

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Future Value (FV)

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= PV(1 + i)^n$$

Where:

PV = Present Value

i = Periodic/Annual Investment Rate

n = Number of Periods/Years



©2021

FPAC EXAM PREP PLATFORM

Present Value (PV)

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{FV}{(1 + i)^n} \text{ or } FV * \left(\frac{1}{(1 + i)^n} \right)$$

Where:

FV = Future Value

i = Periodic/Annual Investment Rate

n = Number of Periods/Years



©2021

FPAC EXAM PREP PLATFORM

Present Value of an Ordinary Annuity

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \text{Payment} * \left(\frac{1}{i} - \frac{1}{i * (1 + i)^n} \right)$$

Where:

i = Periodic/Annual Investment Rate

n = Number of Periods/Years



©2021

FPAC EXAM PREP PLATFORM

Present Value of an Ordinary Annuity with Perpetual Growth

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{\text{Payment}}{i - g} * \left(1 - \frac{(1 + g)^n}{(1 + i)^n} \right)$$

Where:

i = Periodic/Annual Investment Rate

n = Number of Periods/Years

g = Growth Rate



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Return on Investment (ROI)

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{\text{Gain from Investment} - \text{Cost of Investment}}{\text{Cost of Investment}} \text{ or } \left(\frac{\text{Gain from Investment}}{\text{Cost of Investment}} \right) - 1$$



©2021

FPAC EXAM PREP PLATFORM

Percentage Change

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{\text{New Value} - \text{Old Value}}{\text{Cost of Investment}} \text{ or } \left(\frac{\text{New Value}}{\text{Old Value}} \right) - 1$$



©2021

FPAC EXAM PREP PLATFORM

Duration of a Coupon Bond

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{\sum_{t=1}^n \frac{C_t}{(1+r)^t} (t)}{\sum_{t=1}^n \frac{C_t}{(1+r)^t}}$$

Where:

C_t = Cashflow in that period

r = Current Rate

t = Time Period



©2021

FPAC EXAM PREP PLATFORM

Market Price of a Bond

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{CF_1}{(1+k)^1} + \frac{CF_2}{(1+k)^2} + \dots + \frac{CF_N}{(1+k)^N}$$

Where:

CF_N = Annual cash flow produced by the security in year N

k = Required rate of return or opportunity cost for the security



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Weighted Average Cost of Capital (WACC)

PART 1, CHAPTER 1, TOPIC 3

FORMULA

$$= w_D r_D (1 - T) + w_E r_E$$

Where:

w_D = Weighting of debt financing

r_D = Yield to maturity on newly issued debt on a before-tax basis

T = Firm's marginal tax rate

w_E = Weighting of equity financing

r_E = Required rate of return on equity



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Average Financing Required

PART 1, CHAPTER 1, TOPIC 4

FORMULA

$$= (DIO - DPO) * \left(\frac{\text{Cost of Good Sold}}{365} \right) + DSO * \left(\frac{\text{Revenue}}{365} \right)$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Working Capital Requirement (WCR)

PART 1, CHAPTER 1, TOPIC 4

FORMULA

$$= (\text{Average Accounts Receivable} + \text{Average Inventory}) - \text{Average Accounts Payable}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Annual Financing Cost of the Cash Conversion Cycle

PART 1, CHAPTER 1, TOPIC 4

FORMULA

$$= \text{Average Financing Required} * \text{Borrowing Cost}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

FPAC EXAM PREP PLATFORM

FORMULA

Average Accounts Payable

$$= \text{DPO} * \left(\frac{\text{Cost of Goods Sold}}{365} \right)$$

PART 1, CHAPTER 1, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Average Accounts Receivable

$$= \text{DSO} * \left(\frac{\text{Revenue}}{365} \right)$$

PART 1, CHAPTER 1, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

FORMULA

$$= \frac{C_1}{(1+i)^1} + \frac{C_2}{(1+i)^2} + \frac{C_3}{(1+i)^3} + \dots + \frac{C_n}{(1+i)^n} - \text{Cost}$$

Net Present Value (NPV)

Where:

C = Net cash flow in a given year n

i = WACC or discount rate

Cost = Cash outflow

PART 1, CHAPTER 1, TOPIC 5



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Net Advantage to Leasing (NAL)

$$= \text{NPV}_{\text{Lease}} - \text{NPV}_{\text{Purchase}}$$

PART 1, CHAPTER 1, TOPIC 5



©2021

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Net Present Value of Acquisition

PART 1, CHAPTER 1, TOPIC 5

FORMULA

$$= -\text{Cost of Acquisition} + \text{Incremental Value} + \text{Value of Acquired Firm}$$



©2021

FPAC EXAM PREP PLATFORM

Gross Profit

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{Revenue} - \text{Cost of Goods Sold}$$



©2021

FPAC EXAM PREP PLATFORM

EBITDA

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{Gross Profit} - \text{Selling, General and Administrative (SG\&A) expenses}$$



©2021

FPAC EXAM PREP PLATFORM

EBIT

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{EBITDA} - \text{Depreciation and Amortization}$$



©2021



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

Period Depreciation

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \frac{\text{Cost} - \text{Residual Life}}{\text{Useful Life}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Net Income Before Taxes

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{EBIT} - \text{Interest Expense}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Net Income

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{Income Before Taxes} - \text{Income Tax Expense} \pm \text{Extraordinary Items}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Effective Tax Rate (ETR)

