
- A) market signals
  - B) risk premiums
  - C) tools that can correct the moral hazard problem
  - D) incentives

Answer: A

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

- 16) You own a car dealership and pay all of your sales people a flat salary. As a result, they don't work very hard to generate sales. This is an example of
- A) adverse selection.
  - B) moral hazard.
  - C) logrolling.
  - D) an externality.

Answer: B

Diff: 1

Topic: *Asymmetric Information*

Skill: *Conceptual*

17) Related to the *Economics in Practice* on page 352: The purpose of lemon laws is to deal with the problem of \_\_\_\_\_ .

- A) moral hazard in the used car market
- B) adverse selection in the grocery market
- C) adverse selection in the used car market
- D) risk aversion in the automobile market

Answer: C

Diff: 2

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Fact*

18) Related to the *Economics in Practice* on page 352: A laundered lemon is

- A) a car that is designated as a lemon that has had its title cleaned.
- B) a lemon that has been washed thoroughly to remove all pesticides used in farming.
- C) a new car that is a lemon, but has not yet been identified as such.
- D) None of the above are correct.

Answer: A

Diff: 2

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Definition*

19) Related to the *Economics in Practice* on page 354: Suppose you see the following advertisement for a vacation rental. "Beautiful condo on the Island of Maui (Hawaii). Sleeps 5. Great landscaped grounds, pool, and BBQ area. Lanai overlooks pool. \$1500 per week." It is likely true that the condo

- A) doesn't have a view of the pool.
- B) has no view other than the pool (i.e. no ocean, mountain, or city view).
- C) is not on the island of Maui.
- D) has an actual rental rate of \$1600 per week.

Answer: B

Diff: 1

Topic: *Asymmetric Information: Economics in Practice*

Skill: *Conceptual*

## 2 True/False

1) Adverse selection is a situation in which asymmetric information results in low-quality goods or low-quality consumers being squeezed out of transactions because they are unable to demonstrate their quality.

Answer: FALSE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

2) Moral hazard occurs when one party to a contract changes their behavior in response to that contract and thus passes on costs of that behavior to the other party.

Answer: TRUE

Diff: 1

Topic: *Asymmetric Information*

Skill: *Definition*

- 3) Adverse selection and moral hazard are problems that arise in the presence of asymmetric information.  
Answer: TRUE  
Diff: 1  
Topic: Asymmetric Information  
Skill: Definition
- 4) The insurance industry is susceptible to adverse selection problems, but not problems of moral hazard.  
Answer: FALSE  
Diff: 1  
Topic: Asymmetric Information  
Skill: Conceptual
- 5) Jim used to be very careful with his car. However, once he bought full auto insurance on it, he stopped turning on his alarm or even locking it when parking it. This is an example of adverse selection.  
Answer: FALSE  
Diff: 1  
Topic: Asymmetric Information  
Skill: Conceptual
- 6) Annie, a high school student, baby sits to earn extra cash. In order to differentiate herself from other baby sitters, Annie took a baby sitting course from the Red Cross. This is an example of a market signal.  
Answer: TRUE  
Diff: 1  
Topic: Asymmetric Information  
Skill: Conceptual
- 7) Refer to the Economics in Practice on page 354. Advertisements provide information in two ways -- what they say and what they omit.  
Answer: TRUE  
Diff: 2  
Topic: Asymmetric Information: Economics in Practice  
Skill: Conceptual

## 17.3 Incentives

### 1 Multiple Choice

- 1) Mechanism design is used to \_\_\_\_\_ .  
A) align the interests of two parties in a transaction  
B) give individuals the incentive to reveal the truth about themselves  
C) correct inefficiencies associated with asymmetric information  
D) All of the above are correct.

Answer: D  
Diff: 2  
Topic: Incentives  
Skill: Conceptual

- 2) An example of mechanism design is:
- A) An employer pays all sales people a fixed salary.
  - B) Welfare reform that limits the amount of time a person can collect benefits.
  - C) Health insurance with no co-pays.
  - D) Reduced prices on bulk consumer purchases.

Answer: B

Diff: 1

Topic: Incentives

Skill: Conceptual

- 3) Why, in the labor market, are contracts often designed to include a variable salary component that is tied to some measure of performance.
- A) Such contracts provide workers with the incentive to work hard.
  - B) Most people are risk-loving and thus variability in their compensation leads to higher total utility.
  - C) Firms use such contracts to differentiate between high and low quality workers.
  - D) Both A and C are correct.

Answer: D

Diff: 1

Topic: Incentives

Skill: Conceptual

- 4) The following statements are all true EXCEPT:
- A) Since individuals tend to be risk averse, they generally wish to purchase health insurance if they can afford it.
  - B) Insurance programs have co-pays and deductibles in order to reduce the adverse selection problem associated with the health insurance industry.
  - C) Health insurance blunts the rationing function of price with respect to health care.
  - D) Private employers pay premiums on behalf of their employees that are based upon the medical claims of their employees. Thus, employers have an incentive to provide employees with programs that will improve their health (and reduce medical claims).

Answer: B

Diff: 2

Topic: Incentives

Skill: Conceptual

## 2 True/False

- 1) Labor market compensation contracts can be designed to screen out poor quality workers as well as provide employees with incentives to work hard.

Answer: TRUE

Diff: 1

Topic: Incentives

Skill: Conceptual

- 2) Performance compensation that is tied to outcomes out of the employee's control will provide employees with the incentive to work hard.

Answer: FALSE

Diff: 1

Topic: Incentives

Skill: Conceptual

3) Co-pays and deductibles reduce the moral hazard problem associated with the health insurance industry.

Answer: TRUE

*Diff: 1*

*Topic: Incentives*

*Skill: Conceptual*

4) Since insured individuals do not pay the full price for medical services that they consume, they tend to under consume medical services.

Answer: FALSE

*Diff: 1*

*Topic: Incentives*

*Skill: Conceptual*

5) Mechanism design can be used to provide employers and employees with the right incentives in labor and health care markets.

Answer: TRUE

*Diff: 1*

*Topic: Incentives*

*Skill: Conceptual*



# Chapter 18 Income Distribution and Poverty

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## 18.1 The Utility Possibilities Frontier

### 1 Multiple Choice

- 1) An equitable distribution of income means that
- A) income is equally distributed.
  - B) income is fairly distributed.
  - C) income is efficiently distributed.
  - D) there is a long-run equilibrium distribution.

Answer: B

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 2) The utility possibilities frontier graphically represents a two-person world that shows all points at which A's utility can be
- A) increased only if B's utility is increased.
  - B) decreased only if B's utility is decreased.
  - C) increased only if B's utility is decreased.
  - D) held constant as B's utility is either increased or decreased.

Answer: C

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 3) Any point on the utility possibilities frontier is
- A) inefficient because both people could be made better off simultaneously.
  - B) inefficient because it is only possible to make one person better off by making the other person worse off.
  - C) efficient because it is only possible to make one person better off by making the other person worse off.
  - D) efficient because both people could be made better off simultaneously.

Answer: C

Diff: 1

Topic: *The Utility Possibilities Frontier*

Skill: *Fact*

- 4) Any point inside the utility possibilities frontier is
- A) inefficient because both people could be made better off simultaneously.
  - B) inefficient because it is only possible to make one person better off by making the other person worse off.
  - C) efficient because it is only possible to make one person better off by making the other person worse off.
  - D) efficient because both people could be made better off simultaneously.

Answer: A

Diff: 1

Topic: *The Utility Possibilities Frontier*

Skill: *Fact*

Refer to the information provided in Figure 18.1 below to answer the questions that follow.

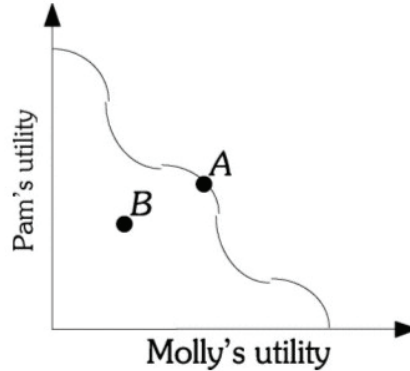


Figure 18.1

- 5) Refer to Figure 18.1. At point A the distribution of goods is  
 A) equitable.                      B) efficient.                      C) equal.                      D) just.

Answer: B

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 6) Refer to Figure 18.1. Point B is  
 A) inefficient because both people could be made better off simultaneously.  
 B) inefficient because it is only possible to make one person better off by making someone else worse off.  
 C) efficient because both people could be made better off simultaneously.  
 D) efficient because to make one person better off the other person must be made worse off.

Answer: A

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 7) Refer to Figure 18.1. In order to reach point A or any other point on the utility possibilities frontier, \_\_\_\_\_ .  
 A) all the assumptions of perfectly competitive market theory must hold  
 B) the government must redistribute income between Molly and Pam  
 C) the initial endowments of wealth, skills, etc. between Molly and Pam must be equitable  
 D) the distributions of income and wealth must be equitable

Answer: A

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 8) All points along the utility possibilities frontier are
- A) inefficient but equally desirable.
  - B) inefficient but may not be equally desirable.
  - C) efficient and equally desirable.
  - D) efficient but may not be equally desirable.

Answer: D

Diff: 1

Topic: *The Utility Possibilities Frontier*

Skill: *Fact*

- 9) If it is possible to make person A better off without making person B worse off, then the distribution of goods must be
- A) efficient.
  - B) inefficient.
  - C) equitable.
  - D) inequitable.

Answer: B

Diff: 3

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 10) If it is possible to make person A better off only by making person B worse off, then the distribution of goods must be
- A) efficient.
  - B) inefficient.
  - C) equitable.
  - D) inequitable.

Answer: A

Diff: 3

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 11) A distribution of goods between person A and person B is efficient if
- A) it is possible to make both person A and person B better off.
  - B) person A can be made better off only if person B is also made better off.
  - C) person A can be made better off only if person B is made worse off.
  - D) any change in the distribution would make both person A and person B worse off.

Answer: C

Diff: 3

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

Refer to the information provided in Figure 18.2 below to answer the questions that follow.

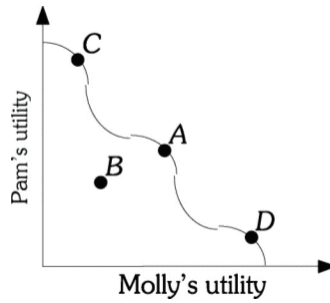


Figure 18.2

- 12) Refer to Figure 18.2. Which point represents an INEFFICIENT outcome?  
 A) A                      B) B                      C) C                      D) D

Answer: B

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 13) Refer to Figure 18.2. Efficiency is achieved  
 A) only at point B.                      B) only at point D.  
 C) at both points A, C, and D.                      D) at all points A, B, C, and D.

Answer: C

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 14) Refer to Figure 18.2. Based on this diagram, which of the following statements is TRUE?  
 A) Point B is clearly preferable to point C.  
 B) Point D is the best point that this society can obtain.  
 C) Both Pam and Molly are better off at point C than at point B.  
 D) From this information, it is impossible to determine if society is better off at point A or point C.

Answer: D

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 15) Refer to Figure 18.2. Ultimately, Molly and Pam will be at point \_\_\_\_\_ .  
 A) A  
 B) C  
 C) D  
 D) The actual point reached will depend upon Molly and Pam's initial endowments of wealth, skills, etc. and it is impossible to determine which point will be achieved from the given information.

Answer: D

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

Refer to the information provided in Figure 18.3 below to answer the question that follows.

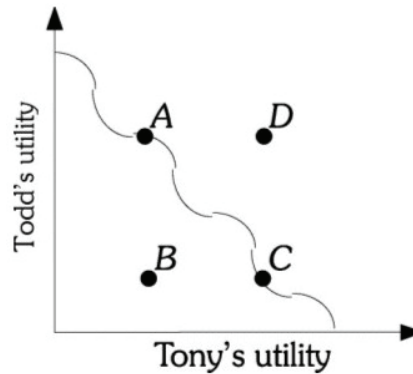


Figure 18.3

- 16) Refer to Figure 18.3. If society is at point A, the distribution is
- A) inefficient, because Todd's utility is zero.
  - B) inefficient, because both Todd and Tony can be made better off.
  - C) efficient because it is impossible to make Todd better off without making Tony worse off.
  - D) efficient because the distribution of income is equitable.

Answer: C

Diff: 3

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 17) Economists measure individual well-being by an individual's
- A) wealth.
  - B) income.
  - C) occupation.
  - D) utility.

Answer: D

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Definition

- 18) Individuals usually behave to as to maximize their \_\_\_\_\_.
- A) wealth
  - B) income
  - C) utility
  - D) opportunities

Answer: C

Diff: 1

Topic: The Utility Possibilities Frontier

Skill: Conceptual

- 19) In practice, the market outcome is usually \_\_\_\_\_.
- A) equitable but inefficient
  - B) efficient and equitable
  - C) inefficient and inequitable
  - D) unfair but efficient

Answer: C

Diff: 2

Topic: The Utility Possibilities Frontier

Skill: Fact

- 20) Income or wealth are often used to measure individual well-being because \_\_\_\_\_ .
- A) they are easily measured while the best measurement, utility, is not
  - B) they are the best measures of well-being since the more you have of either of them the better-off you are
  - C) as income and wealth increase, individuals are able to consume more and thus must be better-off
  - D) both can be redistributed to improve equity

Answer: A

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

## 2 True/False

- 1) If the assumptions of competitive market theory hold, the market system would lead to one and only one point on the utility possibilities frontier.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 2) If the assumptions of competitive market theory hold, the market system would lead to an efficient outcome.

Answer: TRUE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 3) If income is equally distributed to the members of society, then there is an equitable distribution.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Definition*

- 4) Well-being is equivalent to income or wealth.

Answer: FALSE

Diff: 1

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

- 5) All points along a utility possibilities frontier are efficient and equally desirable.

Answer: FALSE

Diff: 2

Topic: *The Utility Possibilities Frontier*

Skill: *Conceptual*

## 18.2 The Sources of Household Income

### 1 Multiple Choice

- 1) Both Amy and Tom are trained as nurses. Amy makes \$35,000 a year working as a nurse in an emergency room in a New York City hospital. Tom makes \$15,000 working as a community health nurse in New York City. Which of the following is TRUE?
- A) Tom is clearly worse off than Amy, because he earns \$20,000 a year less.
  - B) Tom must be better off than Amy if he is willing to take a job at \$20,000 a year less than Amy.
  - C) From this information it cannot be determined who is better off because income is an imperfect measure of well-being.
  - D) Even though income is an imperfect measure of well-being, Amy and Tom must be equally well off because either is free to switch jobs.

Answer: C

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 2) What percentage of United States personal income in 2007 was received in the form of wages and salaries (including wage supplements)?
- A) 37%
  - B) 50%
  - C) 64%
  - D) 90%

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 3) Households derive the majority of their income from
- A) wages and salaries.
  - B) property.
  - C) inherited wealth.
  - D) government transfers.

Answer: A

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 4) Paula was born with an aptitude for learning languages. This aptitude is an example of
- A) a compensating differential.
  - B) human capital.
  - C) property.
  - D) natural capital.

Answer: B

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 5) Earning a master's degree in engineering is an example of
- A) a Pareto good.
  - B) a compensating differential.
  - C) economic income.
  - D) an investment in human capital.

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 6) On-the-job-training is an example of
- A) an investment in human capital.
  - B) a compensating wage differential.
  - C) economic income.
  - D) income redistribution.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 7) Households acquire property through
- A) redistribution programs.
  - B) savings and inheritance.
  - C) savings only.
  - D) supplying labor in the labor market.

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 8) Property income takes the form of
- A) transfer payments.
  - B) wages and salaries.
  - C) profits, interest, dividends, and rents.
  - D) compensating differentials.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Definition*

- 9) Professional female basketball players make far less income than do professional male basketball players. The reason for the wage difference is
- A) gender discrimination.
  - B) the supply of female players is far greater than the supply of male players.
  - C) the demand for female players is far less than the demand for male players.
  - D) compensating differentials.

Answer: C

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

- 10) Upon graduation, Ellie had two job offers. The jobs were identical in every way with two exceptions. One job was located in San Diego, CA and offered an annual salary of \$50,000. The other job was located in Omaha, NE and offered an annual salary of \$60,000. All else equal, the salary difference is due to \_\_\_\_\_ .

- A) compensating differentials
- B) discrimination
- C) transfer payments
- D) the firm in California had a higher demand for workers than the firm in Nebraska

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*



11) Which of the following statements are NOT true?

- A) In the United States, the minimum wage was first nationally adopted in 1932.
- B) The first minimum wage law was adopted in New Zealand.
- C) The minimum wage is one strategy used to reduce wage inequality.
- D) The minimum wage is the lowest wage firms can legally pay their workers.

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

12) By the summer of 2009, the United States federal minimum wage will be raised to \$7.25. A likely result of the increase is:

- A) Some workers will leave the labor market.
- B) Firms will hire more workers.
- C) All workers prior to the wage increase will now earn at least \$7.25 per hour.
- D) Unemployment will increase as firms lay off workers.

