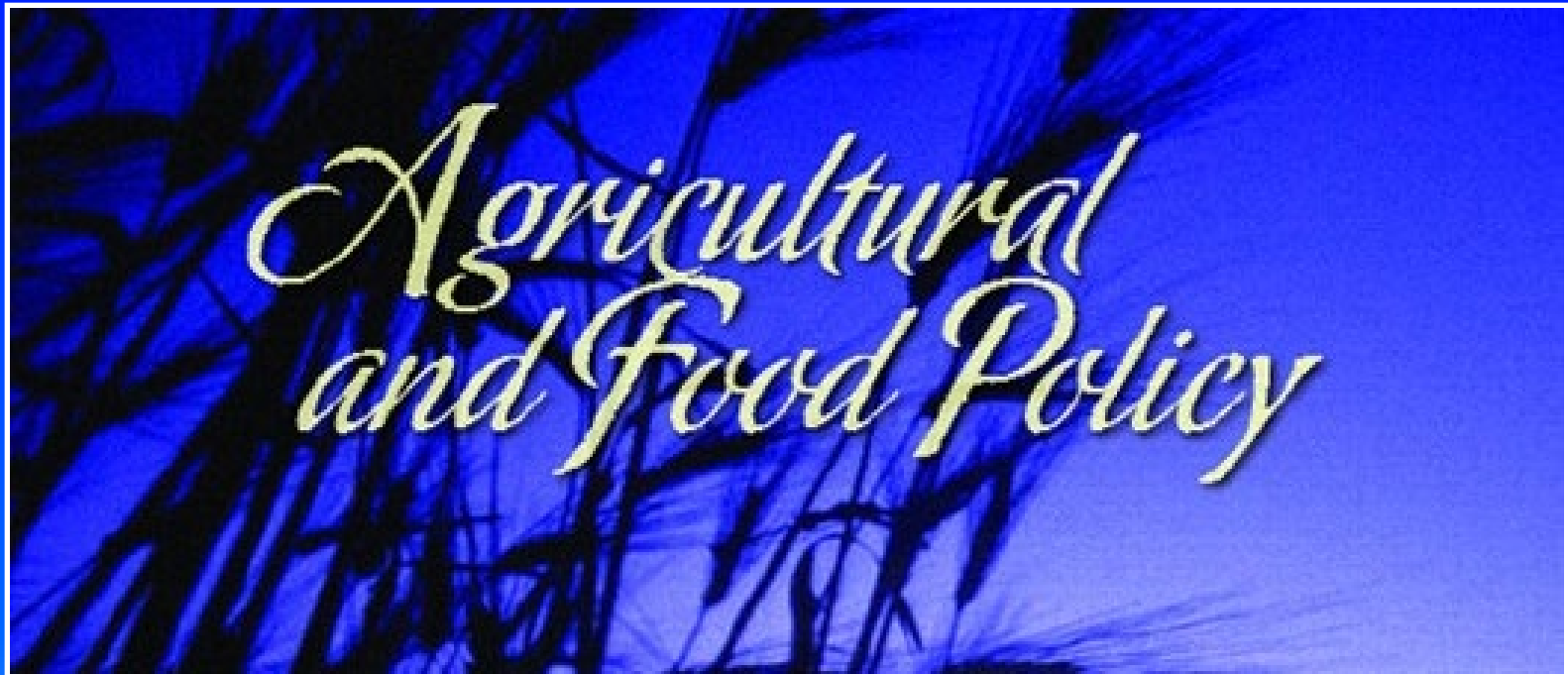


# **AGEC 429: AGRICULTURAL POLICY**

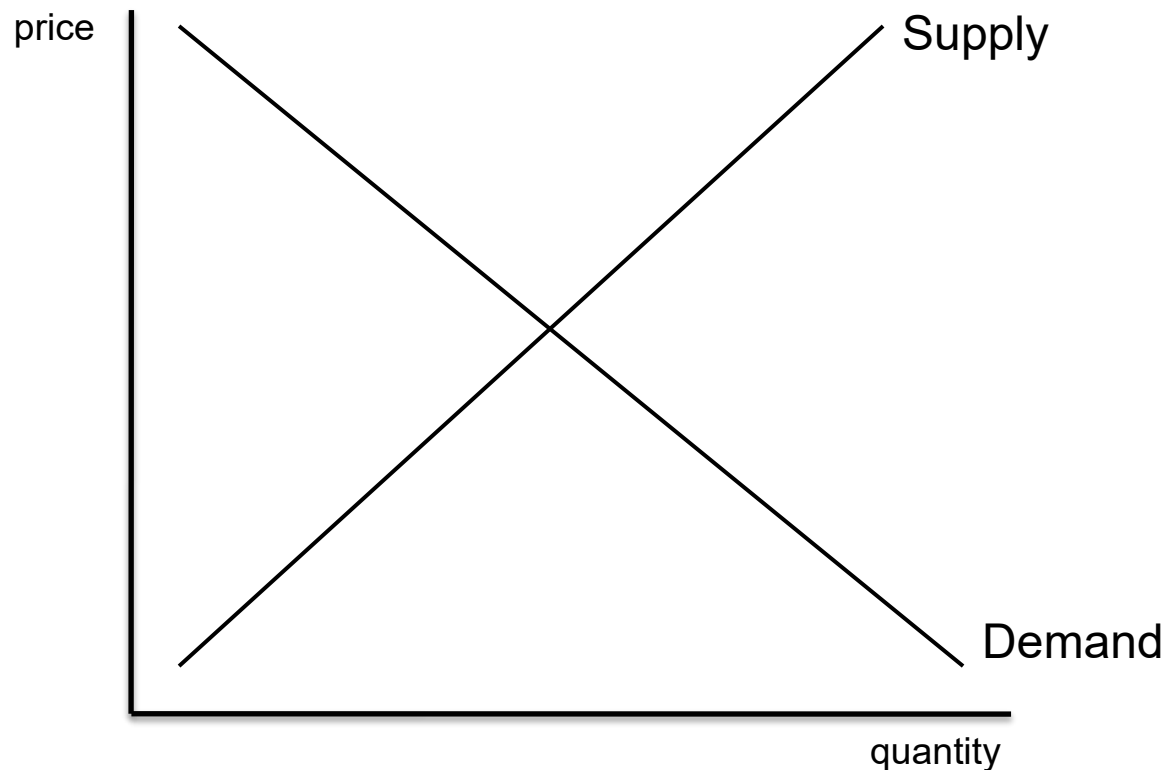


## **LECTURE 7: CONSUMER AND PRODUCER BEHAVIOR I**

# CONSUMER AND PRODUCER BEHAVIOR I

Agricultural policies generally achieve their objectives by changing how consumers and producer behave – that is, by changing how much consumers consume and producers produce.

We represent **CONSUMER BEHAVIOR** with a \_\_\_\_\_ curve  
and **PRODUCER BEHAVIOR** with a \_\_\_\_\_ curve.



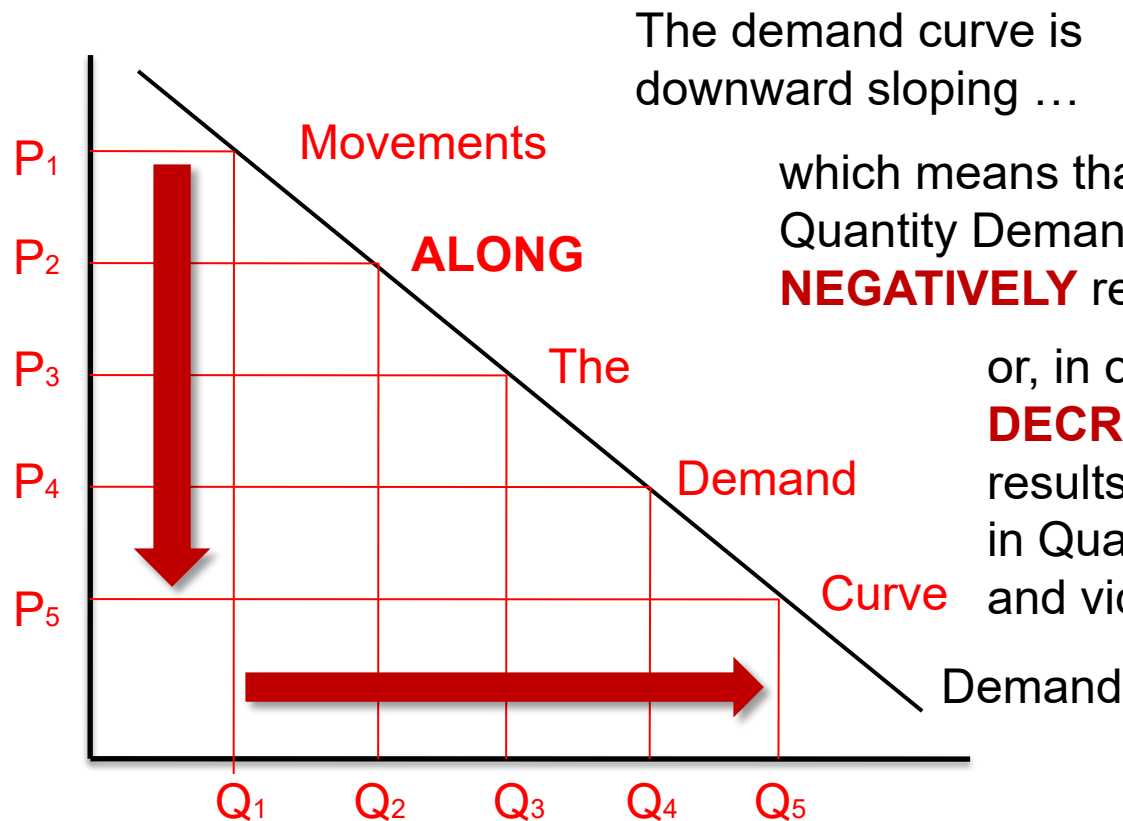
# What Determines How Much Consumers Consume?