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Conceptual*

13) Individuals with more experience tend to earn more than individuals with less experience, because

- A) experience is a compensating differential.
- B) experience on the job increases an individual's human capital.
- C) it is only fair that a more-experienced worker be paid more than a less-experienced worker.
- D) the government requires that more-experienced workers be paid more than less-experienced workers.

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

14) All Pittsburgh police officers must go through the same training program, but police officers assigned to the narcotics squad earn 10% more than police officers assigned to guard the city courthouse. This 10% difference in pay is an example of a \_\_\_\_\_ differential.

- A) human capital
- B) compensating
- C) transfer payment
- D) utility

Answer: B

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 15) An example of a compensating differential is:
- A) A plastic surgeon must train for five more years than an internist and on average plastic surgeons earn 40% more per year than internists.
  - B) A bank hires both men and women who have just graduated from college. The women are assigned positions as bank tellers, and the men are assigned to the management training program.
  - C) It takes the same amount and type of training to be either a prison guard or a parole officer. Prison guards earn about 15% more than parole officers with the same amount of experience. About 3% of prison guards, but only 1% of parole officers, are injured on the job each year.
  - D) Bill was injured on the job and as a result of his injuries he can no longer work. He now qualifies for \$1,000 a month in disability payments.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 16) The demand for Alaskan fishermen is the same as the demand for deep-sea divers in Hawaii. The annual earnings of Alaskan fishermen is 30% higher than the earnings of Hawaiian deep-sea divers. A possible explanation for this is:
- A) Alaskan fishermen can work only part of the year, but deep-sea divers can work year round in Hawaii.
  - B) The amount of human capital needed to be a deep-sea diver must be greater than the amount of human capital necessary to be a fisherman in Alaska.
  - C) Alaskan fishermen must face discrimination that is not encountered by Hawaiian deep-sea divers.
  - D) Being a fisherman in Alaska must be more dangerous than being a deep-sea diver in Hawaii.

Answer: D

Diff: 3

Topic: *The Sources of Household Income*

Skill: *Conceptual*

- 17) The idea that individuals who work for companies should receive at least an equitable hourly income is known as \_\_\_\_\_ .
- A) minimum wage
  - B) compensating differential
  - C) economic income
  - D) transfer payment

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 18) Critics of minimum wage laws argue that such laws will end up hurting people with lower skills because \_\_\_\_\_ .
- A) lower skilled workers will be forced into taking jobs that they would not freely choose.
  - B) compensating differentials will not be applied.
  - C) property income is a better way to measure hourly rates.
  - D) these laws interfere with the smooth functioning of the labor market and create unemployment.

Answer: D

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 19) The \$1,000 you earned last year on your money market fund is an example of \_\_\_\_\_ income.
- A) property
  - B) transfer
  - C) inheritance
  - D) human capital

Answer: A

Diff: 2

Topic: *The Sources of Household Income*

Skill: *Definition*

- 20) Most people's wealth, in the United States, comes from \_\_\_\_\_ .
- A) inheritance
  - B) transfer payments
  - C) saving
  - D) profits

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 21) In 2007 about 14% of personal income in the United States came from
- A) wages and salaries.
  - B) property income.
  - C) transfer payments.
  - D) profits.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 22) In 2007 about 22% of personal income in the United States came from
- A) wages and salaries.
  - B) property income.
  - C) transfer payments.
  - D) profits.

Answer: B

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

- 23) The biggest single transfer program at the federal level is
- A) farm subsidies.
  - B) unemployment compensation.
  - C) Social Security.
  - D) the agricultural support program.

Answer: C

Diff: 1

Topic: *The Sources of Household Income*

Skill: *Fact*

## 2 True/False

- 1) All transfer payments are made to people with low incomes.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Fact*
- 2) In theory, a minimum wage should lead to unemployment, but there is no evidence of such an effect.  
Answer: FALSE  
Diff: 2  
Topic: *The Sources of Household Income*  
Skill: *Fact*
- 3) All government payments to individuals are called transfer payments.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 4) The stock of knowledge, skills, and talents that people possess is called personal capital.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 5) American workers in Iraq earn hazard pay. This is an example of a compensating differential.  
Answer: TRUE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 6) Human capital is a combination of inborn and acquired skills, talent, and knowledge.  
Answer: TRUE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 7) Household income comes from two main sources: wages/salaries and property.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Definition*
- 8) About 50 percent of American women over the age of 16 are in the labor force.  
Answer: FALSE  
Diff: 1  
Topic: *The Sources of Household Income*  
Skill: *Fact*

## 18.3 The Distribution of Income

### 1 Multiple Choice

- 1) Economic income is \_\_\_\_\_ .
- A) the amount of money a household can spend during a given time period without increasing or decreasing its net assets
  - B) income from the ownership of real property and financial holdings
  - C) differences in wages that result from differences in working conditions
  - D) payments by government to people who do not currently supply goods or services in exchange

Answer: A

Diff: 2

Topic: The Distribution of Income

Skill: Definition

- 2) The amount of money a household can spend during a given time period without increasing or decreasing its net assets is called \_\_\_\_\_ .
- A) economic income
  - B) money income
  - C) after-tax income
  - D) property income

Answer: A

Diff: 2

Topic: The Distribution of Income

Skill: Definition

- 3) In the United States, in 2006, the most evenly distributed income source was \_\_\_\_\_ income.
- A) property
  - B) total
  - C) labor
  - D) transfer

Answer: D

Diff: 2

Topic: The Distribution of Income

Skill: Fact

- 4) For the bottom 10% of families in the income distribution, transfer payments account for approximately what percentage of income?
- A) 3%
  - B) 38%
  - C) 52%
  - D) 80%

Answer: D

Diff: 1

Topic: The Distribution of Income

Skill: Fact

- 5) The top 1% of families in the income distribution receive most of their income from
- A) wages and salaries.
  - B) property income.
  - C) transfer income.
  - D) profit income.

Answer: B

Diff: 1

Topic: The Distribution of Income

Skill: Fact

- 6) The bottom fifth of families in the income distribution receive most of their income from
- A) wages and salaries.
  - B) property income.
  - C) transfer income.
  - D) gambling income.

Answer: C

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 7) The difference between money income and economic income is
- A) money income excludes but economic income includes cash and noncash transfer payments and capital gains income.
  - B) economic income excludes but money income includes cash and noncash transfer payments and capital gains income.
  - C) money income excludes but economic income includes noncash transfer payments and capital gains.
  - D) economic income excludes but money income includes noncash transfer payments and capital gains.

Answer: C

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 8) An equal distribution of income would yield a Lorenz curve that was a
- A) line lying directly on the horizontal axis.
  - B) line lying directly on the vertical axis at 0%.
  - C) 45-degree line between 0 and 100%.
  - D) line lying directly on the vertical axis at 100%.

Answer: C

Diff: 3

Topic: *The Distribution of Income*

Skill: *Conceptual*

- 9) As income becomes more unequally distributed, the Lorenz curve \_\_\_\_\_ and \_\_\_\_\_ .
- A) moves further down to the right; the shaded area increases
  - B) moves further up to the left; the shaded area decreases
  - C) moves further up to the left rising about the 45 degree line; the shaded area increases
  - D) moves further down to the right; the shaded area decreases

Answer: A

Diff: 2

Topic: *The Distribution of Income*

Skill: *Conceptual*

Refer to the information provided in Figure 18.4 below to answer the questions that follow.

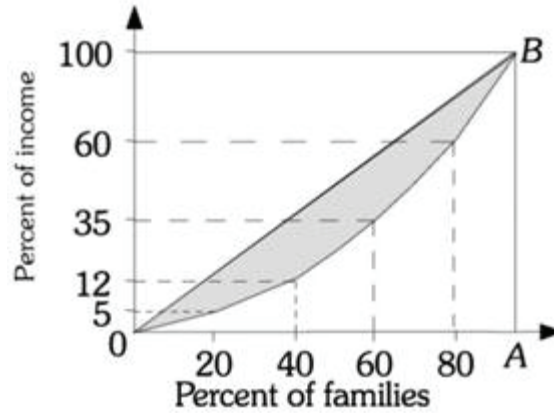


Figure 18.4

- 10) Refer to Figure 18.4. The top fifth of families earned \_\_\_\_\_% of income in Outland.  
 A) 20                      B) 40                      C) 60                      D) 95

Answer: B

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

AACSB: Analytic Skills

- 11) Refer to Figure 18.4. The third fifth of families earned \_\_\_\_\_% of income in Outland.  
 A) 12                      B) 23                      C) 25                      D) 35

Answer: B

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 18.4. Suppose that the Lorenz curve were the same as the 45-degree line *OB*. This would mean that \_\_\_\_\_ .

- A) the distribution of income is perfectly equitable
- B) the distribution of income is completely inequitable
- C) only one family earned all the income
- D) the distribution of income is equal

Answer: D

Diff: 3

Topic: The Distribution of Income

Skill: Conceptual

- 13) Refer to Figure 18.4. Suppose that the Lorenz curve ran along the horizontal axis to 100% of families, then became vertical to 100% of income. This would mean that \_\_\_\_\_ .
- A) the distribution of income is perfectly equitable
  - B) the distribution of income is completely inequitable
  - C) only one family earned all the income
  - D) the distribution of income is equal

Answer: C

Diff: 3

Topic: *The Distribution of Income*

Skill: *Conceptual*

- 14) The Gini coefficient is
- A) the most common way of representing the income distribution graphically.
  - B) a commonly used measure of the degree of inequality in an income distribution.
  - C) a commonly used measure of the degree of inequity in a property distribution.
  - D) the ratio of the percentage of total income received by the top 20% of families to the percentage of total income received by the bottom 20% of families.

Answer: B

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 15) A Gini coefficient of zero means that
- A) the income is equally distributed.
  - B) one person has all the income and everyone else has nothing.
  - C) all the income is received by the top 20% of families.
  - D) the income is split equally between the top 20% and the rest of the distribution.

Answer: A

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 16) A Gini coefficient of one means that
- A) income is distributed equally.
  - B) one family has all the income and everyone else has nothing.
  - C) all the income is received by the top 20% of families.
  - D) the income is split equally between the top 20% and the rest of the distribution.

Answer: B

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

- 17) Evidence suggests that in the last several decades, technology has played a role in driving inequality. Thus, \_\_\_\_\_ may be key to reducing inequality in the future.
- A) education
  - B) savings
  - C) research and development
  - D) investment

Answer: A

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*



18) The only advanced country to experience decreasing inequality in their income distribution is \_\_\_\_\_.

- A) the United States
- C) France

- B) Great Britain
- D) Canada

Answer: C

Diff: 1

Topic: The Distribution of Income

Skill: Fact

19) The official poverty line in the United States is set

- A) equal to one-half the average income in the United States.
- B) at three times the cost of the Department of Agriculture's minimum food budget.
- C) at three times the cost of the Department of Housing's minimum housing allowance.
- D) at the amount necessary to allow an individual to buy the same market basket of goods that the average urban wage earner can afford.

Answer: B

Diff: 1

Topic: The Distribution of Income

Skill: Fact

20) If the cost of the Department of Agriculture's minimum food budget for two people is \$2,000 per year, the official poverty line for a family of two would be

- A) \$667.
- B) \$2,000.
- C) \$6,000.
- D) \$12,000.

Answer: C

Diff: 2

Topic: The Distribution of Income

Skill: Analytic

AACSB: Analytic Skills

21) If the official poverty line for a family of four is \$12,000, then the Department of Agriculture's minimum food bundle costs a family of four \_\_\_\_\_ per year.

- A) \$1,000
- B) \$3,000
- C) \$4,000
- D) \$12,000

Answer: C

Diff: 2

Topic: The Distribution of Income

Skill: Analytic

AACSB: Analytic Skills

22) When measuring income for the purpose of classifying people as poor, the measurement of income used is

- A) economic income.
- B) comprehensive income.
- C) cash income and noncash transfer payments.
- D) money income.

Answer: D

Diff: 1

Topic: The Distribution of Income

Skill: Fact

23) In 2004, the highest incidence of poverty was for \_\_\_\_\_ .

- A) women living in households with no husband present
- B) individuals over 65
- C) Hispanic families
- D) black men

Answer: A

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

24) the bottom 40% of families ranked by wealth control about \_\_\_\_\_ of the nation's net worth.

- A) 2.6%
- B) 5.4%
- C) 10.2%
- D) 12.8%

Answer: A

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

## 2 True/False

1) The income distribution has become more unequal in the United States over the last 30 years.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

2) Counting the total number of individuals on any assistance program and dividing by the population determine the poverty line.

Answer: FALSE

Diff: 2

Topic: *The Distribution of Income*

Skill: *Definition*

3) Recent data suggests that the percentage of the population in poverty for African-American families is approximately three times that of white families.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

4) The top 10% of the population own over 90% of the stocks and bonds in the country.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

5) As the distribution of income becomes more unequal, the Lorenz curve comes closer to the 45-degree line.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

- 6) If we used economic income rather than money income to determine whether or not an individual is poor, the poverty rate would decrease.
- Answer: TRUE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Fact*
- 7) Economic income is measured "after-tax".
- Answer: FALSE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Definition*
- 8) Total income is more evenly distributed than labor income.
- Answer: FALSE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Fact*
- 9) An individual's economic income is generally larger than their money income.
- Answer: TRUE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Definition*
- 10) A Gini coefficient of 0.25 represents less inequality in income distribution than a Gini coefficient of 0.4.
- Answer: TRUE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Definition*
- 11) Disaggregating the distribution of income by race shows that the mean household income for the top 20% of African-American households was very similar to that of the top 20% of Hispanic households.
- Answer: TRUE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Fact*
- 12) Disaggregating the distribution of income by race shows that the mean household income for the bottom 20% of African-American households was very similar to that of the bottom 20% of white households.
- Answer: FALSE  
Diff: 1  
Topic: *The Distribution of Income*  
Skill: *Fact*

13) The United States is the only country to face increasing inequality in their income distribution in the last several decades.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

14) Poverty rates among the elderly have risen in the past few decades.

Answer: FALSE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

15) Nearly one in four African-Americans live in poverty.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

16) In the United States, the distribution of wealth is more unequal than the distribution of income.

Answer: TRUE

Diff: 1

Topic: *The Distribution of Income*

Skill: *Fact*

## 18.4 The Redistribution Debate

### 1 Multiple Choice

1) The most common argument for income redistribution is that

A) it works to reduce the poverty rate.

B) it improves efficiency in the economy.

C) it provides more incentive for people to try to better themselves.

D) a society as wealthy as the United States has a moral obligation to provide its members with the basic necessities of life.

Answer: D

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

2) All of the following are philosophical issues regarding income redistribution EXCEPT:

A) What is and is not possible?

B) What is fair?

C) What is just?

D) What is the ideal distribution of income?

Answer: A

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 3) Opponents of income redistribution argue that
- A) redistribution violates the proposition that "one is entitled to the fruits of one's efforts".
  - B) property income is less just than labor income and thus redistribution of that income is justified.
  - C) redistribution violated property rights.
  - D) Both (A) and (C) are correct.

Answer: D

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 4) Proponents of income redistribution argue that redistribution
- A) increases the welfare of all members of society.
  - B) will not take place absent government intervention as the market for charity, a private good, is imperfect.
  - C) would be agreed to by all members of society if they were risk-loving and contracting from the "original position".
  - D) helps those who, through no fault of their own, are unable to earn an adequate income.

Answer: D

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 5) \_\_\_\_\_ developed the labor theory of value.
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) Jeremy Bentham

Answer: C

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 6) \_\_\_\_\_ developed the theory of distributional justice.
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) Jeremy Bentham

Answer: B

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 7) \_\_\_\_\_ first proposed the idea of utilitarian justice.
- A) John Stuart Mill
  - B) John Rawls
  - C) Karl Marx
  - D) None of the above are correct.

Answer: A

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 8) Most of Karl Marx's writings are about  
A) communism.                      B) socialism.                      C) capitalism.                      D) efficiency.

Answer: C

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Fact*

- 9) You and your brother are splitting a piece of cake. You cut it into two pieces and your brother selects his piece first. Thus, you cut it into two equally sized pieces. This is an example of  
A) utilitarian justice.                      B) Rawlsian justice.  
C) communism.                      D) a public good.

Answer: B

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 10) The idea that a dollar in the hand of a rich person is worth less than a dollar in the hand of a poor person is a consequence of  
A) utilitarian justice.                      B) social justice.  
C) Rawlsian justice.                      D) absolute justice.

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 11) According to utilitarian justice, the redistribution of income from the rich to the poor causes \_\_\_\_\_.  
A) the rich to sacrifice a lot and the poor to gain a little  
B) the marginal utility of both the rich and the poor to increase  
C) the marginal utility of both the rich and the poor to decrease  
D) an increase in total utility because of the law of decreasing marginal utility

Answer: D

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 12) If all individuals have identical utility functions and the marginal utility of income decreases as income increases, transferring income from the rich to the poor will \_\_\_\_\_ total utility.  
A) increase  
B) decrease  
C) not change  
D) increase marginal utility, but not change

Answer: A

Diff: 3

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 13) The notion of utilitarian justice is that \_\_\_\_\_ .
- A) through income redistribution, the rich sacrifice a little and the poor gain a lot
  - B) any change that makes some people better off without making anyone worse off should be undertaken
  - C) income should be distributed so that the well-being of the worse-off member of society should be maximized
  - D) income should be distributed according to an individual's needs

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 14) A theory of distributional justice that concludes that the social contract emerging from the original position would call for an income distribution that would maximize the well-being of the worst-off member of society is known as \_\_\_\_\_ justice.
- A) utilitarian
  - B) Rawlsian
  - C) maxi-min
  - D) relative

Answer: B

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

- 15) Any society bound by a contract calling for an income distribution that would maximize the well-being of the worst-off member of society would allow for inequality if that inequality
- A) was justified by differences in individuals' productivity.
  - B) had the effect of improving the lot of the very poor.
  - C) could not be reduced without making someone worse off.
  - D) was justified by the needs of individuals.

Answer: B

Diff: 3

Topic: *The Redistribution Debate*

Skill: *Conceptual*

- 16) The primary assumption made in Rawlsian justice is that
- A) people are risk averse.
  - B) the marginal utility of income is decreasing.
  - C) each individual tries to maximize his or her own well-being at the expense of everyone else.
  - D) each person will produce according to his or her ability regardless of the reward.

Answer: A

Diff: 2

Topic: *The Redistribution Debate*

Skill: *Definition*

## 2 True/False

- 1) The argument most often used in favor of redistribution is that a society as wealthy as the United States has a moral obligation to provide all its members with the basic necessities of life.

Answer: TRUE

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

- 2) According to Karl Marx the value of any product is dependent upon the labor, capital, and land inputs used in production.

Answer: FALSE

Diff: 1

Topic: *The Redistribution Debate*

Skill: *Fact*

## 18.5 Redistribution Programs and Policies

### 1 Multiple Choice

- 1) A progressive income tax means that those with a higher income pay
- A) a lower percentage of their income in taxes than low-income people.
  - B) a higher percentage of their income in taxes than low-income people.
  - C) the same percentage of their income in taxes as low-income people.
  - D) all the taxes in the economy.

Answer: B

Diff: 2

Topic: *Redistribution Programs and Policies*

Skill: *Definition*

- 2) A proportional income tax means that those with a higher income pay
- A) a lower percentage of their income in taxes than low-income people.
  - B) a higher percentage of their income in taxes than low-income people.
  - C) the same percentage of their income in taxes as low-income people.
  - D) all the taxes in the economy.

Answer: C

Diff: 2

Topic: *Redistribution Programs and Policies*

Skill: *Definition*

- 3) Income tax studies show that its burden as a percentage of income \_\_\_\_\_ as income rises.
- A) remains about the same
  - B) decreases
  - C) rises slightly
  - D) initially increases and then decreases

Answer: C

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 4) Comparing the after-tax distribution of income to the before-tax distribution of income, it is true that the after-tax distribution of income is \_\_\_\_\_ the before-tax distribution of income.
- A) more equally distributed than
  - B) less equally distributed than
  - C) more equitably distributed than
  - D) virtually the same as

Answer: D

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*



- 5) In the Social Security system, the tax receipts from today's workers are
- A) paid into the federal government's general revenue to be used for any government expenditure.
  - B) paid into an account in the employee's name and saved and invested for that individual until he or she retires.
  - C) used to pay benefits to retired and disabled workers and their dependents today.
  - D) all paid into Medicare.

Answer: C

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 6) The largest income redistribution program in the United States is(are) the
- A) Social Security System.
  - B) Public Assistance (Welfare) Program.
  - C) Medicare and Medicaid Programs.
  - D) Supplemental Security Income Program.

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 7) The Social Security System includes three separate programs. They are
- A) Old Age and Survivors Insurance, Disability Insurance, and Health Insurance.
  - B) Old Age and Survivors Insurance, Medicare, and Medicaid.
  - C) Disability Insurance, Medicare, and Public Assistance (Welfare).
  - D) Old Age and Survivors Insurance, Medicare, and Unemployment Compensation.

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 8) The largest in-kind transfer program in the United States is
- A) Medicare.
  - B) the Housing Program.
  - C) Food Stamps.
  - D) Welfare.

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 9) Unemployment compensation is a \_\_\_\_\_ government transfer program.
- A) state
  - B) federal
  - C) local
  - D) municipal

Answer: A

Diff: 1

Topic: *Redistribution Programs and Policies*

Skill: *Fact*

- 10) Food stamps are
- A) only available to low-income families with children.
  - B) fully funded through state tax revenues.
  - C) vouchers that have a face value greater than their cost and that can be used to purchase food at grocery stores.
  - D) All of the above are correct.

Answer: C

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 11) The Earned Income Tax Credit is
- A) a non-refundable tax credit.
  - B) available only to low-income families with children.
  - C) a very simple program that is widely understood.
  - D) only a small program and claimed by very few households annually.

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 12) The Social Security system is financed through \_\_\_\_\_ .
- A) private insurance contributions
  - B) general revenues
  - C) the income tax
  - D) a payroll tax

Answer: D

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 13) The Food Stamp program is financed through \_\_\_\_\_ .
- A) private insurance contributions
  - B) general revenues
  - C) the income tax
  - D) a payroll tax

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 14) The Supplemental Security Income program is designed to take care of
- A) the very poor who have dependent children.
  - B) the elderly who are poor.
  - C) individuals who have been laid off from jobs.
  - D) people who work, but whose income is below the poverty level.

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 15) The Supplemental Security Income program is financed out of
- A) private insurance contributions.
  - B) general revenues.
  - C) the income tax.
  - D) a payroll tax.

Answer: B

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 16) Unemployment benefits are
- A) paid regardless of a person's income from other sources and regardless of assets.
  - B) reduced by an amount that is equal to an individual's income from other sources.
  - C) not paid to individuals with assets valued over \$200,000.
  - D) paid to individuals the entire time they are unemployed regardless of how long they are unemployed.

Answer: A

Diff: 2

Topic: Redistribution Programs and Policies

Skill: Definition

- 17) Related to the *Economics in Practice* on page 376: Which of the following statements regarding charitable giving is NOT TRUE?
- A) Price seems to affect the amount that individuals give to charity.
  - B) Taxpayers have the opportunity to deduct gifts to charity from their income in calculating their taxes. Thus, if the individual is taxed at a rate of 15%, then a \$100 gift to charity really costs them only \$85.
  - C) Since gifts to charity mean reductions in the amount of goods and services an individual can consume, such a gift must reduce their utility.
  - D) In theory, a matching gift may either lead individuals to donate less or more of their own money to charity.

Answer: C

Diff: 2

Topic: Redistribution Programs and Policies: Economics in Practice

Skill: Conceptual

## 2 True/False

- 1) The primary function of Temporary Assistance for Needy Families has been to provide funds for reuniting families.

Answer: FALSE

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

- 2) The biggest single transfer program at the federal level is Social Security.

Answer: TRUE

Diff: 1

Topic: Redistribution Programs and Policies

Skill: Fact

3) After-tax income is much more equally distributed than before-tax income.

Answer: FALSE

*Diff: 1*

*Topic: Redistribution Programs and Policies*

*Skill: Fact*

4) Unemployment benefits are paid only if a person's income from all sources and assets is below a certain level.

Answer: FALSE

*Diff: 1*

*Topic: Redistribution Programs and Policies*

*Skill: Fact*

5) If an aid program is mandated at the federal level, all states must abide by federal law and pay the same amount of benefits.

Answer: FALSE

*Diff: 1*

*Topic: Redistribution Programs and Policies*

*Skill: Fact*

# Chapter 19 Public Finance: The Economics of Taxation

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## 19.1 The Economics of Taxation

### 1 Multiple Choice

- 1) The tax \_\_\_\_\_ is the measure or value upon which a government levies a tax.  
A) base                      B) rate                      C) structure                      D) incidence

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 2) Every tax has two parts: a(n) \_\_\_\_\_ .  
A) base and a rate structure                      B) incidence and a rate  
C) base and an incidence                      D) rate structure and an excess burden

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 3) A local property tax is a tax on \_\_\_\_\_ , while a tax on your salary is a tax on \_\_\_\_\_ .  
A) a flow; a stock                      B) a stock; a flow  
C) a flow; income                      D) a residential holding; a flow

Answer: B

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 4) The tax rate structure is the  
A) measure or value upon which a tax is levied.  
B) measure of who pays the tax.  
C) study of how taxes change over time.  
D) percentage of a tax base that must be paid in taxes.

Answer: D

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 5) The burden of a \_\_\_\_\_ tax falls as a percentage of income as income rises.  
A) regressive                      B) progressive  
C) proportional                      D) benefits-received

Answer: A

Diff: 1

Topic: The Economics of Taxation

Skill: Definition

- 6) A(n) \_\_\_\_\_ tax has a burden that is the same proportion of income for all households.  
A) regressive                      B) progressive                      C) proportional                      D) equal

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 7) The burden of a \_\_\_\_\_ tax rises as a percentage of income as income rises.  
A) regressive                      B) progressive                      C) proportional                      D) ability-to-pay

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 8) The \_\_\_\_\_ is an example of a regressive tax.  
A) individual income tax                      B) tariff  
C) sales tax                      D) energy tax

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 9) The \_\_\_\_\_ tax is an example of a progressive tax in the United States.  
A) retail sales                      B) individual income  
C) property                      D) gasoline

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 10) The largest portion of federal government revenues comes from \_\_\_\_\_.  
A) the individual income tax                      B) excise taxes  
C) social insurance payroll taxes                      D) corporate income taxes

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 11) A family that earns \$20,000 a year pays \$200 a year in clothing taxes. A family that earns \$40,000 a year pays \$800 a year in clothing taxes. The clothing tax is a \_\_\_\_\_ tax.  
A) progressive                      B) regressive  
C) proportional                      D) benefits-received

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 12) A family that earns \$20,000 a year pays \$4,000 a year in payroll taxes. A family that earns \$40,000 a year pays \$8,000 a year in payroll taxes. The payroll tax is a \_\_\_\_\_ tax.
- A) progressive  
B) regressive  
C) proportional  
D) benefits-received

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 13) A family that earns \$20,000 a year pays \$400 a year in city wage taxes. A family that earns \$40,000 a year pays \$1,400 a year in city wage taxes. The city wage tax is a \_\_\_\_\_ tax.
- A) progressive  
B) regressive  
C) proportional  
D) benefits-received

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

AACSB: *Analytic Skills*

- 14) A comprehensive tax of 20% on all forms of income with no deductions or exclusions is an example of a \_\_\_\_\_ tax.
- A) proportional  
B) progressive  
C) regressive  
D) rate

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 15) The total amount of tax you pay divided by your total income is the \_\_\_\_\_ tax rate.
- A) marginal  
B) average  
C) total  
D) proportional

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 16) The \_\_\_\_\_ tax rate is the tax rate paid on any additional income earned.
- A) average  
B) total  
C) marginal  
D) proportional

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

Refer to the information provided in Table 19.1 below to answer the questions that follow.

**Table 19.1**

Total Income	Total Taxes
\$10,000	\$1,000
20,000	2,400
30,000	4,500
40,000	8,000

- 17) Refer to Table 19.1. At an income level of \$10,000, the average tax rate is  
A) 1%.                      B) 5%.                      C) 10%.                      D) 20%.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 18) Refer to Table 19.1. At an income level of \$40,000, the average tax rate is  
A) 2%.                      B) 5%.                      C) 15%.                      D) 20%.

Answer: D

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 19) Refer to Table 19.1. At an income level of \$30,000, the average tax rate is  
A) 1.5%.                      B) 6.67%.                      C) 15%.                      D) 22.5%.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 20) Refer to Table 19.1. If income increases from \$10,000 to \$20,000, the marginal tax rate is  
A) 2%.                      B) 12%.  
C) 14%.                      D) indeterminate from this information.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 21) Refer to Table 19.1. If income increases from \$30,000 to \$40,000, the marginal tax rate is  
A) 5%.                      B) 20%.  
C) 35%.                      D) indeterminate from this information.

Answer: C

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills



- 22) Refer to Table 19.1. The tax rate structure in this example is  
 A) proportional.            B) progressive.            C) regressive.            D) marginal.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.2 below to answer the question that follows.

**Table 19.2**

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$5,000	\$750		
\$10,000	\$1,200		
\$15,000	\$1,500		
\$20,000	\$1,600		

- 23) Refer to Table 17.2. The tax rate structure in this example is  
 A) proportional.            B) progressive.            C) regressive.            D) marginal.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.3 below to answer the questions that follow.

**Table 19.3**

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$10,000	\$1,000		
\$20,000	\$2,000		
\$30,000	\$3,000		
\$40,000	\$4,000		

- 24) Refer to Table 19.3. The tax rate structure in this example is  
 A) proportional.            B) progressive.            C) regressive.            D) marginal.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 19.4 below to answer the questions that follow.

**Table 19.4**

Total Income	Total Taxes	Average Tax Rate	Marginal Tax Rate
\$10,000	\$500		
\$20,000	\$1,500		
\$30,000	\$3,000		
\$40,000	\$8,000		

- 25) Refer to Table 19.4. The tax rate structure in this example is  
 A) proportional.                      B) progressive.                      C) regressive.                      D) marginal.

Answer: B

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 26) After subtracting all deductions and exemptions from total income, you are left with  
 A) taxable income.                      B) marginal income.  
 C) standardized income.                      D) the tax base.

Answer: A

Diff: 2

Topic: The Economics of Taxation

Skill: Definition

Refer to Scenario 19.1 below to answer the questions that follow.

SCENARIO 19.1: An individual earning \$40,000 pays \$3,200 in taxes. The marginal tax rate on any income earned above \$40,000 is 20%.

- 27) Refer to Scenario 19.1. When this person earns \$40,000, her average tax rate is  
 A) 8%.                                              B) 12.5%.  
 C) 20%.                                              D) indeterminate from this information.

Answer: A

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 28) Refer to Scenario 19.1. When this person earns \$60,000, her tax payment would be  
 A) \$4,000.                                              B) \$7,200  
 C) \$12,000.                                              D) indeterminate from this information.

Answer: B

Diff: 2

Topic: The Economics of Taxation

Skill: Analytic

AACSB: Analytic Skills

- 29) Refer to Scenario 19.1. When this person earns \$60,000, her average tax rate is
- A) 12%.
  - B) 14%.
  - C) 20%.
  - D) indeterminate from this information.

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 30) Refer to Scenario 19.1. Suppose this person earns \$60,000 and gives a tax deductible donation of \$1,000 to charity. The donation will reduce her tax payment by \_\_\_\_\_ .
- A) \$80
  - B) \$120
  - C) \$200
  - D) \$1,000

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 31) If the marginal tax rate exceeds the average tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 32) If the average tax rate exceeds the marginal tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 33) If the marginal tax rate equals the average tax rate, the tax would be
- A) proportional.
  - B) regressive.
  - C) progressive.
  - D) uniform.

Answer: A

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 34) Which of the following statements is TRUE?
- A) Economists believe that average tax rates have a greater influence on behavior than marginal tax rates.
  - B) Economists believe that marginal tax rates have a greater influence on behavior than average tax rates.
  - C) Economists believe that marginal and average tax rates influence behavior to the same extent.
  - D) Economists believe that neither marginal nor average tax rates have any influence on behavior.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

- 35) A theory of fairness that holds that taxpayers should contribute to the government in proportion to the benefits they receive from public expenditures is the \_\_\_\_\_ principle.
- A) ability-to-pay
  - B) equity
  - C) benefits-received
  - D) equality-for-all

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 36) If the government used the revenue from the excise tax on cigarettes to fund research on lung cancer treatment programs, this would be an example of
- A) an ability-to-pay tax.
  - B) a benefits-received tax.
  - C) a vertical equity tax.
  - D) a user fee.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 37) Which of the following is a tax based on the benefits-received principle?
- A) a property tax, if the revenue is used to finance public education
  - B) a tax on imports that is used to finance job retraining for workers who have lost their jobs because of the competition from imported products
  - C) a progressive income tax that is used to finance national defense
  - D) a tax added to the camping fee at national parks that is used to maintain and upgrade camping facilities at national parks

Answer: D

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 38) The benefits-received principle of taxation is not often used because
- A) if tax payments are linked to the benefits received, taxpayers tend to overstate the benefits that they receive from public goods.
  - B) it leads to an overproduction of public goods.
  - C) it is difficult to determine the values individual taxpayers place on goods and services that are produced using tax revenue.
  - D) it leads to less equality in the after-tax distribution of income.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Fact*

- 39) A theory of taxation that states that citizens should bear tax burdens in line with their ability to pay taxes is the \_\_\_\_\_ principle.
- A) ability-to-pay
  - B) equity
  - C) benefits-received
  - D) equal payment

Answer: A

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Definition*

- 40) The progressive income tax is based on the \_\_\_\_\_ principle.
- A) benefits-received
  - B) tax equity
  - C) efficiency tax
  - D) ability-to-pay

Answer: D

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 41) Vertical equity holds that those
- A) with equal ability to pay should bear equal tax burdens.
  - B) who benefit the most from governmental services should bear the higher tax burden.
  - C) with greater ability to pay should pay more.
  - D) with equal ability to pay should bear unequal tax burdens.