## Market Demand Determinants:

- Price of the good itself ( $P_X$ ) - Called the “\_\_\_\_\_”
- Price of related goods ( $P_O$ )
  - Substitutes
  - Complements
- Consumers' incomes ( $Y$ )
- The number of consumers (population) ( $N$ )
- Consumer tastes and preferences ( $T$ )
- The range of goods available to consumers ( $R$ )

# What Determines How Much Consumers Consume?

Changes in the price of any good result in ...

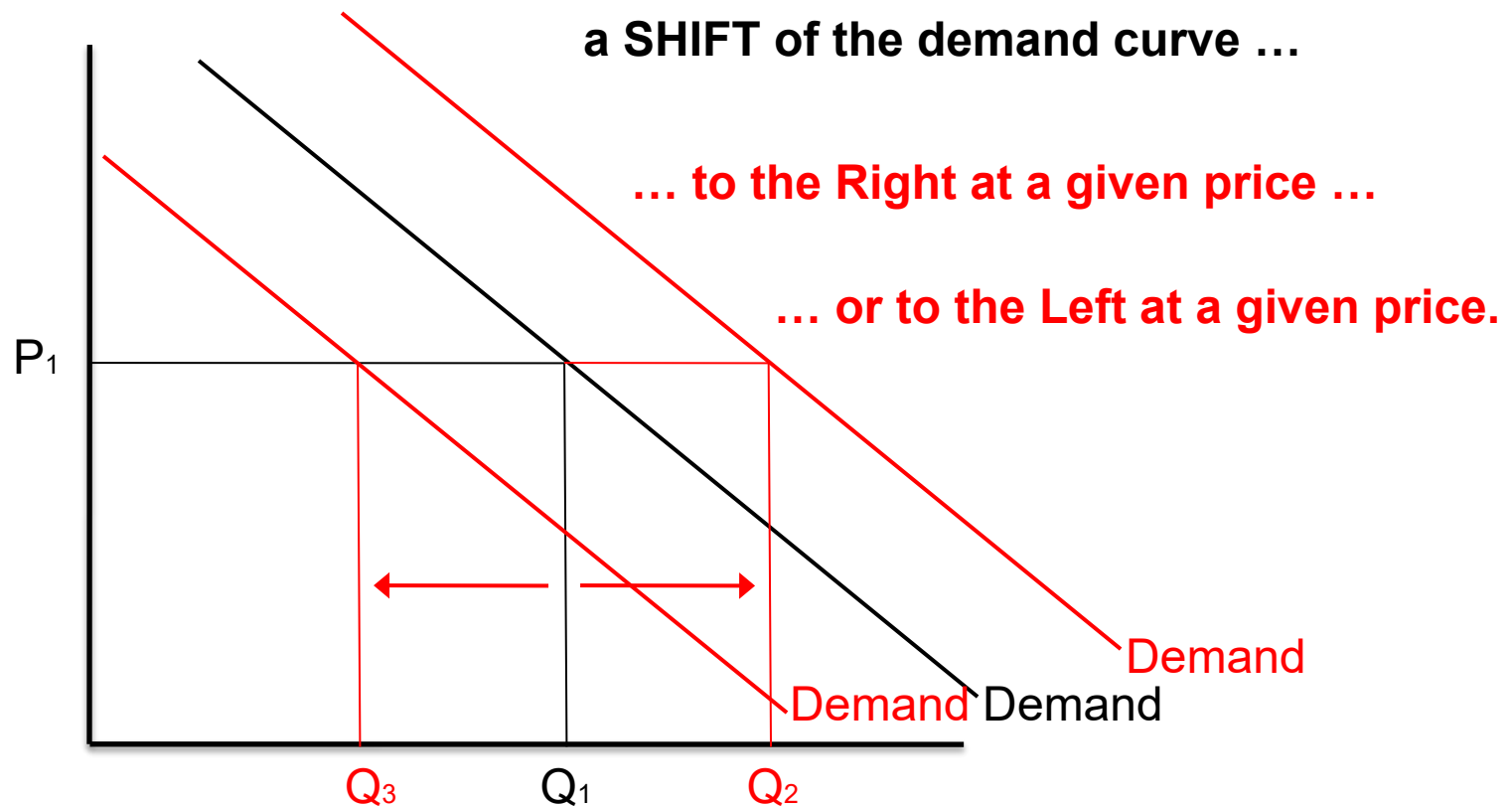


which means that Price and Quantity Demanded are **NEGATIVELY** related ...

or, in other words, a **DECREASE** in price results in an **INCREASE** in Quantity Demanded and vice versa.

# What Determines How Much Consumers Consume?

A change in **ANY OTHER** demand determinant results in ...



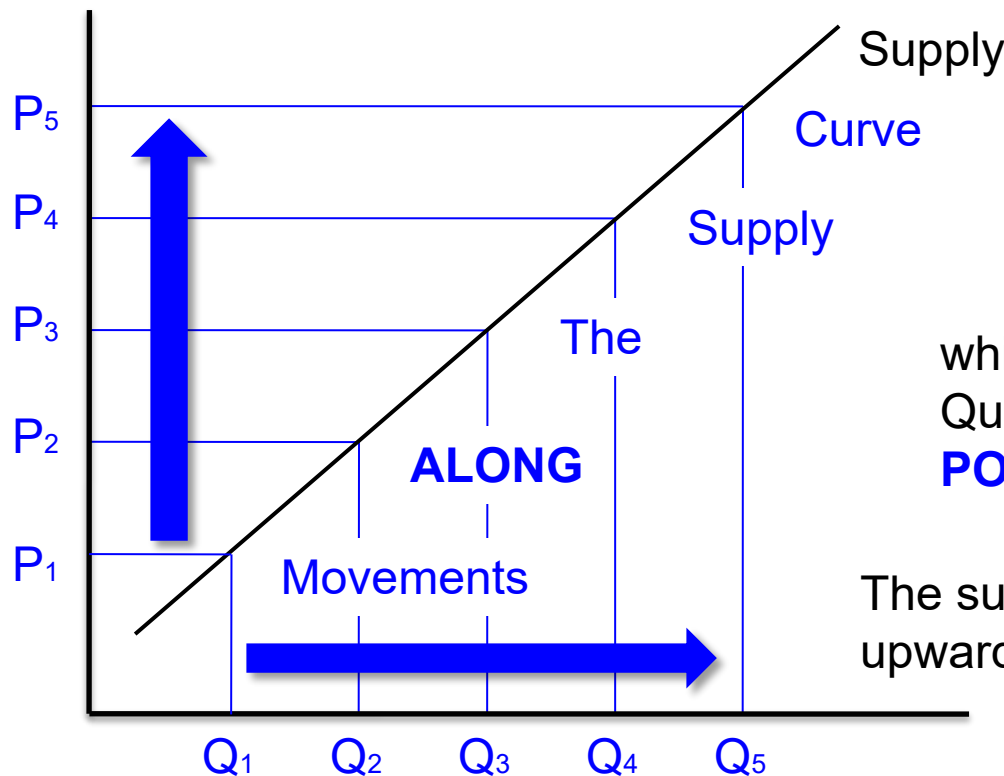
# What Determines How Much Producers Produce?

## Market Supply Determinants:

- Price of the good itself ( $P_X$ ) - Again, the “\_\_\_\_\_”
- Price of related goods ( $P_G$ )
  - Substitutes
  - Complements
- Technology (State of) (T)
- Price of Resources or Inputs ( $P_I$ )
- Number of Sellers or Producers (N)
- Sellers' Price Expectations (E)

# What Determines How Much Producers Produce?

Changes in the price of any good result in ...