Answer: C

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

- 42) Horizontal equity holds that those
- A) with equal ability to pay should bear unequal tax burdens.
  - B) with equal ability to pay should bear equal tax burdens.
  - C) who benefit the most from government services should bear the higher tax burden.
  - D) who benefit the most from government services should have the greatest voice in determining what gets produced.

Answer: B

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Definition*

- 43) Individuals are allowed to deduct a percentage of their expenditures for health care from their taxable income if these expenditures are above a certain amount. This reduces the amount that must be paid in taxes. Allowing for these deductions would improve \_\_\_\_\_ of the federal income tax.
- A) the horizontal equity
  - B) the vertical equity
  - C) both vertical and horizontal equity
  - D) the progressivity

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Conceptual*

- 44) Economic income is the sum of consumption and
- A) net worth.
  - B) the change in net worth.
  - C) wealth.
  - D) transfer payments.

Answer: B

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*





55) Which of the following statements is FALSE?

- A) An income tax taxes savings twice only if consumption is the measure used to gauge a person's ability to pay.
- B) Proponents of income as a tax base argue that you should not be taxed on what you draw out of the common pot, but rather on the basis of your ability to draw from the pot.
- C) The double taxation of saving tends to increase the saving rate because people have to save more to keep the after-tax yield constant.
- D) At this time, there is not clear consensus on what the best tax base is.

Answer: C

Diff: 2

Topic: *The Economics of Taxation*

Skill: *Fact*

56) Related to the *Economics in Practice* on page 387: Warren Buffet, billionaire investment guru, addressed Congress with regard to the Gift and Estate Tax. Buffet said:

- A) The estate tax should be repealed.
- B) The estate tax should be reinstated and the revenue used to give a tax credit to U.S. households with incomes under \$20,000.
- C) The estate tax is paid by many families each year and causes a significant burden on them -- especially hurting small family farms.
- D) The estate tax should be reinstated, but that the maximum gift should be increased to \$5 million.

Answer: B

Diff: 2

Topic: *The Economics of Taxation: Economics in Practice*

Skill: *Fact*

## 2 True/False

1) A tax that exacts a higher proportion of income from higher-income people than it does from lower-income households is a regressive tax.

Answer: FALSE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*

2) A retail sales tax is a proportional tax with respect to income.

Answer: FALSE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Fact*

3) Vertical equity holds that those with greater ability to pay should pay more.

Answer: TRUE

Diff: 1

Topic: *The Economics of Taxation*

Skill: *Definition*



- 4) Horizontal equity hold that those with greater ability to pay should pay less.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 5) For the purpose of defining economic income, capital gains count as income only when they are realized.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Fact*
- 6) An income tax leads to double taxation on saving only if consumption is the measure to gauge a person's ability to pay.  
Answer: TRUE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Fact*
- 7) A person's wealth is the total value of all the things they own.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 8) Consumption is the total value of all goods that a household consumes in a given period.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 9) Assets minus liabilities equals net worth.  
Answer: TRUE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*
- 10) Wealth is a flow measure.  
Answer: FALSE  
Diff: 1  
Topic: *The Economics of Taxation*  
Skill: *Definition*

## 19.2 Tax Incidence: Who Pays?

### 1 Multiple Choice

- 1) Tax incidence is the
- A) behavior of shifting the tax to another party.
  - B) ultimate distribution of a tax's burden.
  - C) structure of the tax.
  - D) measure of the impact the tax has on employment and output.

Answer: B

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Definition

- 2) Tax shifting
- A) is the way in which a tax is structured.
  - B) is the ultimate distribution of a tax's burden.
  - C) occurs when taxes cause prices to increase, but wages to fall.
  - D) occurs when households can alter their behavior and do something to avoid paying a tax.

Answer: D

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Definition

- 3) A household is hurt, on the \_\_\_\_\_ side, when its net profits or wages fall and is hurt, on the \_\_\_\_\_ side when the prices of goods and services increase.
- A) sources; uses
  - B) uses; sources
  - C) flow; stock
  - D) input; output

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Definition

- 4) A(n) \_\_\_\_\_ is most easily shifted.
- A) income tax that allows for no deductions or exemptions
  - B) retail sales tax
  - C) uniform tax on land
  - D) tax on imported rice

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 5) As a result of an increase in the payroll tax that employers must pay on their employees' wages, employers reduce the starting wage for new employees. This is an example of
- A) tax shifting.
  - B) tax incidence.
  - C) a regressive tax.
  - D) tax avoidance.

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 6) The government imposes a tax on imported automobiles. As a result, fewer individuals purchase imported cars. This is an example of tax  
 A) equity.                      B) shifting.                      C) evasion.                      D) incidence.

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 7) Firms may react to a payroll tax by  
 A) substituting labor for capital.  
 B) reducing their output.  
 C) shifting to more capital intensive techniques.  
 D) Both (B) and (C) are correct.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

Refer to the information provided in Figure 19.1 below to answer the questions that follow.



Figure 19.1

- 8) Refer to Figure 19.1. Prior to the imposition of a payroll tax, this labor market was in equilibrium at a wage of \_\_\_\_\_ and employment of \_\_\_\_\_ workers.  
 A) \$5.00; 500                      B) \$7.00; 800                      C) \$10.00; 700                      D) \$12.00; 650

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Figure 19.1. The payroll tax imposed is \_\_\_\_\_ per unit of labor.  
A) \$2                      B) \$3                      C) \$5                      D) \$10

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 10) Refer to Figure 19.1. Initially after the payroll tax is imposed, the firms' cost per unit of labor is \_\_\_\_\_ per hour and the workers' take home pay is \_\_\_\_\_ per hour.  
A) \$10; \$9                      B) \$9; \$9                      C) \$10; \$10                      D) \$12; \$7

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 11) Refer to Figure 19.1. Initially after the payroll tax is imposed, there will be an  
A) equilibrium in the labor market.                      B) excess demand for labor of 100 units.  
C) excess supply of labor of 150 units.                      D) excess supply of labor of 100 units.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 12) Refer to Figure 19.1. After firms can respond to the payroll tax, the total wage paid by firms equals  
A) \$12.                      B) \$10.                      C) \$7.                      D) \$5.

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 13) Refer to Figure 19.1. After firms can respond to the payroll tax, the workers will take home a wage of  
A) \$12.                      B) \$10.                      C) \$7.                      D) \$5.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 14) Refer to Figure 19.1. After firms can respond to the payroll tax, employment will be  
A) 500.                      B) 650.                      C) 700.                      D) 800.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

AACSB: Analytic Skills

- 15) Refer to Figure 19.1. The workers' tax burden is \_\_\_\_\_ and the employers' tax burden is \_\_\_\_\_.
- A) \$2,100; \$1,400      B) \$1,400; \$2,100      C) \$700; \$1,400      D) \$0; \$2,100

Answer: B

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 16) Refer to Figure 19.1. The total tax collections from this payroll tax are
- A) \$700.      B) \$1,400.      C) \$2,100.      D) \$3,500.

Answer: D

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

AACSB: Analytic Skills

- 17) If demand is unit elastic and the labor supply is very elastic, the payroll tax is
- A) borne mostly by the employer.  
B) borne entirely by the employer.  
C) borne mostly by the workers.  
D) split evenly between the employer and the workers.

Answer: A

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 18) When the demand is unit elastic and the labor supply is very inelastic, the payroll tax is
- A) borne mostly by the employer.  
B) borne entirely by the employer.  
C) borne mostly by the employee.  
D) split fairly evenly between the employer and the employee.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

- 19) Employers will bear the full burden of the payroll tax if labor supply is
- A) perfectly inelastic.      B) perfectly elastic.  
C) backward bending.      D) upward sloping.

Answer: B

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 20) A payroll tax is imposed on two types of labor: carpenters and laborers. In the short run, the elasticity of labor supply of carpenters is much less elastic than the elasticity of labor supply of laborers. Which of the following is TRUE?
- A) In the short run, carpenters will bear a larger share of the payroll tax than laborers.
  - B) In the short run, laborers will bear a larger share of the payroll tax than carpenters.
  - C) In the short run, carpenters and laborers will bear the same share of the payroll tax, but in the long run, laborers will bear a larger share of the payroll tax than carpenters.
  - D) There is not enough information to determine the relative shares of the payroll tax for carpenters and laborers in either the short run or the long run.

Answer: A

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

- 21) The payroll tax for Social Security in the United States is
- A) progressive.
  - B) regressive.
  - C) proportional.
  - D) uniform.

Answer: B

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 22) The payroll tax is regressive because
- A) most of the tax does not apply to wages and salaries above \$97,500.
  - B) wages and salaries are a larger percentage of total income for those higher on the income scale.
  - C) the elasticity of labor supply is close to zero.
  - D) All of the above are correct.

Answer: A

Diff: 3

Topic: Tax Incidence: Who Pays?

Skill: Analytic

- 23) Empirical studies of labor supply behavior in the United States suggest that the elasticity of labor supply is close to zero and therefore
- A) most of the payroll tax in the United States is borne by workers.
  - B) most of the payroll tax in the United States is borne by employers.
  - C) most of the payroll tax in the United States is borne by consumers in the form of higher prices.
  - D) the payroll tax is split equally between employers and workers.

Answer: A

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

24) The corporation income tax causes \_\_\_\_\_ the noncorporate sector.

- A) capital to flow into the corporate sector from
- B) capital to flow from the corporate sector to
- C) less capital to be used in both the corporate sector and
- D) more capital to be used in both the corporate sector and

Answer: B

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

25) Assume that both the corporate and noncorporate sectors are in long-run equilibrium before the imposition of a corporate profits tax. In the short run, the imposition of a corporate profits tax will

- A) decrease profits in both the corporate and noncorporate sectors.
- B) not change profits in either the corporate or the noncorporate sector.
- C) not change profits in the noncorporate sector, but decrease profits in the corporate sector.
- D) not change profits in the corporate sector, but increase profits in the noncorporate sector.

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

26) In the long run, the corporate profits tax will lead to \_\_\_\_\_ profits in the corporate sector and \_\_\_\_\_ profits in the noncorporate sector.

- A) lower; higher
- B) higher; higher
- C) higher; lower
- D) lower; lower

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

27) In the long run the corporate profits tax may lead to \_\_\_\_\_ prices for the products of corporations and \_\_\_\_\_ prices for the products of partnerships and proprietorships.

- A) higher; higher
- B) lower; lower
- C) higher; lower
- D) lower; higher

Answer: C

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

28) The ultimate burden of the corporate profits tax appears to depend on

- A) the relative capital/labor intensity of the corporate and noncorporate sectors.
- B) the ease with which capital and labor can be substituted in the corporate and noncorporate sectors.
- C) the elasticities of demand for the products produced in the corporate and noncorporate sectors.
- D) All of the above are correct.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 29) Arnold Harberger's study on the incidence of the corporate income tax concluded that the burden of the tax is borne by
- A) corporations in the form of lower profits and by consumers in the form of higher prices.
  - B) consumers in the form of higher prices and by workers in the form of lower wages.
  - C) noncorporate firms in the form of higher capital prices.
  - D) owners of corporations, proprietorships, and partnerships in rough proportion to profits.

Answer: D

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 30) State and local taxes seem as a group to be mildly \_\_\_\_\_ and federal taxes seem as a group to be mildly \_\_\_\_\_.
- A) regressive; regressive
  - B) progressive; regressive
  - C) progressive; progressive
  - D) regressive; progressive

Answer: D

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

## 2 True/False

- 1) Workers bear the bulk of the payroll tax when labor supply is very elastic.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 2) State and local taxes as a group seem to be mildly progressive, but federal taxes as a group seem to be mildly regressive.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 3) Broad-based taxes are less likely to be shifted than partial taxes are.

Answer: TRUE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 4) Corporate taxes are levied on the profits of all firms.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

- 5) Payroll taxes are ultimately borne entirely by workers.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact



6) Since the demand for gasoline is relatively inelastic, a gas tax is largely borne by consumers.

Answer: TRUE

Diff: 2

Topic: Tax Incidence: Who Pays?

Skill: Conceptual

7) The United States payroll tax is progressive.

Answer: FALSE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

8) The United States corporate income tax is progressive.

Answer: TRUE

Diff: 1

Topic: Tax Incidence: Who Pays?

Skill: Fact

### 19.3 Excess Burden and the Principle of Neutrality

#### 1 Multiple Choice

1) Excess burden is the

A) ultimate distribution of a tax.

B) shifting of the tax from one burden to another.

C) amount by which the burden of a tax exceeds the total revenue collected.

D) differential impact the tax has on high-and low-income groups.

Answer: C

Diff: 1

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

2) Excess burden is caused by the fact that taxes

A) are spent in ways that taxpayers do not support.

B) distort economic decisions.

C) generate less revenue than the government spends.

D) are regressive instead of progressive.

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

3) All else equal, taxes that are neutral with respect to economic decisions are generally preferable to taxes that distort economic decisions. This is known as the

A) principle of neutrality.

B) principle of second best.

C) principle of excess burden.

D) law of tax incidence.

Answer: A

Diff: 1

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

- 4) A tax on \_\_\_\_\_ would impose the smallest excess burden on an individual.
- A) Diet Pepsi
  - B) all diet beverages
  - C) all soft drinks
  - D) all types of beverages including water

Answer: D

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Conceptual

*Refer to Scenario 19.2 below to answer the questions that follow.*

SCENARIO 19.2: The current lowest cost method of producing brown paper bags is \$5.00 per 100 bags. The government imposes a \$0.50 tax per unit of labor. After the tax is imposed, paper bag producers will use two units of labor to produce 100 paper bags. This increases the cost of paper-bag production to \$6.50 per 100 bags.

- 5) Refer to Scenario 19.2. If 1,000 paper bags are sold, the total burden of the tax is
- A) \$1.50.
  - B) \$10.00.
  - C) \$15.00.
  - D) \$65.00.

Answer: C

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Scenario 19.2. If 1,000 paper bags are sold, the excess burden of the tax is
- A) \$5.00.
  - B) \$10.00.
  - C) \$15.00.
  - D) \$25.00.

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 7) Refer to Scenario 19.2. If 1,000 paper bags are sold, the total tax revenue collected is
- A) \$10.00.
  - B) \$50.00.
  - C) \$250.00.
  - D) \$500.00.

Answer: A

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Table 19.5 below to answer the questions that follow. Capital and labor each cost \$1 per unit. The firm produces 1000 units of output.

**Table 19.5**

Technology	Input Requirements per unit of Output	
	K	L
A	5	2
B	3	5

- 8) Refer to Table 19.5. Given the input prices, which technology will the firm use?
- A) Technology A
  - B) Technology B
  - C) Either technology A or B -- the firm is indifferent between the two.
  - D) The answer is impossible to determine with the given information.

Answer: A

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 9) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. Which technology will the firm use?
- A) Technology A
  - B) Technology B
  - C) Either technology A or B -- the firm is indifferent between the two.
  - D) The answer is impossible to determine with the given information.

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 10) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the total tax revenue raised?
- A) \$2,000
  - B) \$3,000
  - C) \$5,000
  - D) The answer is impossible to determine with the given information.

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

11) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the total burden of the tax? Assume that the industry is perfectly competitive and thus price is equal to the marginal cost of production.

- A) \$1,000                      B) \$3,000                      C) \$4,000                      D) \$11,000

Answer: C

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

12) Refer to Table 19.5. Suppose the government imposes a 100% tax on capital. What is the excess burden of the tax? Assume that the industry is perfectly competitive and thus price is equal to the marginal cost of production.

- A) \$1,000                      B) \$3,000                      C) \$4,000                      D) \$11,000

Answer: A

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

13) The total tax burden is the \_\_\_\_\_ the tax.

- A) revenue collected from the tax minus the excess burden created by  
B) excess burden created by the tax minus the revenue collected from  
C) sum of the revenue collected by the tax and the excess burden created by  
D) ratio of the revenue collected and the excess burden created by

Answer: C

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

14) Taxes levied on broad bases tend to distort choice \_\_\_\_\_ and impose \_\_\_\_\_ excess burden than taxes on more sharply defined bases.

- A) less; larger                      B) less; smaller                      C) more; larger                      D) more; smaller

Answer: B

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

15) The total burden of a tax is \$12,000 and the tax revenue from this tax is \$8,000. The excess burden of this tax is

- A) \$4,000.                      B) \$8,000.                      C) \$10,000.                      D) \$20,000.

Answer: A

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 16) The excess burden of a tax is \$5,000 and the tax revenue from this tax is \$20,000. The total burden of this tax is
- A) \$4,000.                      B) \$5,000.                      C) \$15,000.                      D) \$25,000.

Answer: D

Diff: 2

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 17) There would be no excess burden from a tax if demand were
- A) unitarily elastic.                                              B) perfectly elastic.  
C) perfectly inelastic.                                              D) upward sloping.

Answer: C

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Fact

- 18) Your local government needs to increase tax revenue. To increase tax revenue it can either increase the property tax on residential property or increase the property tax on all property. The government wants to impose the smallest excess burden possible. You recommend that local government increase the property tax
- A) only on residential property because this tax cannot be shifted.  
B) on all property because the demand for all property is less elastic than the demand for residential property.  
C) on all property, because this tax would be less regressive than a tax only on residential property.  
D) only on residential property because taxpayers are allowed to deduct property taxes from their federal income tax liability, thus reducing the amount they must pay in federal taxes.

Answer: B

Diff: 3

Topic: Excess Burdens and the Principle of Neutrality

Skill: Analytic

AACSB: Analytic Skills

- 19) The principle of second best states that
- A) if previously existing distortions exist, a distortionary tax may actually improve efficiency.  
B) the broader based the tax, the less distortionary it is.  
C) the more inelastic the demand for a product, the less distortionary a tax on the product would be.  
D) taxes should be constructed so that they are neutral.

Answer: A

Diff: 1

Topic: Excess Burdens and the Principle of Neutrality

Skill: Definition

- 20) What circumstances favor nonneutral taxes?
- A) only the presence of externalities
  - B) only the presence of other distortionary taxes
  - C) both the presences of externalities and other distorting taxes
  - D) both inelastic demand and the presence of externalities

Answer: C

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 21) Which of the following illustrates the principle of second best?
- A) The government imposes taxes on gasoline and the tax revenue collected is used to pay for road repair.
  - B) The government decides to impose taxes on all grains, rather than imposing a tax only on wheat.
  - C) The government imposes a tax on a paper manufacturer that equals the cost of cleaning the river damaged by the waste discharged into the river by the paper manufacturer.
  - D) A tax imposed on land, because this tax distorts economic decisions less than taxes on other factors of production.

Answer: C

Diff: 3

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) The optimal taxation system is a tax system that
- A) is highly progressive.
  - B) minimizes the overall excess burden.
  - C) minimizes the total tax burden.
  - D) maximizes tax revenues.

Answer: B

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 23) Related to the *Economics in Practice* on page 396: President Bush's advisory panel on federal tax reform recommended eliminating the deduction on state and local taxes because \_\_\_\_\_.
- A) an individual's ability to pay is based on "before-tax" income
  - B) state and local taxes are used to provide services for individuals and since the individuals are essential "buying" a good or service they should not be able to deduct those tax payments
  - C) deductibility of these taxes encourages overspending on services provided by state and local governments
  - D) the deduction reduces the progressivity of the federal income tax

Answer: C

Diff: 2

Topic: *Excess Burdens and the Principle of Neutrality; Economics in Practice*

Skill: *Fact*

- 24) Related to the *Economics in Practice* on page 396: Those opposed to eliminating the deduction on home mortgages did so because \_\_\_\_\_.
- A) they feel that the deduction encourages overinvestment in housing
  - B) it encourages home ownership which is associated with an external public good
  - C) such a move would unfairly benefit the wealthy
  - D) this is a very popular deduction and many citizens would be very upset

Answer: B

Diff: 2

Topic: *Excess Burdens and the Principle of Neutrality: Economics in Practice*

Skill: *Fact*

## 2 True/False

- 1) A tax that distorts an economic decision always imposes an excess burden and decreases efficiency.

Answer: FALSE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Fact*

- 2) Deadweight loss is another term for excess burden.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Definition*

- 3) Excess burden is the total burden of a tax minus the tax revenue generated by the tax.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Definition*

- 4) Neutral taxes do not impose excess burdens.

Answer: TRUE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Conceptual*

- 5) A nonneutral tax cannot be used to reduce distortions created by another nonneutral tax.

Answer: FALSE

Diff: 1

Topic: *Excess Burdens and the Principle of Neutrality*

Skill: *Conceptual*

## 19.4 Measuring Excess Burdens

### 1 Multiple Choice

Refer to Scenario 19.3 below to answer the questions that follow.

SCENARIO 19.3: Suppose demand for widgets is given by the equation  $P = 20 - 0.5Q$ . Originally, the price of the good is \$10 per unit. When a tax of \$2 per unit is imposed, the price of the good rises to \$12 per unit.

- 1) Refer to Scenario 19.3. How much total tax revenue is raised by the tax?  
A) \$2                      B) \$20                      C) \$32                      D) \$40

Answer: C

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

- 2) Refer to Scenario 19.3. What is the total burden of the tax?  
A) \$4                      B) \$36                      C) \$64                      D) \$100

Answer: B

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

- 3) Refer to Scenario 19.3. What is the excess burden of the tax?  
A) \$4                      B) \$36                      C) \$64                      D) \$100

Answer: A

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

- 4) Refer to Scenario 19.3. Prior to the imposition of the tax consumers purchased \_\_\_\_\_ widgets and after the tax was imposed they purchased \_\_\_\_\_ widgets.  
A) 16; 20                      B) 20; 16                      C) 10; 8                      D) 40; 32

Answer: B

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Scenario 19.3. Prior to the imposition of the tax consumer surplus was \_\_\_\_\_ and after the tax was imposed consumer surplus was \_\_\_\_\_ .  
A) \$100; \$64                      B) \$64; \$100                      C) \$200; \$128                      D) \$50; \$32

Answer: A

Diff: 2

Topic: Measuring Excess Burdens

Skill: Analytic

AACSB: Analytic Skills



## 2 True/False

- 1) If demand were perfectly elastic, there would be no excess burden.

Answer: FALSE

*Diff: 1*

*Topic: Measuring Excess Burdens*

*Skill: Fact*

- 2) The more elastic is demand for a taxed good, the smaller the excess burden associated with the tax.

Answer: FALSE

*Diff: 2*

*Topic: Measuring Excess Burdens*

*Skill: Conceptual*

# Chapter 20 International Trade, Comparative Advantage, and Protectionism

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## 20.1 Trade Surpluses and Deficits

### 1 Multiple Choice

- 1) When a nation's exports exceed its imports, it has a
- A) trade surplus.
  - B) trade shortage.
  - C) trade embargo.
  - D) exchange rate discrepancy.

Answer: A

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 2) When a nation's net exports are equal to zero, it has a
- A) surplus in trade.
  - B) shortage in trade.
  - C) balanced trade.
  - D) deficit in trade.

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 3) When a nation's exports are less than its imports, it has a
- A) trade surplus.
  - B) balanced trade.
  - C) trade shortage.
  - D) trade embargo.

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Definition

- 4) If a country has a trade surplus of \$60 billion, which of the following can be true?
- A) The country's exports are \$180 billion, and its imports are \$120 billion.
  - B) The country's exports are \$110 billion, and its imports are \$190 billion.
  - C) The country's exports are \$120 billion, and its imports are \$180 billion.
  - D) The country's exports are \$160 billion, and its imports are \$60 billion.

Answer: A

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

5) If a country has a trade deficit of \$50 billion, which of the following can be true?

- A) The country's exports are \$150 billion, and its imports are \$100 billion.
- B) The country's exports are \$110 billion, and its imports are \$160 billion.
- C) The country's exports are \$100 billion, and its imports are \$50 billion.
- D) The country's exports are \$150 billion, and its imports are \$60 billion.

Answer: B

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

6) In the year 1976, the United States switched from running a trade \_\_\_\_\_ to running a trade \_\_\_\_\_.

- A) balance; surplus
- B) deficit; surplus
- C) surplus; deficit
- D) deficit; balance

Answer: C

Diff: 1

Topic: Trade Surpluses and Deficits

Skill: Fact

## 2 True/False

1) If Germany has exports of 90 billion euros and imports of 110 billion euros, then it is running a trade deficit.

Answer: TRUE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

2) If Mexico has a exports of 40 billion pesos and imports of 50 billion pesos, it is running a trade surplus.

Answer: FALSE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

3) If a country's exports are greater than its imports, a country has a trade deficit.

Answer: FALSE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

4) A country's balance of trade is always balanced.

Answer: FALSE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

5) If a country's imports are greater than its exports, a country has a trade deficit.

Answer: TRUE

Diff: 2

Topic: Trade Surpluses and Deficits

Skill: Conceptual

AACSB: Reflective Thinking

## 20.2 The Economic Basis for Trade: Comparative Advantage

### 1 Multiple Choice

1) The purpose of the \_\_\_\_\_ was to discourage imports and encourage exports, and thus keep the price of food high.

A) Banana Tax

B) Soybean Wars

C) Sugar Legislation

D) Corn Laws

Answer: D

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Fact

2) The theory of \_\_\_\_\_ is credited to David Ricardo.

A) supply and demand

B) comparative advantage

C) national trade protection

D) marginal production

Answer: B

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Fact

3) The United States would have an absolute advantage compared to Canada in the production of wheat if

A) wheat sells for a higher price in the United States than in Canada.

B) the demand for wheat is higher in the United States than in Canada.the United States.

C) uses fewer resources to produce wheat than Canada does.

D) wheat can be produced at lower cost in terms of other goods than it could be in Canada.

Answer: C

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking

4) The advantage in the production of a product enjoyed by one country over another when it uses \_\_\_\_\_ to produce that product than the other country does is an absolute advantage.

A) fewer resources

B) more technology

C) more labor

D) more capital

Answer: A

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Definition

5) According to the theory of comparative advantage, a country \_\_\_\_\_ the goods in which it has a comparative advantage.

- A) exports
- B) imports
- C) exports and imports
- D) does not trade

Answer: A

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Fact*

6) Thailand has a comparative advantage in rice and an absolute advantage in cell phones. Indonesia has a comparative advantage in cell phones and an absolute advantage in rice. According to this scenario

- A) Indonesia should export both cell phones and rice.
- B) Thailand should import both cell phones and rice.
- C) Thailand should export rice and import cell phones.
- D) Indonesia should export rice and import cell phones.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

7) India has a comparative advantage compared to Spain in the production of clothing if

- A) India can produce clothing at a lower monetary cost than Spain can.
- B) India can produce clothing using fewer resources than Spain can.
- C) the demand for clothing is higher in India than in Spain.
- D) India can produce clothing at a lower cost in terms of other goods than Spain can.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

8) According to the theory of comparative advantage, a country should specialize and \_\_\_\_\_ goods with \_\_\_\_\_ opportunity cost.

- A) import; the lowest
- B) import; negative
- C) export; the lowest
- D) export; the highest

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Fact*

9) When one country can produce a product at a \_\_\_\_\_ cost in terms of other goods, that country is said to have a(n) \_\_\_\_\_ advantage.

- A) higher; comparative
- B) lower; comparative
- C) lower; absolute
- D) higher; absolute

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Definition*

- 10) The United States imports DVD recorders from China and China imports computer chips from the United States. If the theory of comparative advantage guides trade between the two countries, it must be true that
- A) the United States has comparative advantage in producing computer chips.
  - B) the opportunity cost of producing computer chips in the United States is higher than that in China.
  - C) the opportunity cost of producing DVD recorders in China is higher than that in the United States.
  - D) the United States has comparative advantage in producing DVD recorders.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 11) If Argentina has an absolute advantage in the production of beef and Guatemala has an absolute advantage in the production of bananas, then
- A) it is reasonable to expect that specialization and trade will benefit both countries.
  - B) it is reasonable to expect that specialization will benefit both countries, but trade will not.
  - C) neither country has anything to gain from specialization and trade.
  - D) it is reasonable to expect that trade will benefit both countries, but specialization will not.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 12) If Mexico has a comparative advantage in the production of oil compared to France, then
- A) Mexico also has an absolute advantage in the production of oil.
  - B) France has an absolute advantage in the production of oil.
  - C) Mexico can produce oil at a lower opportunity cost than France.
  - D) France cannot produce oil.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 13) The Dominican Republic has a comparative advantage in the production of tobacco, and Panama has a comparative advantage in the production of oranges. If both countries specialize based on the theory of comparative advantage
- A) only the production of tobacco will increase.
  - B) only the production of both goods will increase.
  - C) only the consumption of both goods will increase.
  - D) the production and consumption of both goods will increase.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 14) Suppose that Greece and Portugal are both engaged in the production of grapes and figs, and that Greece has an absolute advantage in the production of both goods. If Portugal has a lower opportunity cost for producing figs, then
- A) Portugal has a comparative advantage in the production of figs, but it is outweighed by Portugal's absolute advantage in fig production.
  - B) Greece has a comparative advantage in the production of both goods.
  - C) Portugal has a comparative advantage in fig production, but there will be no gains from specialization and trade.
  - D) Portugal has a comparative advantage in the production of figs, and specialization and trade between the two countries can be mutually beneficial.

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 15) If the slopes of the production possibility frontiers involving corn and wheat in the United States and Canada are equal
- A) the opportunity cost of producing corn is less in the United States.
  - B) the opportunity cost of producing wheat is less in Canada.
  - C) specialization does not benefit either country.
  - D) equal amounts of corn and wheat will be produced in both countries.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 16) Suppose that Paraguay and Guyana are both engaged in the production of soybeans and grapefruit, and that Paraguay has an absolute advantage in the production of both goods. If Guyana has a comparative advantage in the production of soybeans, then Guyana
- A) has a higher opportunity cost for soybeans, which means it should specialize in the production of grapefruit and engage in trade.
  - B) has a lower opportunity cost for producing soybeans, but specialization is not feasible because Paraguay has a lower monetary cost of soybean production.
  - C) has a lower opportunity cost for soybeans, which means that it should specialize in production of soybeans and engage in trade.
  - D) should continue to produce soybeans, but only for domestic consumption, because trade is not a viable option.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*





- 21) Refer to Table 20.1. The opportunity cost of producing a case of beer in Germany is
- A) twice as much as that in Chile.
  - B) half as much as that in Chile.
  - C) the same as that in Chile.
  - D) four times as much as that in Chile.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 22) Refer to Table 20.1. Chile has
- A) a comparative advantage in beer production.
  - B) an absolute advantage in beer production.
  - C) an absolute advantage in wine production.
  - D) a comparative advantage in wine production.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 23) Refer to Table 20.1. Chile has
- A) a comparative advantage in wine production.
  - B) an absolute advantage and a comparative advantage in beer production.
  - C) an absolute advantage and a comparative advantage in wine production.
  - D) neither a comparative advantage in wine production nor in beer production.

Answer: A

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 24) Refer to Table 20.1. Germany has
- A) a comparative advantage in beer production.
  - B) an absolute advantage in wine production.
  - C) an absolute advantage in beer production.
  - D) all of the above

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 25) Refer to Table 20.1. Chile should specialize in and export \_\_\_\_\_, and Germany should specialize in and export \_\_\_\_\_.
- A) beer; beer
  - B) wine; wine
  - C) wine; beer
  - D) beer; wine

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

26) Refer to Table 20.1. Before specialization, Germany produces 45 cases of beer and 30 cases of wine, and Chile produces 18 cases of beer and 24 cases of wine. After specialization, the increase in beer production is

- A) 0 cases of beer.
- B) 2 cases of beer.
- C) 8 cases of beer.
- D) 12 cases of beer.

Answer: D

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

27) Refer to Table 20.1. Before specialization, Germany produces 45 cases of beer and 30 cases of wine, and Chile produces 18 cases of beer and 24 cases of wine. After specialization, the gain from trade is

- A) 2 cases of wine.
- B) 4 cases of wine.
- C) 6 cases of wine.
- D) 10 cases of wine.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

28) Refer to Table 20.1. For both countries to benefit from trade, the terms of trade must be between \_\_\_\_\_ case(s) of beer to case(s) of wine.

- A) 1:1/2 and 1:4
- B) 1:1 and 1:2
- C) 1:1 and 1:1/2
- D) 2:3 and 2:1

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Table 20.2 below to answer the questions that follow.

**Table 20.2**

<b>India</b>		<b>Vietnam</b>	
<b>Cashews</b>	<b>Tea</b>	<b>Cashews</b>	<b>Tea</b>
0	600	0	600
20	500	20	450
40	400	40	300
60	300	60	150
80	200	80	0
100	100	—	—
120	0	—	—

- 29) Refer to Table 20.2. In India, the opportunity cost of
- A) a bushel of cashews is 6 lbs. of tea.
  - B) a lb. of tea is 1/6 of a bushel of cashews.
  - C) a bushel of cashews is 5 lbs. of tea.
  - D) a lb. of tea is 1/5 of a bushel of cashews.

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 30) Refer to Table 20.2. In Vietnam, the opportunity cost of
- A) a lb. of tea is 2/15 of a bushel of cashews.
  - B) a lb. of tea is 1/8 of a bushel of cashews.
  - C) a lb. of tea is 40 bushels of cashews.
  - D) a bushel of cashews is 4/3 of a lb. of tea.

Answer: A

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 31) Refer to Table 20.2. \_\_\_\_\_ has a comparative advantage in tea and \_\_\_\_\_ has an absolute advantage in tea.

- A) India; neither
- B) Neither; neither
- C) Vietnam; neither
- D) Vietnam; India

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

32) Refer to Table 20.2. If both countries specialize and trade with each other, Vietnam will export \_\_\_\_\_ and India will import \_\_\_\_\_.