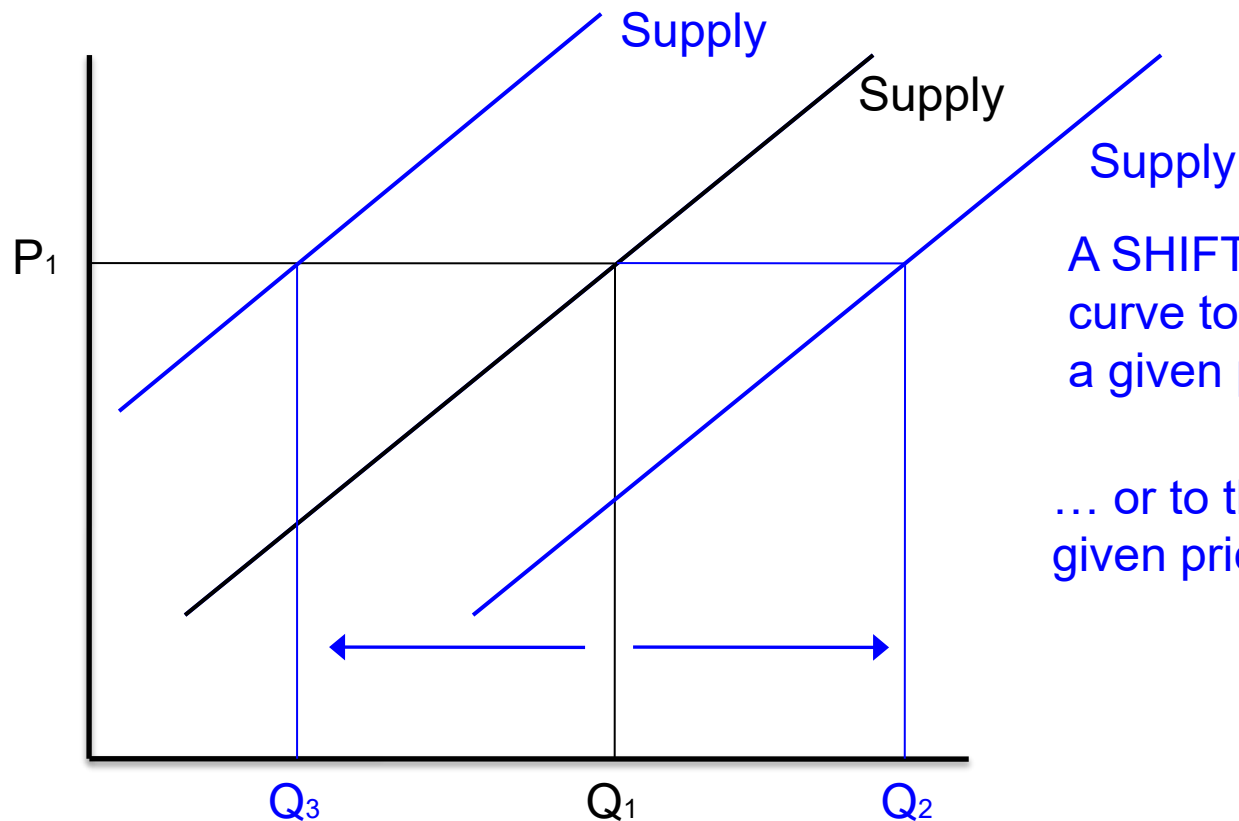
or, in other words, an **INCREASE** in price results in an **INCREASE** in Quantity Supplied and vice versa.

which means that Price and Quantity Supplied are **POSITIVELY** related ...

The supply curve is upward sloping ...

# What Determines How Much Producers Produce?

A change in ANY OTHER supply determinant results in ...

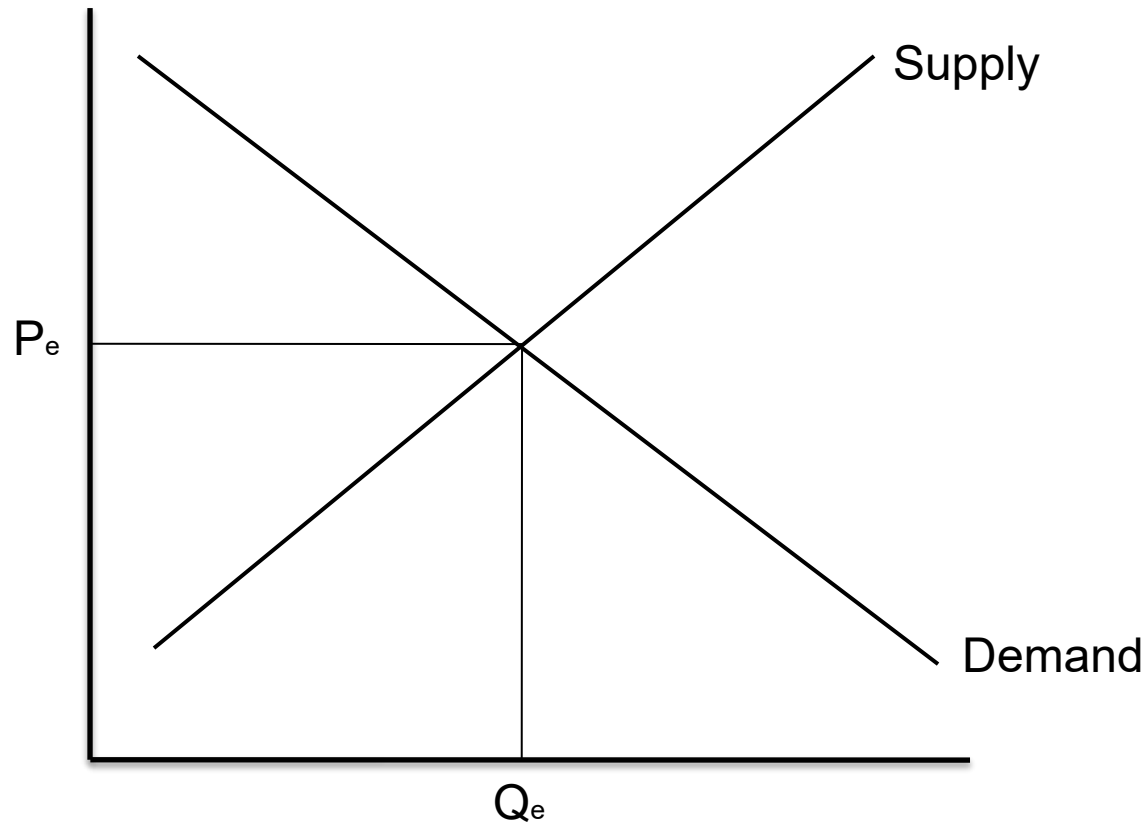


A SHIFT in the supply curve to the Right at a given price...

... or to the LEFT at a given price.



# Supply and Demand Interact to Determine Equilibrium Market Price and Quantity

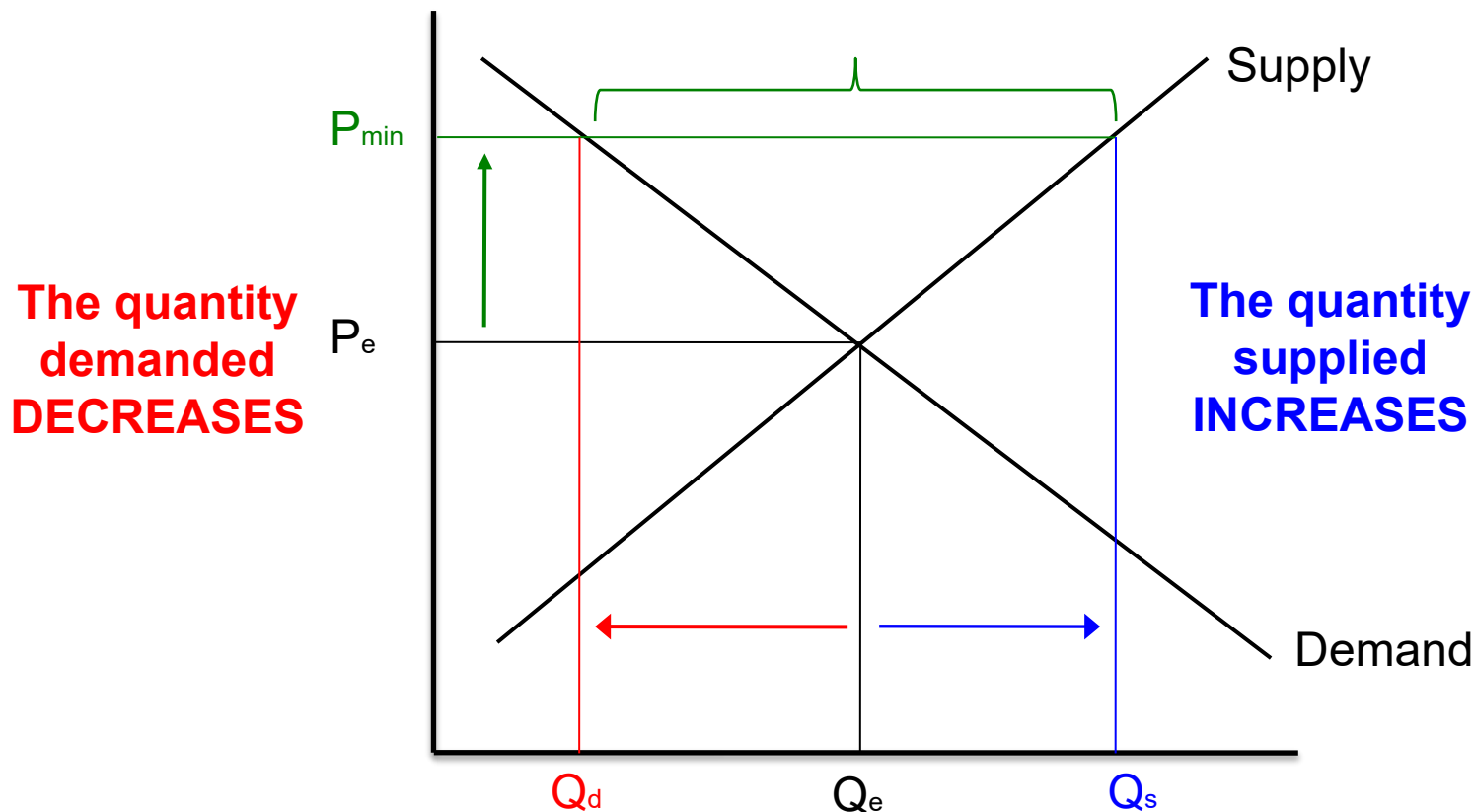


# How Does Policy Change Market Supply and Demand?

Let's say a policy mandates a minimum market price above the current market equilibrium.