- A) tea; cashews  
B) cashews; tea  
C) cashews; cashews  
D) tea; tea

Answer: D

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

33) Refer to Table 20.2. The most that Vietnam will be willing to pay for a bushel of cashews is  
A) 5 lbs. of tea.                      B) 6.25 lbs. of tea.                      C) 7.5 lbs. of tea.                      D) 10 lbs. of tea.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

34) Refer to Table 20.2. The most that India will be willing to pay for a lb. of tea is

- A) 1/10 of a bushel of cashews.                      B) 1/5 of a bushel of cashews.  
C) 1/4 of a bushel of cashews.                      D) 1/2 of a bushel of cashews.

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

35) Refer to Table 20.2. Which terms of trade benefits both countries?

- A) 1 bushel of cashews for 4 lbs. of tea                      B) 1 bushel of cashews for 6 lbs. of tea  
C) 1 lb. of tea for 8 bushels of cashews                      D) 1 lb. of tea for 10 bushels of cashews

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

36) The ratio at which one country trades a domestic product for imported product is that country's

- A) absolute advantage.                      B) comparative advantage.  
C) cost ratio.                      D) terms of trade.

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Definition*

- 37) Specialization and trade allow a country to produce \_\_\_\_\_ its production possibility frontier and consume \_\_\_\_\_ it.
- A) outside; outside  
B) outside; inside  
C) outside; on  
D) on; outside

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 38) The main advantage of trade between two countries is that both countries move \_\_\_\_\_ their previous resource and production constraints.
- A) back to  
B) in from  
C) out beyond  
D) none of the above

Answer: C

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 39) According to comparative advantage, trade between two countries allows \_\_\_\_\_ of the trading countries to use its resources most efficiently.
- A) only the smaller  
B) only the larger  
C) neither  
D) each

Answer: D

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 40) When countries specialize in producing those goods in which they have a comparative advantage, they \_\_\_\_\_ their combined output and allocate their resources \_\_\_\_\_ efficiently.
- A) maximize; less  
B) maximize; more  
C) minimize; less  
D) minimize; more

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Figure 20.1 below to answer the questions that follow.

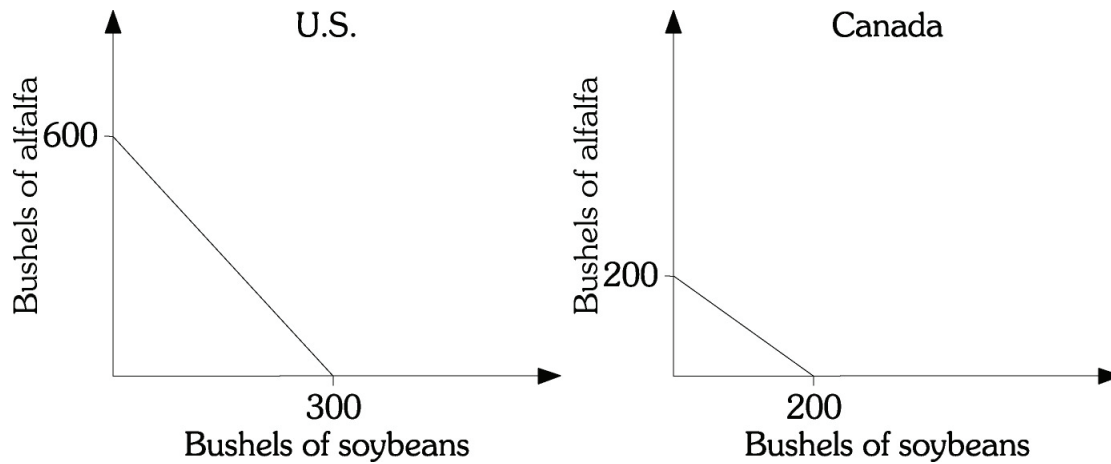


Figure 20.1

- 41) Refer to Figure 20.1. The United States has a(n) \_\_\_\_\_ advantage in the production of soybeans and alfalfa, and a(n) \_\_\_\_\_ advantage in the production of alfalfa.
- A) comparative; absolute  
 B) comparative; comparative  
 C) absolute; absolute and comparative  
 D) comparative; absolute and comparative

Answer: C

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 42) Refer to Figure 20.1. Which of the following statements is *true*?
- A) Only Canada can benefit from trade.  
 B) Only the United States will benefit from trade.  
 C) Trade will benefit both countries.  
 D) Trade will benefit neither country.

Answer: C

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 43) Refer to Figure 20.1. The opportunity cost of producing a bushel of alfalfa in Canada is
- A) twice as much as that in the United States.  
 B) half as much as that in the United States.  
 C) the same as that in the United States.  
 D) four times as much as that in the United States.

Answer: A

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 44) Refer to Figure 20.1. The opportunity cost of producing a bushel of soybeans in the United States is
- A) 1/2 as much as that in Canada.
  - B) twice as much as that in Canada.
  - C) 4 times as much as that in Canada.
  - D) the same as that in Canada.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 45) Refer to Figure 20.1. The opportunity cost of producing a bushel of soybeans in Canada is
- A) half a bushel of alfalfa.
  - B) 1 bushel of alfalfa.
  - C) 2 bushels of alfalfa.
  - D) zero.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 46) Refer to Figure 20.1. The opportunity cost of producing a bushel of soybeans in the United States is
- A) 300 bushels of alfalfa.
  - B) 2 bushels of alfalfa.
  - C) 1 bushel of alfalfa.
  - D) half a bushel of alfalfa.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

Refer to the information provided in Figure 20.2 below to answer the questions that follow.

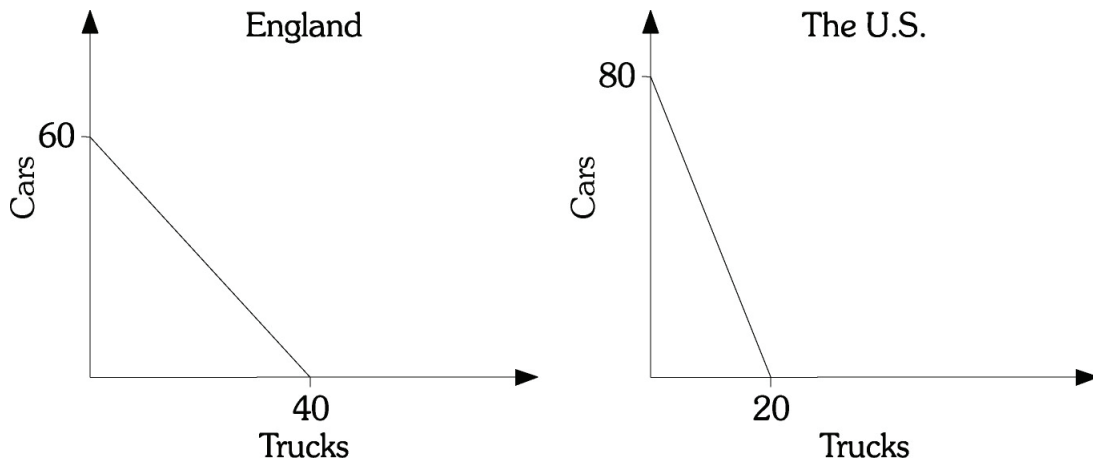


Figure 20.2

47) Refer to Figure 20.2. The opportunity cost of 1 \_\_\_\_\_ is 4 \_\_\_\_\_ in the United States and 1.5 \_\_\_\_\_ in England.

- A) car; trucks; trucks  
 B) truck; cars; cars  
 C) car; cars; trucks  
 D) truck; trucks; cars

Answer: B

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

48) Refer to Figure 20.2. the theory of comparative advantage suggests that

- A) England should export trucks and import cars.  
 B) England should export both trucks and cars.  
 C) the United States should export both trucks and cars.  
 D) the United States should import cars and export trucks.

Answer: A

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

49) Refer to Figure 20.2. The opportunity cost of 1 \_\_\_\_\_ is 0.25 \_\_\_\_\_ in the United States and 0.67 \_\_\_\_\_ in England.

- A) car; trucks; trucks  
 B) truck; cars; cars  
 C) car; cars; trucks  
 D) truck; trucks; cars

Answer: A

Diff: 1

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills



- 50) Refer to Figure 20.2. \_\_\_\_\_ has a comparative advantage in producing \_\_\_\_\_.
- A) England; trucks
  - B) England; cars and trucks
  - C) the United States; trucks
  - D) the United States; cars and trucks

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 51) Refer to Figure 20.2. \_\_\_\_\_ has a comparative advantage in producing \_\_\_\_\_.
- A) England; cars
  - B) England; cars and trucks
  - C) the United States; cars
  - D) the United States; cars and trucks

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 52) Assume that Down Slope specializes in producing snow boards and Seven Seas specializes in producing scuba tanks. After trade, Down Slope exports 2,000 snow boards and imports 500 scuba tanks. The terms of trade
- A) are 1/4:1 snow boards to scuba tanks.
  - B) are 4:1 snow boards to scuba tanks.
  - C) are 1:4 snow boards to scuba tanks.
  - D) cannot be determined from this information.

Answer: B

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 53) When trade is \_\_\_\_\_, patterns of trade and trade flows result from the independent decisions of thousands of importers and exporters, as well as millions of private households and firms.
- A) restricted
  - B) barred
  - C) free
  - D) embargoed

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 54) If you are traveling in Thailand and you purchase a meal that costs 1,400 baht and the current exchange rate is 35 baht to the dollar, then the price of the meal in U.S. currency is
- A) \$400.
  - B) \$40.
  - C) \$4.
  - D) \$0.40.

Answer: B

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 55) Suppose a U.S. dollar exchanges for 0.8 euros, then each euro is worth  
A) \$1.25.                      B) \$1.20.                      C) \$0.80.                      D) \$0.20.

Answer: A

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 56) If the price of a truck in the United States is \$25,000, and the exchange rate between the dollar and the euro falls from \$1.50 to \$1.30 per euro, then the price of the American truck in the EU will  
A) rise.  
B) fall.  
C) remain the same.  
D) be irrelevant, because the EU will impose restrictions on imports from the United States.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 57) If the price of a truck in the United States is \$18,000, and the exchange rate between the dollar and the Argentine peso falls from 10 pesos to 8 pesos per dollar, then the price of the American truck in Argentina will  
A) rise.  
B) fall.  
C) remain the same.  
D) be irrelevant, because the Argentine government will impose restrictions on imports from the United States.

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 58) For \_\_\_\_\_, there is a range of exchange rates that can lead automatically to both countries realizing the gains from specialization and comparative advantage.  
A) any pair of countries                      B) very few countries  
C) only industrialized countries                      D) only democratic countries

Answer: A

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

Refer to the information provided in Table 20.3 below to answer the questions that follow.

	United States	France
Peas	\$3	3 euros
Carrots	\$4	9 euros

- 59) Refer to Table 20.3. If the exchange rate is \$1 = 1 euro, then
- A) the United States will import both peas and carrots.
  - B) France will import both peas and carrots.
  - C) the United States will import carrots and France will import peas.
  - D) France will import carrots.

Answer: D

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 60) Refer to Table 20.3. If the exchange rate is \$1 = 3 euros, then
- A) the United States will import both peas and carrots.
  - B) France will import both peas and carrots.
  - C) the United States will import carrots and France will import peas.
  - D) the United States will import peas and France will import carrots.

Answer: A

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 61) Refer to Table 20.3. If the exchange rate is \$1 = 2 euros, then
- A) the United States will import both peas and carrots.
  - B) France will import both peas and carrots.
  - C) the United States will import peas and France will import carrots.
  - D) France will import peas.

Answer: C

Diff: 2

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 62) Refer to Table 20.3. Trade will flow in both directions between countries only if the price of the euro is between
- A) \$1.00 and \$2.25.
  - B) \$.44 and \$1.00
  - C) \$.40 and \$.50.
  - D) \$.60 and \$.75.

Answer: B

Diff: 3

Topic: The Economic Basis for Trade: Comparative Advantage

Skill: Analytic

AACSB: Analytic Skills

- 63) If the exchange rate between the United States and Mexico changes from \$1 = 8 pesos to \$1 = 9 pesos, then, *ceteris paribus*, the price of American goods in Mexico
- A) will remain the same.
  - B) will increase.
  - C) could either increase or decrease.
  - D) will decrease.

Answer: B

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 64) If the exchange rate between the United States and India changes from \$1 = 60 rupees to \$1 = 10 rupees, *ceteris paribus*
- A) the United States imports from India increase.
  - B) Indian exports to the United States increase.
  - C) the United States exports to India increase.
  - D) the trade deficit in the United States increases.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 65) If trade between the United States and Australia is balanced and the U.S. dollar depreciates against the Australian dollar, *ceteris paribus*, we would expect
- A) a trade deficit in the United States.
  - B) a trade surplus in Australia.
  - C) a trade deficit in Australia.
  - D) a trade deficit in both countries.

Answer: C

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

- 66) Suppose that the United States and Spain both produce cognac and handbags. In the United States, cognac sells for \$20 a bottle and handbags sell for \$80. In Spain, cognac sells for 30 euros a bottle and handbags sell for 40 euros. If the current exchange rate is 0.8 euro to the dollar, then
- A) Spain will import both handbags and cognac from the United States.
  - B) the United States will import both handbags and cognac from Spain.
  - C) the United States will import handbags from Spain and Spain will import cognac from the United States.
  - D) the United States will import cognac from Spain and Spain will import handbags from the United States.

Answer: C

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

67) Suppose that the United States and Spain both produce cognac and handbags. In the United States, cognac sells for \$20 a bottle and handbags sell for \$80. In Spain, cognac sells for 30 euros a bottle and handbags sell for 40 euros. Given this information, trade will flow in both directions if the price of a dollar is between

A) 1.5 and 2.5 euros.

B) 2.0 and 3.0 euros.

C) 0.5 and 0.75 euro.

D) 0.67 and 2.0 euros.

Answer: D

Diff: 3

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Analytic*

AACSB: *Analytic Skills*

## 2 True/False

1) In general, for any two countries, there are very few exchange rates that will lead to gains from trade, based on comparative advantage.

Answer: FALSE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

2) Trade allows the people of a country to produce outside their production possibility curve.

Answer: FALSE

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

3) If the exchange rate between the United States and Portugal changes from \$1 = 1 euro to \$1 = 2 euros, then holding everything else constant, the price of U.S. goods in Portugal will decrease.

Answer: FALSE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) If Holland decreases subsidies to its tulip growers, the price of tulips in the United States will rise.

Answer: TRUE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

5) A country is said to enjoy a comparative advantage over another country in the production of a product if it uses more resources to produce that product than the other country does.

Answer: FALSE

Diff: 1

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 6) A country enjoys an absolute advantage in the production of a good if that good can be produced at a lower cost in terms of other goods.  
Answer: FALSE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 7) For any pair of nations and goods, if each country has an absolute advantage in the production of one product, it is reasonable to expect that specialization and trade will not benefit either country.  
Answer: FALSE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 8) For any pair of countries, there are many exchange rates that can lead automatically to both countries realizing the gains from specialization and comparative advantage.  
Answer: TRUE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 9) Within the range of exchange rates that permits specialization and trade to take place, the exchange rate will determine which country gains the least from trade.  
Answer: TRUE  
Diff: 2  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 10) If exchange rates end up in the right ranges, the free market will drive each country to shift resources into those sectors in which it enjoys an absolute advantage.  
Answer: FALSE  
Diff: 2  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*
- 11) Only those products in which a country has a comparative advantage will be competitive in world markets.  
Answer: TRUE  
Diff: 1  
Topic: *The Economic Basis for Trade: Comparative Advantage*  
Skill: *Conceptual*  
AACSB: *Reflective Thinking*

- 12) If the domestic price is above the world price of a certain product, the domestic country will export the product.

Answer: FALSE

Diff: 2

Topic: *The Economic Basis for Trade: Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 20.3 The Sources of Comparative Advantage

### 1 Multiple Choice

- 1) The quantity and quality of \_\_\_\_\_, and \_\_\_\_\_ of a country are its factor endowments.
- |                                      |                                |
|--------------------------------------|--------------------------------|
| A) imports; exports                  | B) deficits; surpluses         |
| C) labor and land; natural resources | D) commodity money; fiat money |

Answer: C

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Definition*

- 2) The pharmaceutical industry depends on highly trained workers, who are abundantly available in India. The automobile industry depends on the availability of a large stock of physical capital with which the United States is well endowed. According to Heckscher-Ohlin theorem
- |                                                     |
|-----------------------------------------------------|
| A) India should export automobiles.                 |
| B) the United States should export pharmaceuticals. |
| C) the United States should import automobiles.     |
| D) India should import automobiles.                 |

Answer: D

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 3) A \_\_\_\_\_ portion of actual world trade patterns results from \_\_\_\_\_ factor endowments between countries.
- |                           |                        |
|---------------------------|------------------------|
| A) significant; different | B) significant; equal  |
| C) small; different       | D) negative; different |

Answer: A

Diff: 2

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) An example of a(n) \_\_\_\_\_ comparative advantage is U.S. consumers buying automobiles produced in Japan because Japanese companies have a reputation for producing a higher-quality automobile than those produced in the United States.