What happens when the price increases?

And a market surplus results!



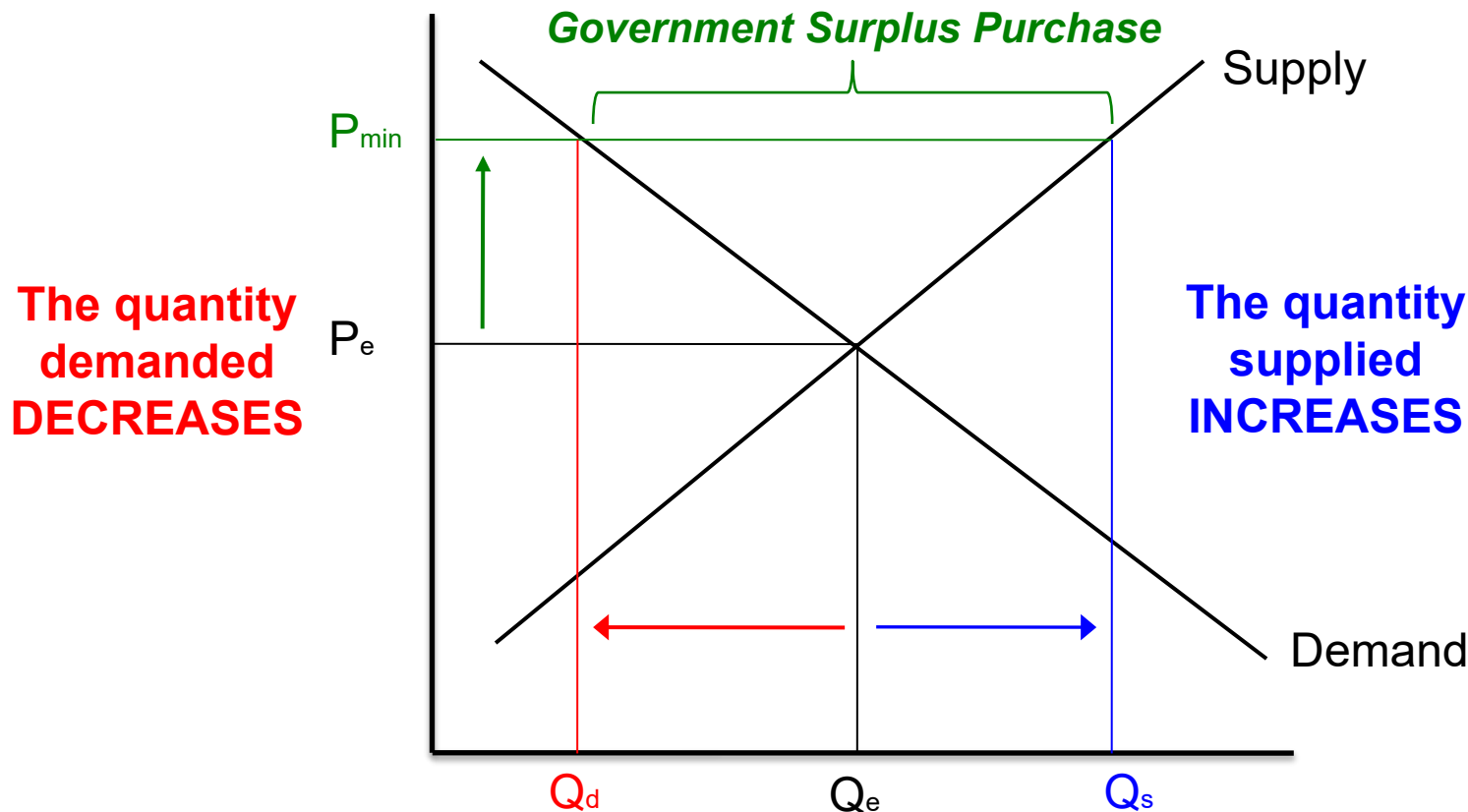
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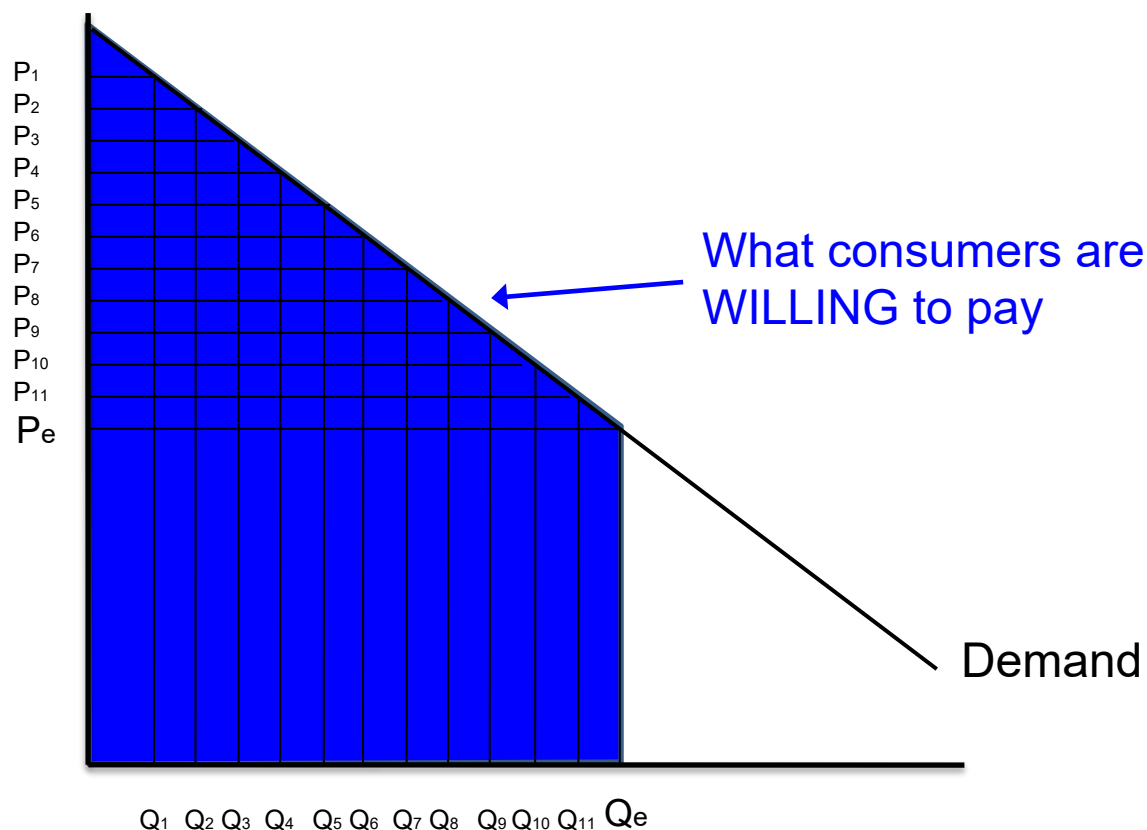
What will happen to the market price?

What could the government do to keep that from happening?



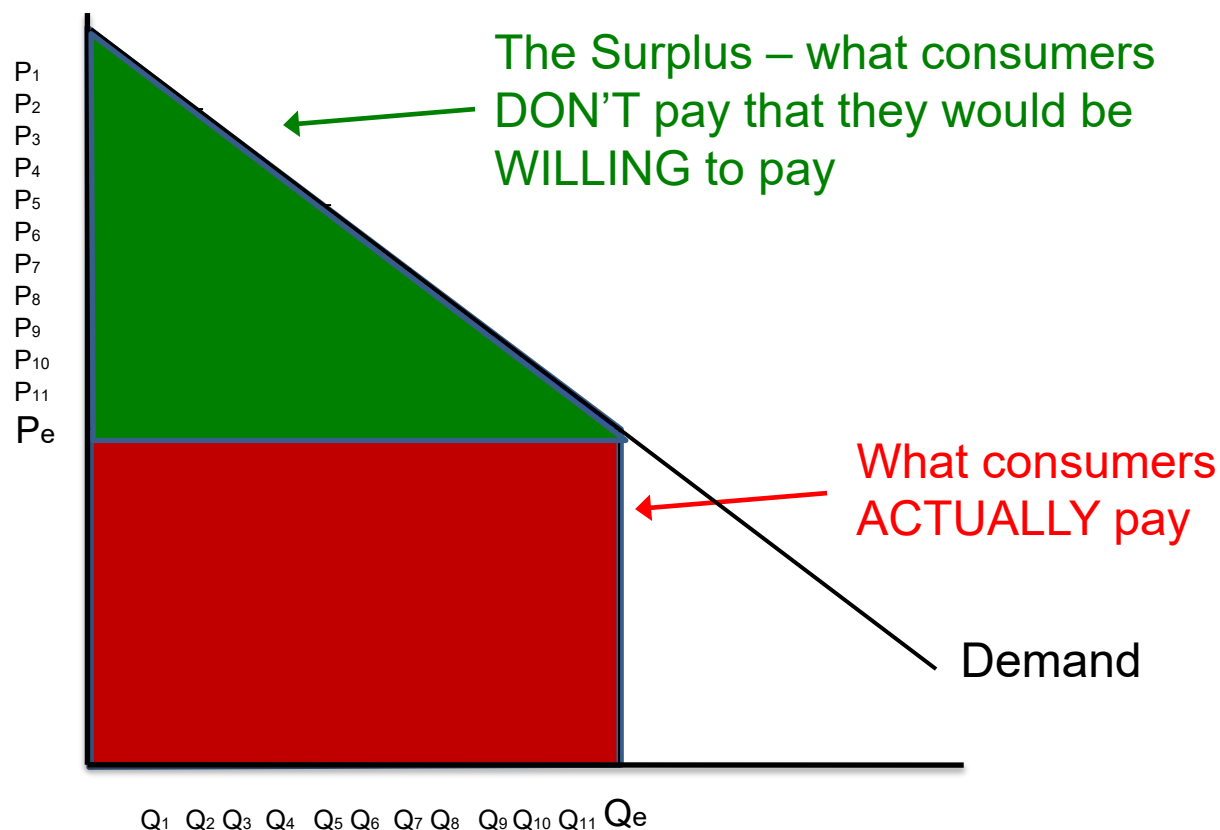
# Measuring Economic Welfare: Consumer and Producer Surplus

**Consumer Surplus:** The difference between what consumers are willing to pay and what they actually pay for a good.



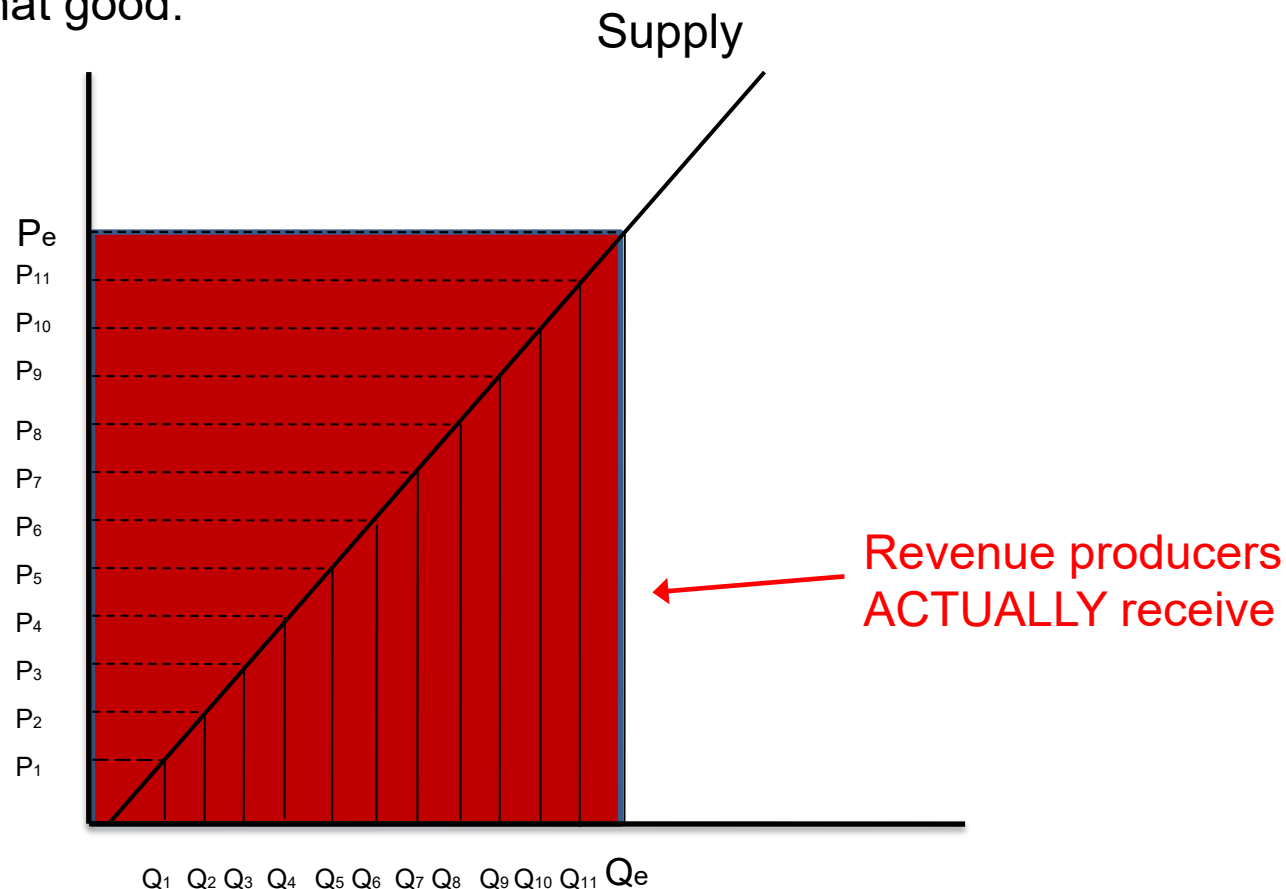
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# Measuring Economic Welfare: Consumer and Producer Surplus

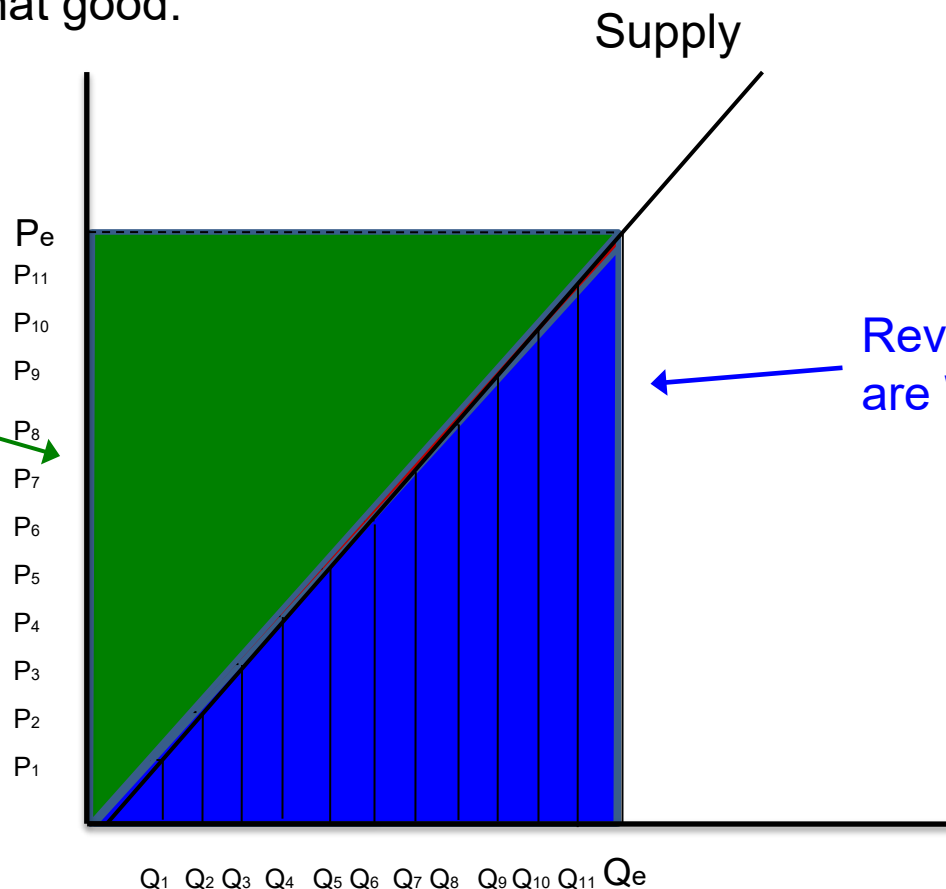
**Producer Surplus:** The difference between the actual revenue that producers receive for a good and the revenue they would be willing to accept for that good.



# Measuring Economic Welfare: Consumer and Producer Surplus

**Producer Surplus:** The difference between the actual revenue that producers receive for a good and the revenue they would be willing to accept for that good.