- A) unwarranted                      B) acquired                      C) natural                      D) subsidized

Answer: B

Diff: 2

Topic: The Sources of Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking

5) An example of a(n) \_\_\_\_\_ comparative advantage is that some U.S. consumers prefer German beer over American beer because German beer has a reputation for tasting better.

- A) unwarranted                      B) acquired                      C) natural                      D) subsidized

Answer: B

Diff: 2

Topic: The Sources of Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking

6) Which of the following phenomena can be explained by the simple comparative advantage theory?

- A) A country that has a vast amount of farmland tends to export agricultural goods.  
B) A country with little skilled labor tends to export highly technical goods.  
C) A country tends to import the goods that it can produce at a lower opportunity cost.  
D) A country imports and exports the same goods.

Answer: A

Diff: 2

Topic: The Sources of Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking

7) \_\_\_\_\_ looks to relative factor endowments to explain trade flows.

- A) The Heckscher-Ohlin theorem                      B) Ockham's razor  
C) Say's law                      D) The Sherman Antitrust Act

Answer: A

Diff: 1

Topic: The Sources of Comparative Advantage

Skill: Fact

8) Which of the following is a valid explanation for the existence of international trade?

- A) the existence of natural comparative advantage  
B) the existence of acquired comparative advantage  
C) industries may differentiate their products in order to please the wide variety of tastes that exist worldwide  
D) all of the above

Answer: D

Diff: 1

Topic: The Sources of Comparative Advantage

Skill: Conceptual

AACSB: Reflective Thinking



## 2 True/False

- 1) A country with limited human capital is likely to have a comparative advantage in highly technical goods.

Answer: FALSE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) The Heckscher–Ohlin theorem says that a country is likely to have a comparative advantage in a capital intensive product, if it has a large supply of capital.

Answer: TRUE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Fact*

- 3) The Heckscher–Ohlin theorem explains why Japan both imports and exports rice.

Answer: FALSE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 4) International trade can be spurred by diseconomies of scale giving a cost advantage to one large producer exporting to the whole world.

Answer: FALSE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 5) Natural comparative advantage comes from factor endowments.

Answer: TRUE

Diff: 1

Topic: *The Sources of Comparative Advantage*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

## 20.4 Trade Barriers: Tariffs, Export Subsidies, and Quotas

### 1 Multiple Choice

- 1) A tax on imports is a(n)
- |                                  |                     |
|----------------------------------|---------------------|
| A) import quota.                 | B) tariff.          |
| C) voluntary import restriction. | D) quality barrier. |

Answer: B

Diff: 1

Topic: *Trade Barriers: Tariffs, Export Subsidies, and Quotas*

Skill: *Definition*

2) Government payments made to \_\_\_\_\_ firms in order to encourage \_\_\_\_\_ are called subsidies.

- A) foreign; immigration
- B) foreign; imports
- C) domestic; imports
- D) domestic; exports

Answer: D

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

3) It costs a television manufacturer \$2,000 to produce a plasma television. This manufacturer sells these televisions abroad for \$1,200. This is an example of

- A) an export subsidy.
- B) dumping.
- C) a negative tariff.
- D) a trade-related economy of scale.

Answer: B

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

4) If the United States increases the tariff on imported salmon, this will

- A) reduce the amount of salmon imported into the United States and reduce production of salmon in the United States.
- B) increase the amount of salmon imported in the United States and increase the production of salmon in the United States.
- C) reduce the amount of salmon imported in the United States and increase the production of salmon in the United States.
- D) increase the amount of salmon imported in the United States and reduce the production of salmon in the United States.

Answer: C

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

5) Germany placed a limit on the amount of beer that can be imported into Germany. This is an example of

- A) dumping.
- B) an export subsidy.
- C) a tariff.
- D) a quota.

Answer: D

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 6) Which of the following is *false*?
- A) An import quota does not generate government revenue.
  - B) Tariffs on imports generate government revenue as long as the domestic price is larger than the world price plus the tariff.
  - C) Tariffs on imports do not generate government revenue if the domestic price is larger than the world price plus the tariff.
  - D) all of the above

Answer: C

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 7) Which of the following statements is *true*?
- A) If the United States imposes a tariff on German car imports, the price of cars in the United States is likely to increase.
  - B) If the United States imposes a quota on German car imports, the price of cars in the United States is likely to increase.
  - C) If Germany imposes a "voluntary export restraint" on car exports to the United States, the price of cars in the United States is likely to increase.
  - D) all of the above

Answer: D

Diff: 3

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

- 8) \_\_\_\_\_ involves a country selling its exports at a price lower than its cost of production.
- A) Dumping
  - B) Having an absolute advantage
  - C) Having a comparative advantage
  - D) An export quota

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

- 9) The Smoot-Hawley tariff set off an international trade war in the
- A) 1930s.
  - B) 1950s.
  - C) 1970s.
  - D) 1990s.

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 10) GATT is the international agreement signed by the United States and \_\_\_\_\_ other countries in 1947 to promote the liberalization of foreign trade.
- A) 13
  - B) 22
  - C) 86
  - D) 97

Answer: B

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 11) \_\_\_\_\_ U.S. president(s) who has/have held office since GATT was signed has argued for free-trade policies, yet each one has used his powers to protect various sectors of the economy.  
A) Only one                      B) No                      C) Every                      D) Only 3

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 12) In 2003, the \_\_\_\_\_ ruled that U.S. tariffs on steel imported from the EU were unfair and allowed the EU to issue retaliatory tariffs on U.S. products.

- A) World Trade Organization  
B) United Nations  
C) European Central Bank  
D) International Human Rights Commission

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 13) Over time, the general movement in the United States has been toward \_\_\_\_\_ free trade.

- A) complete                      B) relatively less  
C) relatively more                      D) no

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 14) If a nation has \_\_\_\_\_ status conferred on it, then exports from that country are taxed at the lowest negotiated tariff rates.

- A) international-ally                      B) no-child-labor  
C) total-trade-guaranteed                      D) most-favored-nation

Answer: D

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

- 15) Economic \_\_\_\_\_ occurs when two or more nations join to form a free-trade zone.

- A) integration                      B) correlation                      C) conjugation                      D) immigration

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

16) The idea of the U.S.-Canadian Free-Trade Agreement that \_\_\_\_\_ barriers to trade including tariffs and quotas between the United States and Canada by 1998 was to increase the amount that the United States exports to Canada and the amount that the United States imports from Canada.

- A) increased all  
B) removed some  
C) removed all  
D) increased some

Answer: C

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

17) In 1991, the European Union began the process of forming the

- A) largest free-trade zone in the world.  
B) only continental military force in the world.  
C) first international trade agreement in the world.  
D) first unified currency in the world.

Answer: A

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

18) Which of the following is *true*?

- A) Countries that are members of GATT are all considered free-trade zones.  
B) The United States can be considered a free-trade zone.  
C) All English speaking nations are free-trade zones.  
D) The industrialized OECD nations are all free-trade zones.

Answer: B

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Fact

19) Related to the *Economics in Practice* on p. 366 [678]: Europe's removal of cereal-import duties will result in lower \_\_\_\_\_ and higher \_\_\_\_\_ for cereal grains in the European market.

- A) prices; quantities available  
B) quantities available; import quantities  
C) export quantities; prices  
D) import quantities; export quantities

Answer: A

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas: *Economics in Practice*

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

1) An export subsidy lowers the domestic price of the product.

Answer: FALSE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

2) A quota is a tax on imports.

Answer: FALSE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

3) Dumping involves to a country selling its exports at a price lower than its cost of production.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

4) A quota is a restriction on imports.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Definition

5) Tariffs, quotas and exports subsidies all decrease imports.

Answer: TRUE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

6) A quota on corn benefits domestic producers of corn.

Answer: TRUE

Diff: 2

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas

Skill: Conceptual

AACSB: Reflective Thinking

7) Related to the *Economics in Practice* on p. 366 [678]: China has recently lowered export duties on food products in an effort to keep domestic markets well stocked with food products.

Answer: FALSE

Diff: 1

Topic: Trade Barriers: Tariffs, Export Subsidies, and Quotas: *Economics in Practice*

Skill: Fact

## 20.5 Free Trade or Protection?

### 1 Multiple Choice

1) The case for \_\_\_\_\_ is based on the theory of \_\_\_\_\_ advantage.

A) trade barriers; comparative

B) free trade; absolute

C) trade barriers; absolute

D) free trade; comparative

Answer: D

Diff: 1

Topic: Free Trade or Protection?

Skill: Fact

- 2) Which of the following statements is *true*?
- A) Trade is beneficial because it allows more efficient production.
  - B) Trade is beneficial because it allows consumers to buy goods at cheaper prices.
  - C) Trade is beneficial because it allows consumption beyond the production possibility frontier.
  - D) all of the above

Answer: D

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

- 3) A tariff imposed on imported wine will cause the domestic \_\_\_\_\_ of wine to increase and the domestic \_\_\_\_\_ of wine to increase.
- A) price; production
  - B) cost; price
  - C) imports; exports
  - D) revenues; imports

Answer: A

Diff: 1

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

Refer to the information provided in Figure 20.3 below to answer the questions that follow.

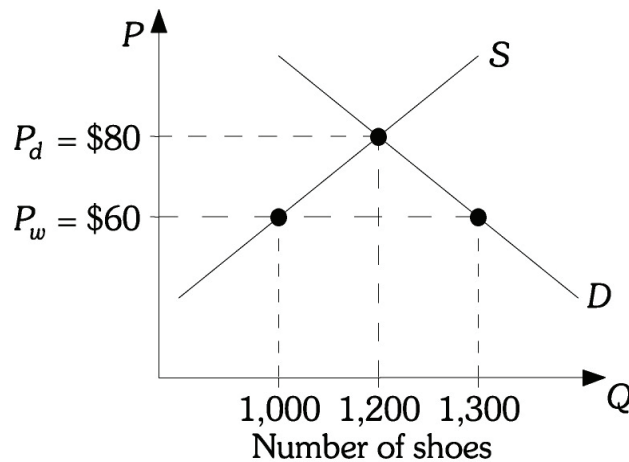


Figure 20.3

- 4) Refer to Figure 20.3. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. After trade this country will \_\_\_\_\_ 300 pairs of shoes.
- A) buy
  - B) sell
  - C) import
  - D) export

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 5) Refer to Figure 20.3. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. Now domestic production costs fall so that the equilibrium domestic price of a pair of shoes is \$70. This would cause the number of pairs of shoes imported into this country to
- A) increase.
  - B) decrease.
  - C) remain the same.
  - D) fall to zero.

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

- 6) Refer to Figure 20.3. The domestic price of shoes is \$80. After trade the price of a pair of shoes is \$60. If shoes are a normal good and income in this country falls, then we would expect
- A) the number of pairs of shoes imported into this country to increase.
  - B) the number of pairs of shoes imported into this country to decrease.
  - C) the number of pairs of shoes exported from this country to increase.
  - D) the number of pairs of shoes exported from this country to decrease.

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

Refer to the information provided in Figure 20.4 below to answer the questions that follow.

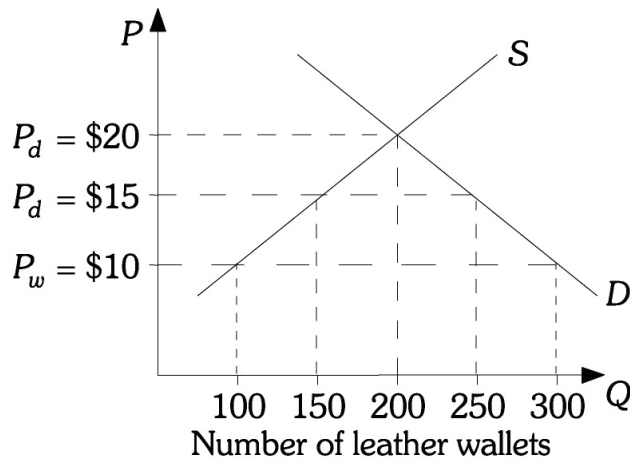


Figure 20.4

- 7) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. If there is free trade, this country will \_\_\_\_\_ 200 leather wallets.
- A) buy
  - B) sell
  - C) import
  - D) export

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills



8) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed, this country will \_\_\_\_\_ 250 leather wallets.

- A) buy                                      B) sell                                      C) import                                      D) export

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

9) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed, \_\_\_\_\_ revenue in this country will be \$500.

- A) export                                      B) import                                      C) tariff                                      D) total

Answer: C

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

10) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. After the tariff is imposed, domestic production will \_\_\_\_\_ by 50 wallets and domestic consumption will \_\_\_\_\_ by 50 wallets.

- A) increase; decrease                                      B) decrease; increase  
C) decrease; decrease                                      D) none of the above

Answer: A

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

11) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. If the tariff is changed so that it is now \_\_\_\_\_, tariff revenue in this country will be zero.

- A) \$1                                                              B) between \$1 and \$5  
C) between \$5 and \$10                                      D) \$10

Answer: D

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

12) Refer to Figure 20.4. The domestic price of a leather wallet is \$20. With free trade the price of a leather wallet is \$10 and after a tariff is imposed the price is \$15. With free trade domestic consumption is \_\_\_\_\_

- A) 0.                                                              B) 100.                                                              C) 150.                                                              D) 300.

Answer: D

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills





19) Refer to Figure 20.6. If the government does not impose an import quota of 6,000 pounds of cheese and the world price of cheese is \$3 per pound, this country will \_\_\_\_\_ pounds of cheese.

- A) import 2,000                      B) import 6,000                      C) import 8,000                      D) import 12,000

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

20) Refer to Figure 20.6. From a no trade position, an import quota of 6,000 pounds decreases domestic supply by \_\_\_\_\_ pounds and lowers the price by \_\_\_\_\_ per pound.

- A) 8,000; \$5                      B) 2,000; \$2                      C) 6,000; \$3                      D) 4,000; \$1

Answer: B

Diff: 2

Topic: Free Trade or Protection?

Skill: Analytic

AACSB: Analytic Skills

21) Related to the *Economics in Practice* on p. 369 [681]: The French economy would most likely have to pay higher prices for candles if the candle makers in the petition

- A) were able to gain protection for their industry.  
B) were not granted any protection for their industry.  
C) were allowed to export their product.  
D) had a comparative advantage in producing candles.

Answer: A

Diff: 1

Topic: Free Trade or Protection?: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

22) Related to the *Economics in Practice* on p. 369 [681]: Protectionism of the kind that is suggested in the petition of the candle makers would most likely result in

- A) more efficient production.                      B) lower prices.  
C) lower production cost.                      D) lower consumption.

Answer: D

Diff: 1

Topic: Free Trade or Protection?: Economics in Practice

Skill: Conceptual

AACSB: Reflective Thinking

## 2 True/False

1) It is not a valid argument that industries need to be protected from foreign competition because foreign wages are substantially higher than wages paid to U.S. workers.

Answer: TRUE

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

2) Free trade allows the people of a country to produce outside their production possibility frontier.

Answer: FALSE

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

3) Free trade increases world production but decreases world consumption.

Answer: FALSE

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

4) Infant industry protection is always temporary.

Answer: FALSE

Diff: 2

Topic: Free Trade or Protection?

Skill: Fact

5) In general, free-trade makes the people of a country better off.

Answer: TRUE

Diff: 2

Topic: Free Trade or Protection?

Skill: Conceptual

AACSB: Reflective Thinking

6) Most environmental groups agree that free trade policies are beneficial for the environment.

Answer: FALSE

Diff: 1

Topic: Free Trade or Protection?

Skill: Fact

# Chapter 21 Economic Growth in Developing and Transitional Economies

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## 21.1 Life in the Developing Nations: Population and Poverty

### 1 Multiple Choice

- 1) All of the following are problems facing some developing countries EXCEPT
- A) chronic food shortages.
  - B) explosive population growth.
  - C) hyperinflations.
  - D) low infant mortality rates.

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 2) In 2006, the infant mortality rate was 114 births per 1,000 for countries classified as
- A) low-income.
  - B) lower middle-income.
  - C) upper middle-income.
  - D) high-income.

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 3) In 2006, per capita income was roughly \_\_\_\_\_ times higher in high-income countries than in low-income countries.
- A) 12
  - B) 31
  - C) 56
  - D) 181

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 4) In 2005, the number of internet users was \_\_\_\_\_ per 1,000 people in low-income countries.
- A) 0.44
  - B) 116.50
  - C) 148.25
  - D) 286.0

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 5) In the year 2006, the population of the world
- A) was approximately 2 billion people.
  - B) was approximately 4.2 billion people.
  - C) was over 6.5 billion people.
  - D) exceeded 12 billion people.