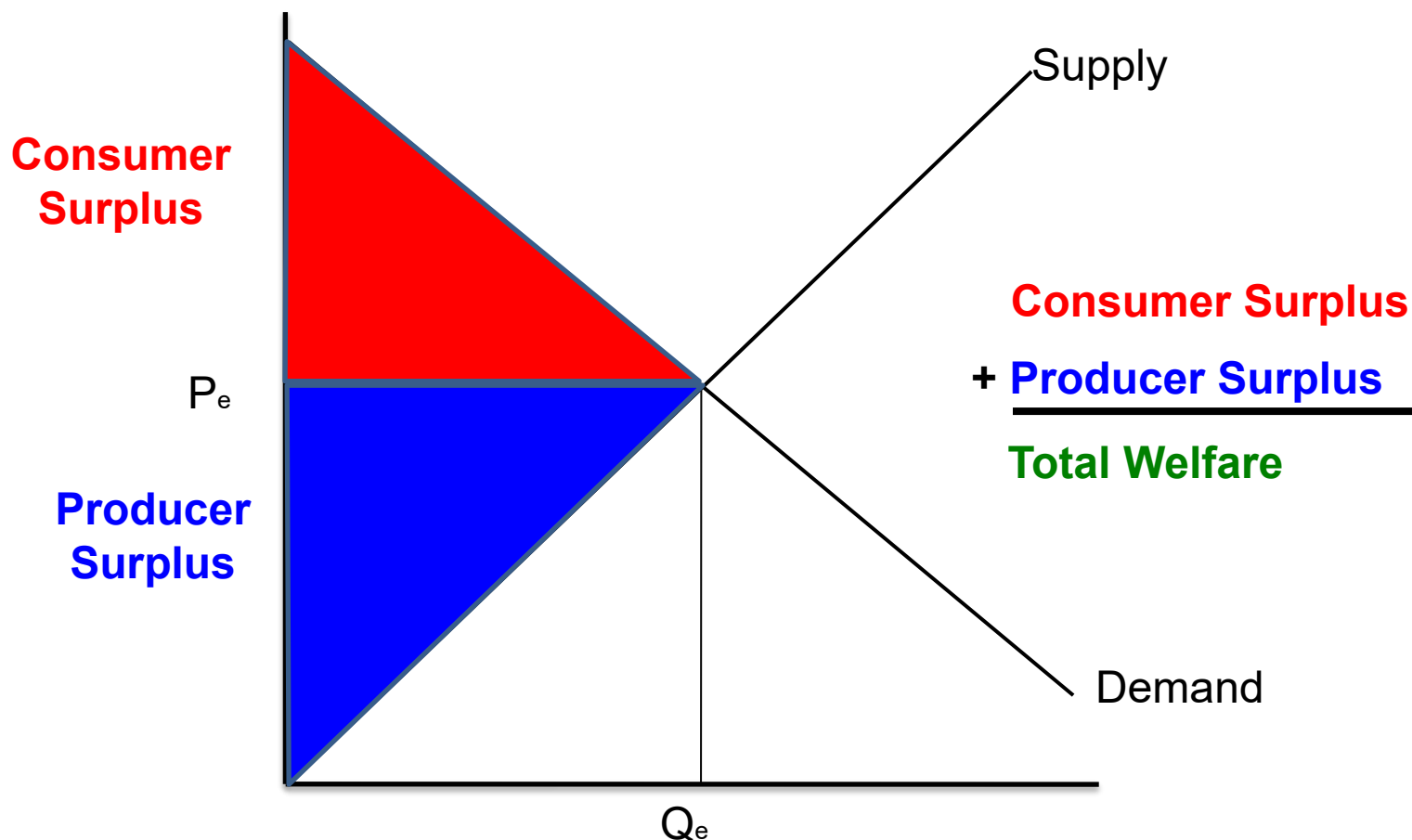
The Surplus – revenue producers receive in excess of what they would be **WILLING** to take.



Revenue producers are **WILLING** to take

# How Does Policy Change Producer And Consumer Welfare?

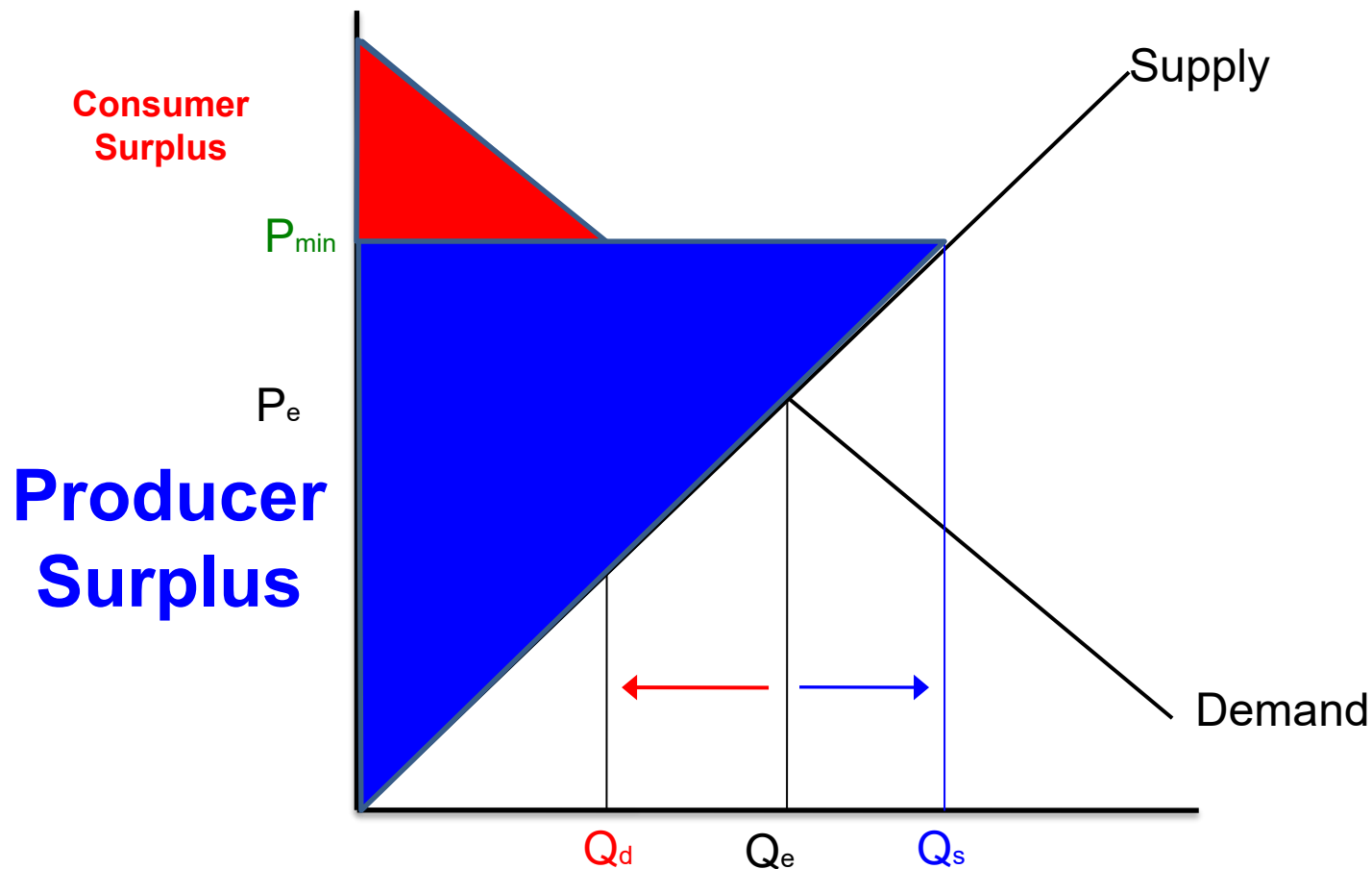
Again, let's say a policy mandates a minimum market price above the current market equilibrium.





# How Does Policy Change Producer And Consumer Welfare?

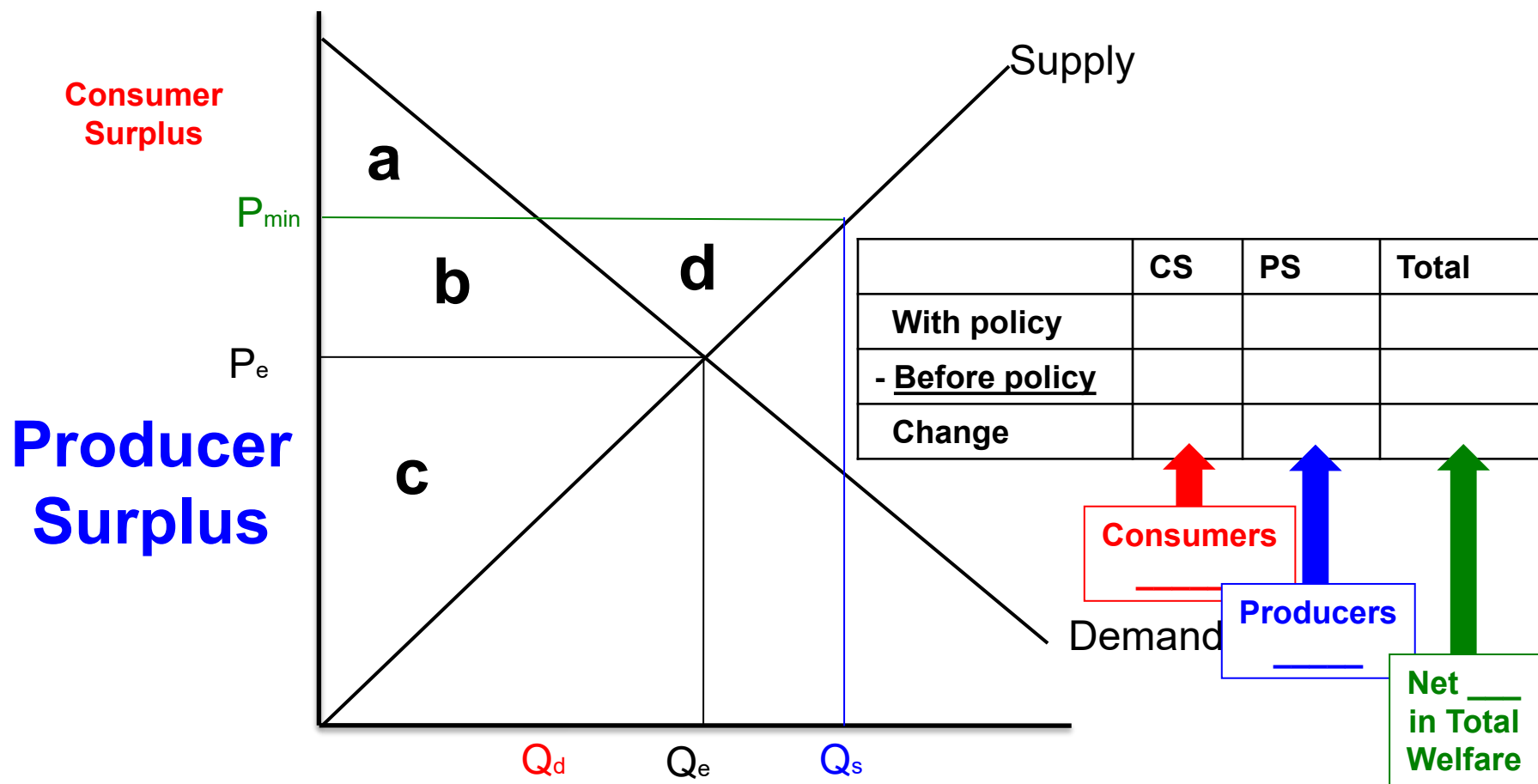
What happens to producer and consumer surplus?



# How Does Policy Change Producer And Consumer Welfare?

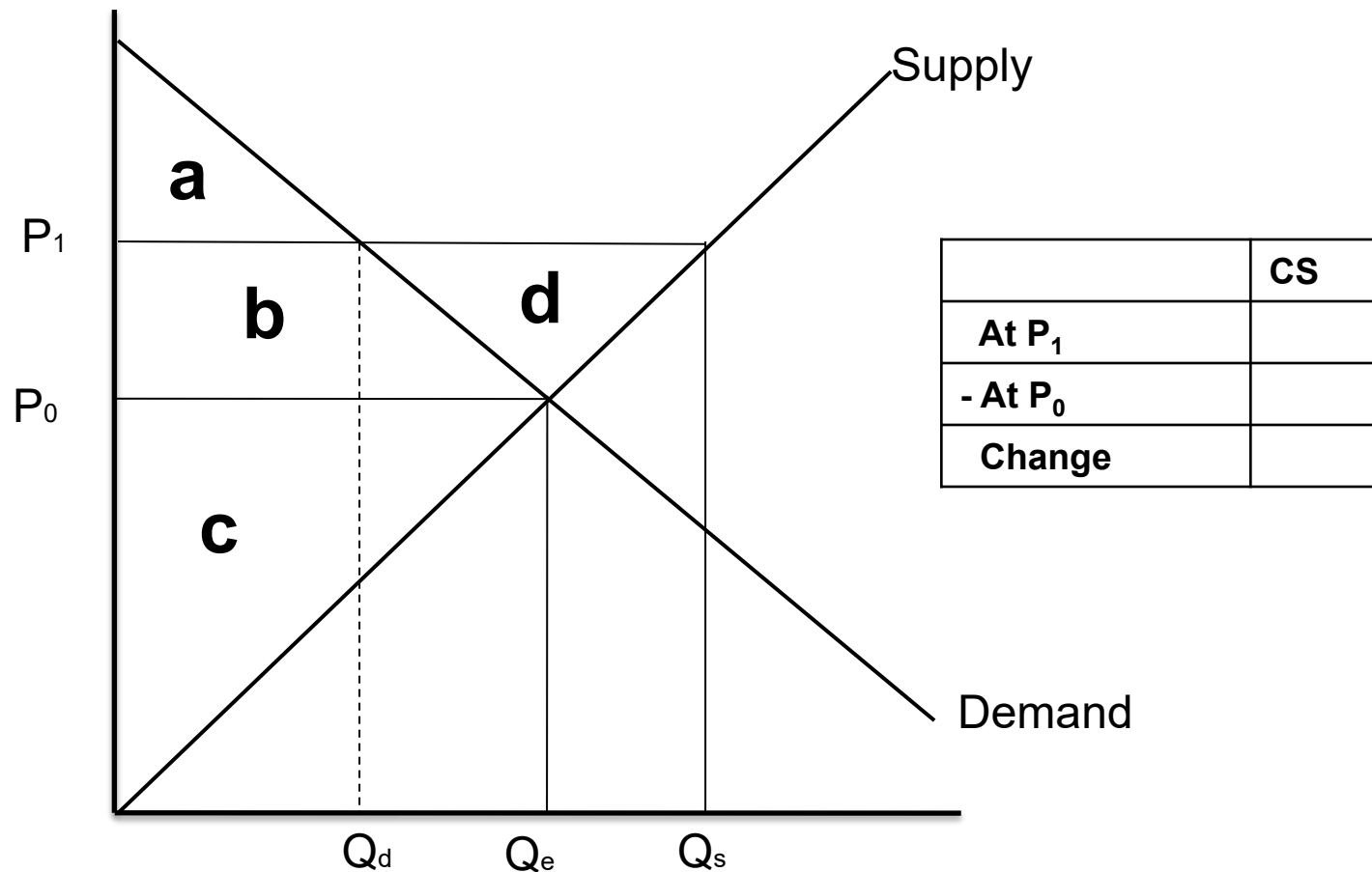
What happens to producer and consumer surplus?

What happens to Total Welfare?



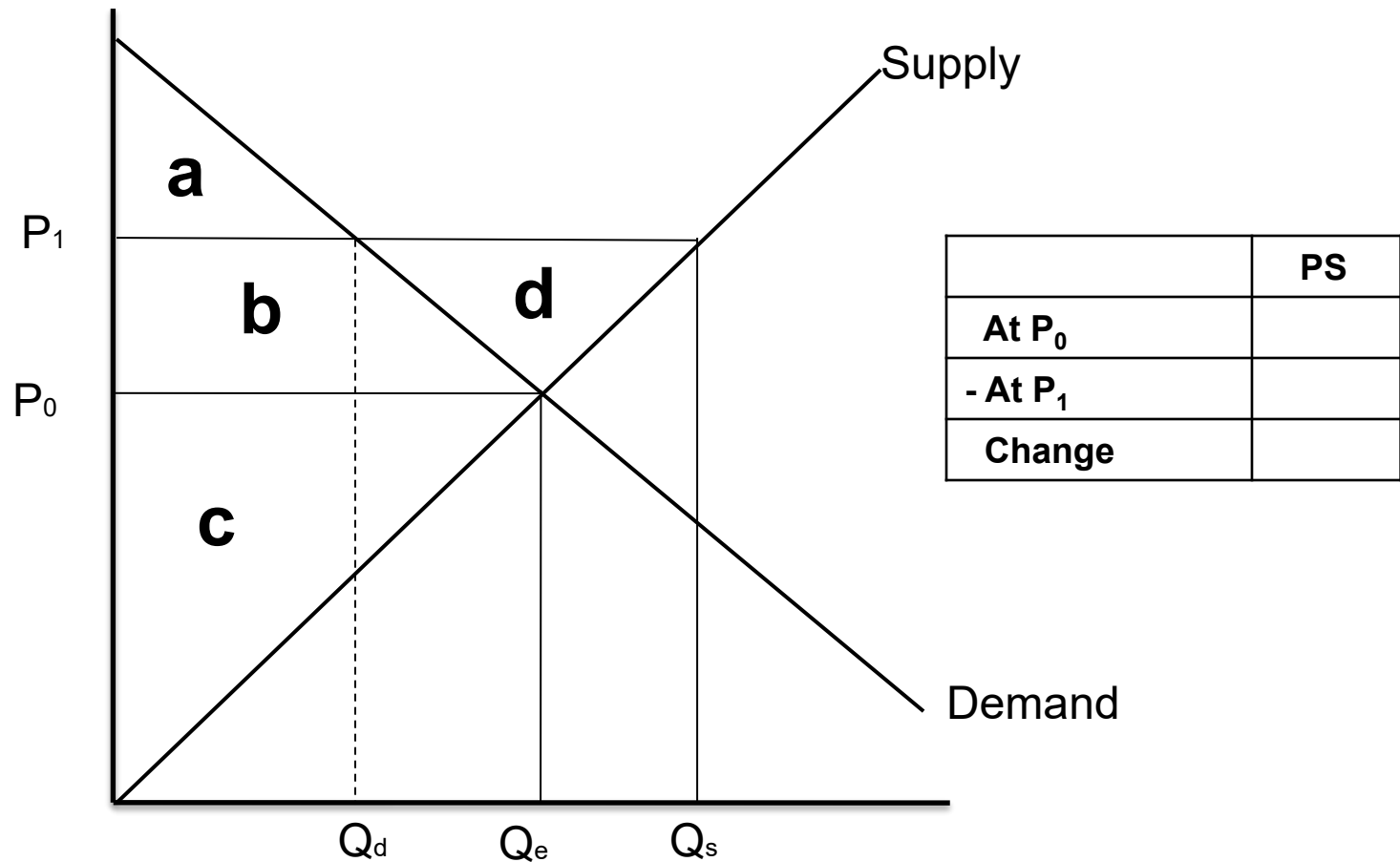
# Producer and Consumer Welfare Analysis Example Problems