Answer: C

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*



- 11) The term \_\_\_\_\_ refers to the tendency for talented people in developing countries to become educated and remain in developed countries.
- A) brain drain
  - B) scholastic flight
  - C) outsourcing
  - D) no turning back

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 12) Which of the following is a characteristic that is associated with developing countries?
- A) a high per capita GNP
  - B) high infant mortality rates
  - C) high life expectancy
  - D) an income distribution that is very close to being equal

Answer: B

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 13) Characteristics of economic development include all of the following EXCEPT
- A) improvements in basic education
  - B) an increase in the standard of living
  - C) an increase in life expectancy
  - D) a decrease in literacy

Answer: D

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 14) Which of the following characteristics is generally representative of developing countries relative to developed nations?
- A) a higher level of per capita GNP
  - B) a shorter life expectancy
  - C) a lower rate of infant mortality
  - D) a larger percentage of children enrolled in school

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 15) Which of the following characteristics is generally representative of developing countries relative to developed countries?
- A) a larger percentage of the labor force in urban areas
  - B) a lower infant mortality rate
  - C) a lower degree of equality in the income distribution
  - D) a lower rate of illiteracy

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*



- 16) Compared to developing countries, developed countries tend to have a(n) \_\_\_\_\_ percentage of the labor force in \_\_\_\_\_ areas.  
A) larger; urban      B) larger; rural      C) equal; urban      D) equal; rural

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 17) Compared to developing countries, developed countries tend to have \_\_\_\_\_ productivity in the agricultural sector.  
A) higher      B) lower      C) equal      D) no

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 18) Which of the following statements is *true*?
- A) Low productivity in the agricultural sector in developing countries means that farm output per person is barely sufficient to feed a farmer's own family.
  - B) Income tends to be more equally distributed in developing countries than in developed countries.
  - C) The percentage of the labor force employed in urban areas is smaller in developed nations than in developing nations.
  - D) Developed nations account for only about one-half of the world's population, but they consume about three-quarters of the world's output.

Answer: A

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 19) In the distribution of world income, the richest \_\_\_\_\_ of the world's population earns about 79% of the world income.  
A) one-tenth      B) one-fifth      C) one-fourth      D) one-half

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 20) In the distribution of world income, the poorest \_\_\_\_\_ of the world's population earns about 0.5% of the world income.  
A) one-tenth      B) one-fifth      C) one-fourth      D) one-half

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 21) Developed nations account for about \_\_\_\_\_ of the world's population, and are estimated to consume three-quarters of the world's output.  
A) one-quarter                      B) one-half                      C) two-thirds                      D) three-quarters

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 22) Developing nations account for about \_\_\_\_\_ of the world's people, and are estimated to receive one-fourth of the world's income.  
A) one-fourth                      B) one-third                      C) one-half                      D) three-fourths

Answer: D

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 23) Recent studies suggest that 40% of the population of the \_\_\_\_\_ nations have annual incomes insufficient to provide for adequate nutrition.  
A) developed                                              B) developing  
C) developed and developing                      D) underpopulated

Answer: B

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 24) In 2006, the smallest population group (810 million people) belonged to countries classified as  
A) low-income.                                              B) lower-middle income.  
C) upper-middle income.                                              D) high-income.

Answer: C

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 25) \_\_\_\_\_ capital formation has been suggested as an explanation for the \_\_\_\_\_ economic growth in many poor nations.  
A) Insufficient; lack of                                              B) Increases in; rapid  
C) Outsourced; negative                                              D) Subsidized; exponential

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 26) The \_\_\_\_\_ capital in developing nations causes labor productivity to remain low.  
A) lack of                                              B) subsidized  
C) reassignment of                                              D) increase in privately controlled

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 27) If a developing economy restricts the amount of money its citizens can invest abroad, it has a greater chance of \_\_\_\_\_ by forcing its citizens to invest in their own country.
- A) alienating trade partners
  - B) increasing capital formation
  - C) slowing down its economy
  - D) increasing unemployment

Answer: B

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Conceptual*

- 28) \_\_\_\_\_ is on the World Bank's list of low-income countries, yet its capital city is one of the top ten centers of commerce in the world.

A) India                      B) Mexico                      C) Rwanda                      D) Thailand

Answer: A

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

## 2 True/False

- 1) Investment in social overhead capital refers to investment in areas like power plants and road construction.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 2) The World Bank makes loans to encourage economic development.

Answer: TRUE

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 3) Human capital is basic infrastructure projects such as roads, power generation and irrigation systems.

Answer: FALSE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Definition*

- 4) Income distributions in developing countries are relatively equitable.

Answer: FALSE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 5) Developing countries are characterized by high population growth rates.

Answer: TRUE

Diff: 2

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 6) In 2006, despite having the lowest literacy rates in the world, low-income countries had lower infant mortality rates than upper middle-income countries.

Answer: FALSE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 7) According to the World Bank, in 2006 the largest population group (2.4 billion people) belonged to countries classified as upper middle-income.

Answer: FALSE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

- 8) Despite its capital city (Mumbai) being one of the top ten centers of commerce in the world, India is on the World Bank's list of low-income countries.

Answer: TRUE

Diff: 1

Topic: *Life in the Developing Nations: Population and Poverty*

Skill: *Fact*

## 21.2 Economics Development: Sources and Strategies

### 1 Multiple Choice

- 1) All of the following are factors that limit a poor nation's economic growth EXCEPT
- |                                    |                           |
|------------------------------------|---------------------------|
| A) insufficient capital formation  | B) lack of human capital  |
| C) lack of entrepreneurial ability | D) increased urbanization |

Answer: D

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

- 2) The \_\_\_\_\_ hypothesis states that poor countries are unable to save and invest enough to accumulate capital stock that would help them grow.

- |                              |                         |
|------------------------------|-------------------------|
| A) vicious-circle-of-poverty | B) equitable investment |
| C) no-country-left-behind    | D) global-redevelopment |

Answer: A

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Definition*

- 3) \_\_\_\_\_ refers to the fact that both human and financial capital leave developing countries in search of a higher rate of return.

- |                 |                   |                |                |
|-----------------|-------------------|----------------|----------------|
| A) Urbanization | B) Capital flight | C) Outsourcing | D) Divestiture |
|-----------------|-------------------|----------------|----------------|

Answer: B

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Definition*

- 4) A "brain drain" is the tendency of talented people in developing countries to get education in
- A) developed countries and return home after graduation.
  - B) developed countries and stay there after graduation.
  - C) their own countries and leave after graduation.
  - D) their own countries and stay there after graduation.

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 5) \_\_\_\_\_ refers to compensation sent back to family in the home country by recent emigrants.
- A) Remittances
  - B) Transaction costs
  - C) Outsourcing
  - D) Capital flight

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 6) Remittances sent from the United States are estimated at approximately \_\_\_\_\_ per year.
- A) \$2 million
  - B) \$50 million
  - C) \$100 billion
  - D) \$5 trillion

Answer: C

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 7) In 2007, \_\_\_\_\_ crackdowns on illegal immigration, remittances from illegal immigrants in the United States to Mexico \_\_\_\_\_.
- A) because of; began to fall
  - B) because of; grew at a faster rate than in prior years
  - C) despite; continued to rise
  - D) despite; did not noticeably change

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 8) Building infrastructure is referred to as
- A) human capital.
  - B) physical capital.
  - C) social overhead capital.
  - D) financial capital.

Answer: C

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 9) The government's role in a developing country is important during the country's development process because building social overhead capital
- A) cannot be taken on by the private sector.
  - B) can only be financed by the private sector.
  - C) requires a joint venture between the public and private sectors.
  - D) can only be achieved in a developing country.

Answer: A

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 10) Statistics show that the \_\_\_\_\_ a country is, the \_\_\_\_\_ is the share of agricultural output in its total output.
- A) more developed; larger
  - B) less developed; larger
  - C) less populated; smaller
  - D) more populated; smaller

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 11) Import substitution is the process of developing local industries to manufacture goods to
- A) replace imports.
  - B) import.
  - C) replace exports.
  - D) export.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 12) A decline in a country's terms of trade means the domestic price of its imports \_\_\_\_\_ and the world price of its exports \_\_\_\_\_.
- A) increases; increases
  - B) increases; decreases
  - C) decreases; increases
  - D) decreases; decreases

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 13) A(n) \_\_\_\_\_ in the domestic price of a country's imports and a(n) \_\_\_\_\_ in the world price of its exports increases the country's terms of trade.
- A) increase; increase
  - B) increase; decrease
  - C) decrease; increase
  - D) decrease; decrease

Answer: C

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Analytic

AACSB: Analytic Skills

- 14) Export promotion is the policy in which industrial production is oriented towards
- A) foreign producers.
  - B) foreign consumers.
  - C) domestic consumers.
  - D) both A and B

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 15) \_\_\_\_\_ implementing export promotion policies is Japan.
- A) One of the most successful countries in
  - B) One of the least successful countries in
  - C) The only developed country that has banned
  - D) The only developed country that has been successful in

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 16) The World Bank lends money to countries to
- A) finance their international transactions.
  - B) stabilize their exchange rates.
  - C) promote their economic development.
  - D) fund wars against dictatorial regimes.

Answer: C

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 17) The International Monetary Fund lends money to countries to
- A) finance their international transactions.
  - B) stabilize their exchange rates.
  - C) promote their economic development.
  - D) both A and B are correct

Answer: D

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 18) Reducing the size of the public sector through privatization is a goal of
- A) social overhead capital programs.
  - B) the World Bank.
  - C) the IMF.
  - D) structural adjustment programs.

Answer: D

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 19) \_\_\_\_\_ is the practice of lending very small amounts of money, with no collateral, and accepting small savings deposits.
- A) Microfinance
  - B) Capital flight
  - C) Debt rescheduling
  - D) A stabilization program

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Definition

- 20) With microfinance, the mechanism of peer lending is a way to avoid the problem of
- A) capital flight.
  - B) imperfect information.
  - C) the tragedy of the commons.
  - D) a double coincidence of wants.

Answer: B

Diff: 2

Topic: Economics Development: Sources and Strategies

Skill: Conceptual

AACSB: Reflective Thinking

- 21) Compared to traditional bank loans, microfinance loans
- A) are much larger.
  - B) require collateral.
  - C) are made more frequently to women than to men.
  - D) have repayments that begin at a much later date.

Answer: C

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 22) From 1978 to 2003, China grew on average \_\_\_\_\_ percent per year, a rate faster than any other country in the world.
- A) 4
  - B) 8
  - C) 25
  - D) 75

Answer: B

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 23) Which of the following characteristics is shared by India and China?
- A) both have embraced free-market economies
  - B) both have low literacy rates
  - C) both are politically authoritarian
  - D) both have low life-expectancy rates

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

- 24) China and India both have rapidly developing economies. What has fueled the growth in these two countries?
- A) China's growth has been fueled by manufacturing, and India's growth has been fueled by services.
  - B) India's growth has been fueled by manufacturing, and China's growth has been fueled by services.
  - C) Growth in both countries has been fueled by manufacturing.
  - D) Growth in both countries has been fueled by services.

Answer: A

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact



25) Related to the *Economics in Practice* on p. 406 [718]: According to the World bank, of the following countries, which one has the lowest controls on corruption?

- A) Germany                      B) India                      C) China                      D) Nigeria

Answer: D

Diff: 1

Topic: *Economics Development: Sources and Strategies: Economics in Practice*

Skill: *Fact*

## 2 True/False

1) In a developing economy, scarcity of capital may have less to do with any absolute scarcity of income available for capital accumulation than with a lack of incentive for citizens to save and invest productively.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

2) The following situation is an example of an export promotion strategy. Guatemala has a comparative advantage in the production of bananas and, as a result, the Guatemalan government grants incentives to banana growers to improve their performance in the international marketplace.

Answer: TRUE

Diff: 3

Topic: *Economics Development: Sources and Strategies*

Skill: *Analytic*

AACSB: *Analytic Skills*

3) In general, as a nation's income increases, fertility rates rise.

Answer: FALSE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

4) Remittances are used to fund housing and education for families left behind in the home countries.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

5) Human capital shortages are a barrier to economic growth in developing countries.

Answer: TRUE

Diff: 1

Topic: *Economics Development: Sources and Strategies*

Skill: *Fact*

- 6) A frequently cited barrier to economic development is the apparent shortage of entrepreneurial activity in developed nations.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 7) Most economists do not believe that import–substitution strategies have been quite successful around the world.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 8) Policies designed to promote import substitution often encouraged capital–intensive production methods.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 9) Social overhead capital guarantees economic growth.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Conceptual*
- 10) Developing countries often pursue agricultural policies that encourage farm production.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 11) The natural rate of population is the difference between the birth rate and the death rate.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 12) The World Bank is an international agency that lends money to individual countries for projects that promote economic development.  
Answer: TRUE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*
- 13) Export promotion policies try to discourage firms to produce more of products the country has a comparative advantage in.  
Answer: FALSE  
Diff: 1  
Topic: *Economics Development: Sources and Strategies*  
Skill: *Fact*

14) Microfinance is aimed at encouraging entrepreneurs among the very poorest parts of the developing world to relocate to high-income countries.

Answer: FALSE

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

15) China is politically authoritarian and does not have well-established property rights, characteristics which were once thought to hinder growth.

Answer: TRUE

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

16) China has developed a pragmatic, gradual approach to development.

Answer: TRUE

Diff: 1

Topic: Economics Development: Sources and Strategies

Skill: Fact

17) Related to the *Economic in Practice* on p. 406 [718]: Corruption often leads to less efficient firms producing the goods and services in a society.

Answer: TRUE

Diff: 1

Topic: Economics Development: Sources and Strategies: Economics in Practice

Skill: Fact

## 21.3 Issues in Economic Development

### 1 Multiple Choice

1) Studies by \_\_\_\_\_ during the 1970s indicate that growth in GDP does not guarantee improvements in development indicators.

A) NAFTA

B) the World Bank

C) the Federal Reserve

D) the International Monetary Fund

Answer: B

Diff: 2

Topic: Issues in Economic Development

Skill: Fact

2) The population in \_\_\_\_\_ countries grows at a rate of 1.7% a year, whereas the population in \_\_\_\_\_ countries grows at a rate of 0.5% a year.

A) developing; developed

B) first-world; third-world

C) industrial; agricultural

D) democratic; socialistic

Answer: A

Diff: 2

Topic: Issues in Economic Development

Skill: Fact



3) Developed countries have a lower population growth than developing countries.

Answer: TRUE

Diff: 1

Topic: Issues in Economic Development

Skill: Fact

## 21.4 The Transition to a Market Economy

### 1 Multiple Choice

1) \_\_\_\_\_ relates to the idea that collective ownership may not provide the proper private incentives for efficiency because individuals do not bear the full costs of their own decisions, but enjoy the full benefits.

A) Collective bargaining

B) The communal-living compact

C) The tragedy of commons

D) The Communist Manifesto

Answer: C

Diff: 1

Topic: The Transition to a Market Economy

Skill: Definition

2) The tragedy of commons relates to the idea that common owned resources tend to be

A) overvalued.

B) underutilized.

C) overused.

D) economically useless.

Answer: C

Diff: 1

Topic: The Transition to a Market Economy

Skill: Definition

3) \_\_\_\_\_ relates to the idea that no one has an incentive to maintain collectively owned property.

A) Collective bargaining

B) The communal-living compact

C) The Communist Manifesto

D) The tragedy of commons

Answer: D

Diff: 1

Topic: The Transition to a Market Economy

Skill: Definition

4) The Russian transition to a \_\_\_\_\_ economy required market-supporting institutions such as a developed banking system, functional financial markets, a code of commercial law, and developed processes for insurability of business activities.

A) command

B) market

C) dictatorial

D) fascist

Answer: B

Diff: 2

Topic: The Transition to a Market Economy

Skill: Fact

5) In a \_\_\_\_\_ economy, the labor market does not function freely and there is essentially no such thing as unemployment.

- A) laissez-faire  
B) capitalist  
C) centrally planned  
D) market driven

Answer: C

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

6) Within a fully employed, centrally planned economy, there \_\_\_\_\_ unemployment insurance, welfare, and other social programs.

- A) is no need for  
B) are growing costs for  
C) is a desperate need for  
D) is privately funded

Answer: A

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

7) The Russian transition to a market economy with \_\_\_\_\_ labor markets and \_\_\_\_\_ prices means that unemployment and higher prices are inevitable.

- A) controlled; controlled  
B) free; fixed  
C) fixed; fixed  
D) free; uncontrolled

Answer: D

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

8) The transition to a market-oriented economy characterized by rising unemployment and higher prices suggests that a social safety net including unemployment compensation, and food, clothing, and housing subsidies for those in need will be politically \_\_\_\_\_.

- A) detrimental.  
B) popular.  
C) unnecessary.  
D) dangerous.

Answer: B

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

9) Most authorities agree that the transition to a market economy can be achieved \_\_\_\_\_ external financial assistance \_\_\_\_\_ technical assistance.

- A) without; or  
B) without; but with  
C) only with; and  
D) only with; and no

Answer: C

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*



3) Transition from socialism by shock therapy is a rapid process.

Answer: TRUE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Conceptual*

AACSB: *Reflective Thinking*

4) Moving from socialism to capitalism as fast as possible is known as gradualism.

Answer: FALSE

Diff: 1

Topic: *The Transition to a Market Economy*

Skill: *Definition*

5) Market socialism is characterized by private ownership of firms but collective allocation of goods.

Answer: FALSE

Diff: 2

Topic: *The Transition to a Market Economy*

Skill: *Definition*