1. If price **increases** from  $P_0$  to  $P_1$ , in the graph below, what is the **CHANGE** in consumer surplus?



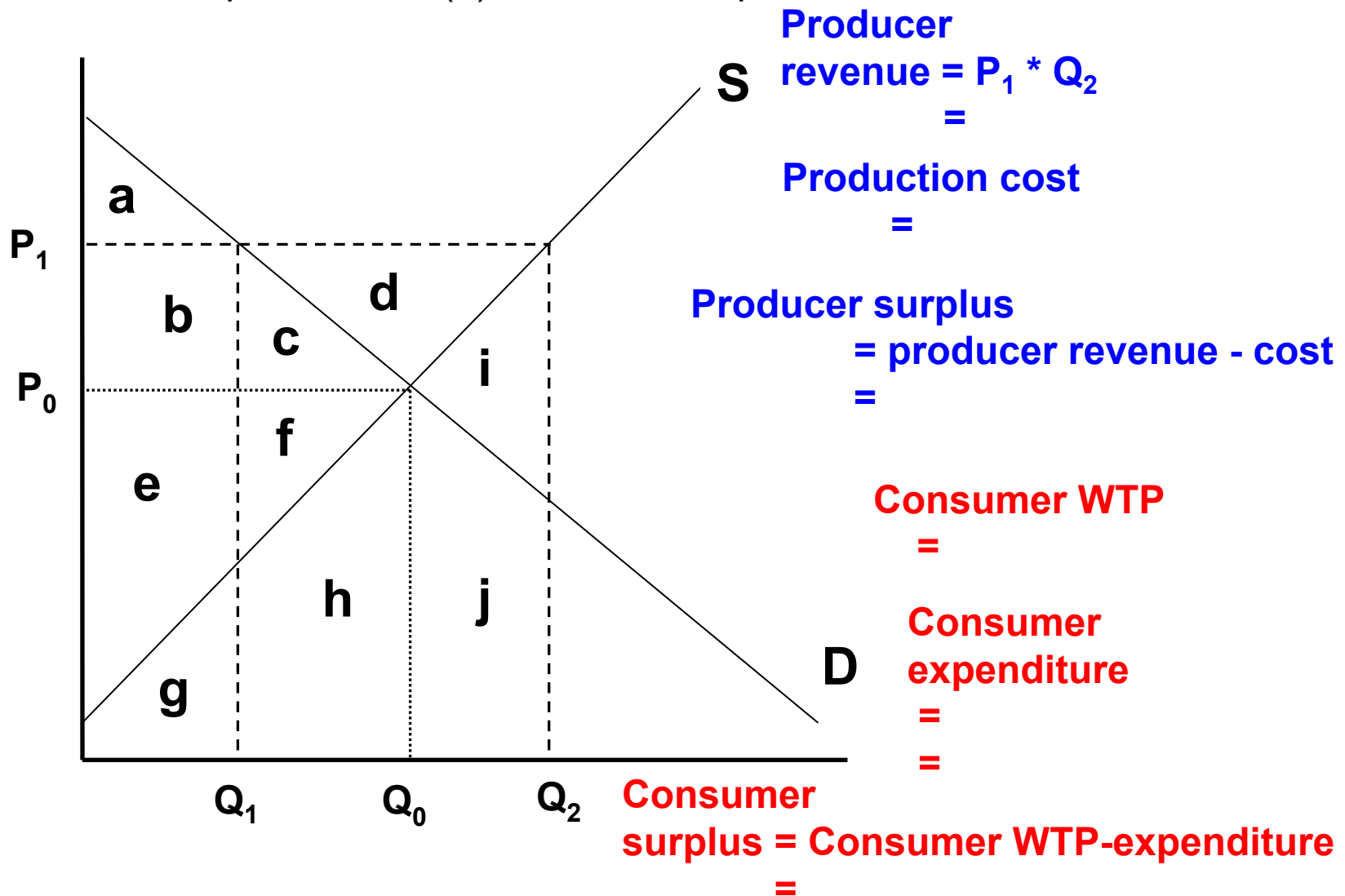
## Producer and Consumer Welfare Analysis Example Problems (continued)

2. If price **decreases** from  $P_1$  to  $P_0$ , in the graph below, what is the **CHANGE** in producer surplus?



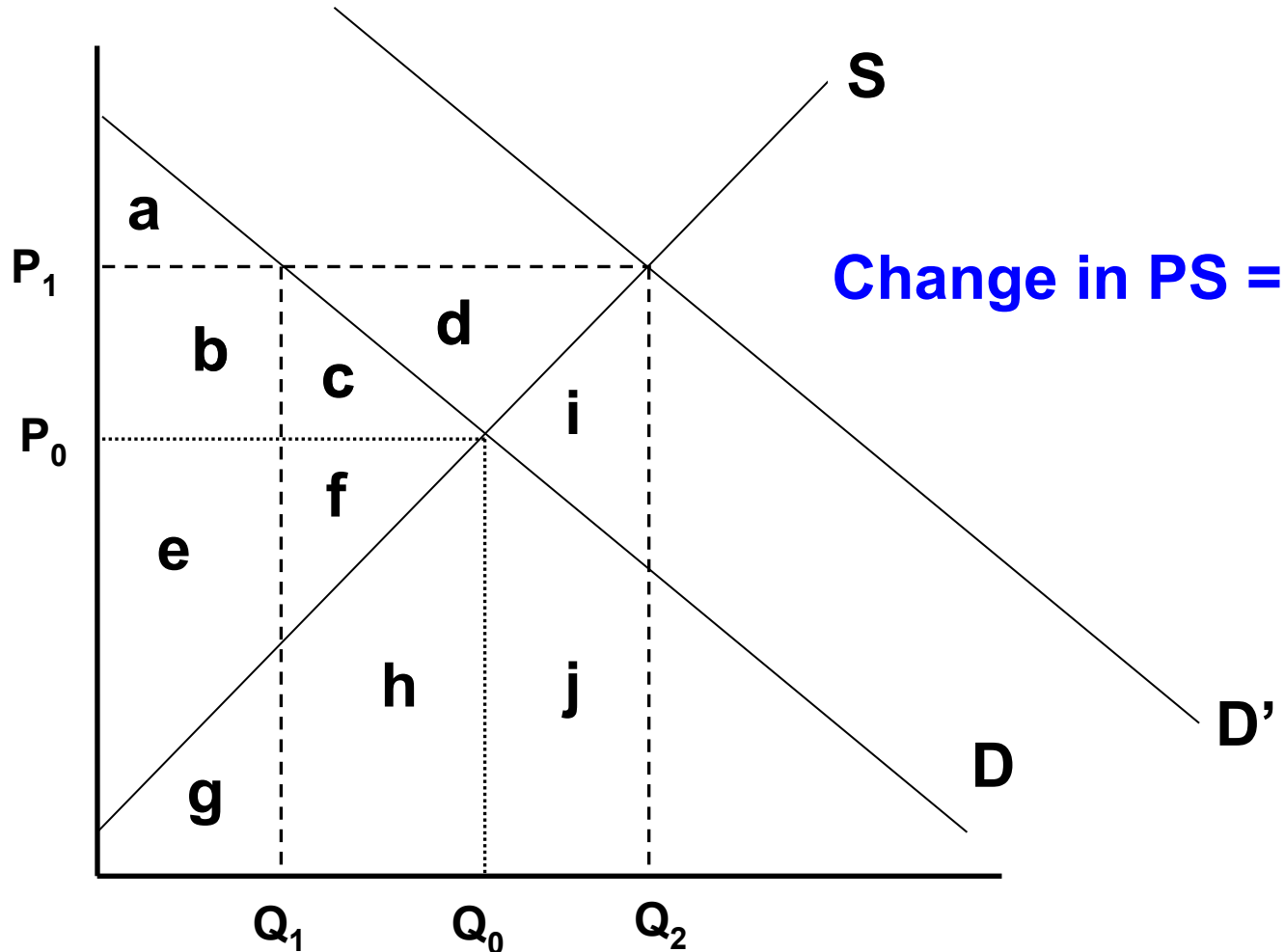
## Producer and Consumer Welfare Analysis Example Problems (continued)

3. At  $P_1$ , what is (are) the area(s) representing: (1) producer revenue? (2) production cost? (3) producer surplus? (4) consumer willingness to pay? (5) consumer expenditures? (6) consumer surplus?



## Producer and Consumer Welfare Analysis Example Problems (continued)

4. If the demand curve shifts out to the right so that the new market price is  $P_1$ , by how much does **producer surplus CHANGE**?



## Producer and Consumer Welfare Analysis Example Problems (continued)

5. If the supply curve shifts out to the left so that the new market price is  $P_1$ , by how much does **consumer surplus CHANGE**?