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \frac{\text{Income Tax}}{\text{Income Before Tax}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Cost of Goods Sold (COGS)

PART 1, CHAPTER 3, TOPIC 3

FORMULA

$$= \text{Revenue} - \text{Gross Profit}$$



©2021

FPAC EXAM PREP PLATFORM

Balance Sheet Equation

PART 1, CHAPTER 3, TOPIC 4

FORMULA

$$\text{Total Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$



©2021

FPAC EXAM PREP PLATFORM

Cash Ratio

PART 1, CHAPTER 4, TOPIC 1

FORMULA

$$= \frac{\text{Cash} + \text{Cash Equivalents} + \text{Marketable Securities}}{\text{Current Liabilities}}$$



©2021

FPAC EXAM PREP PLATFORM

Current Ratio

PART 1, CHAPTER 4, TOPIC 1

FORMULA

$$= \frac{\text{Current Assets}}{\text{Current Liabilities}}$$



©2021

FPAC Exam Prep Platform Formula Flashcards

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Quick Ratio

PART 1, CHAPTER 4, TOPIC 1

FORMULA

$$= \frac{\text{Cash} + \text{Cash Equivalents} + \text{Short term Investments} + \text{Accounts Receivable}}{\text{Current Liabilities}}$$

or

$$= \frac{\text{Current Assets} - \text{Inventories} - \text{Other Current Assets}}{\text{Current Liabilities}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Cash Coverage

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\text{EBIT} + \text{Depreciation}}{\text{Interest Expense}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Debt to Equity

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\text{Total Debt}}{\text{Shareholders' Equity}} \text{ or } \frac{\text{Total Debt}}{\text{Total Assets} - \text{Total Liabilities}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Debt to Total Assets

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\text{Total Debt}}{\text{Total Assets}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM****Degree of Financial Leverage**

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\% \text{ Change in EPS}}{\% \text{ Change in EBIT}} \text{ or } \frac{\% \text{ Change in Net Income}}{\% \text{ Change in EBIT}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM**Degree of Operating Leverage**

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\% \text{ Change in EBIT}}{\% \text{ Change in Revenue}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM**Degree of Total Leverage**

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\% \text{ Change in EPS}}{\% \text{ Change in Revenue}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM**Interest Coverage
(Times Interest Earned)**

PART 1, CHAPTER 4, TOPIC 2

FORMULA

$$= \frac{\text{EBIT}}{\text{Interest Expense}}$$

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

Long-Term Debt to Equity

$$= \frac{\text{Long Term Debt}}{\text{Shareholders' Equity}}$$

PART 1, CHAPTER 4, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

Average Asset Turnover

$$= \frac{\text{Revenue}}{\text{Average Total Assets}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

Average Accounts Payable Turnover

$$= \frac{\text{Cost of Goods Sold}}{\text{Average Accounts Payable}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

Average Accounts Receivable Turnover

$$= \frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

FOLD
↓



FPAC EXAM PREP PLATFORM

FORMULA

Average Fixed Asset Turnover

$$= \frac{\text{Revenue}}{\text{Average Fixed Assets}} \text{ or } \frac{\text{Revenue}}{\text{Average Net PP\&E}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Average Inventory Turnover

$$= \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Average Working Capital Turnover

$$= \frac{\text{Revenue}}{\text{Average Working Capital}} \text{ or } \frac{\text{Revenue}}{\text{Average Current Assets} - \text{Average Current Liabilities}}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Cash Conversion Cycle (CCC)

$$= \text{Days' Inventory Outstanding} + \text{Days' Sales Outstanding} - \text{Days' Payable Outstanding}$$

PART 1, CHAPTER 4, TOPIC 3



©2021

FPAC Exam Prep Platform Formula Flashcards

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Days' Inventory Outstanding (DIO)

PART 1, CHAPTER 4, TOPIC 3

FORMULA

$$= \frac{\text{Average Inventory}}{\text{Cost of Goods Sold}} * \text{Number of Days in Period}$$



©2021

FPAC EXAM PREP PLATFORM

Days' Payable Outstanding (DPO)

PART 1, CHAPTER 4, TOPIC 3

FORMULA

$$= \frac{\text{Average Accounts Payable}}{\text{Cost of Goods Sold}} * \text{Number of Days in Period}$$



©2021

FPAC EXAM PREP PLATFORM

Days' Sales Outstanding (DSO)

PART 1, CHAPTER 4, TOPIC 3

FORMULA

$$= \frac{\text{Average Accounts Receivable}}{\text{Net Credit Sales}} * \text{Number of Days in Period}$$



©2021

FPAC EXAM PREP PLATFORM

Basic Earnings Per Share

PART 1, CHAPTER 4, TOPIC 4

FORMULA

$$= \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted Average Outstanding Shares}}$$



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Diluted Earnings Per Share

PART 1, CHAPTER 4, TOPIC 4

FORMULA

$$= \frac{(\text{Net Income} - \text{Preferred Dividends}) + (\text{Convertible Preferred Dividends} + \text{Convertible Bond After Tax Interest})}{\text{Weighted Average Outstanding Shares} + \text{Diluted Shares}}$$



©2021

FPAC EXAM PREP PLATFORM

Return on Equity (Dupont Analysis)

PART 1, CHAPTER 4, TOPIC 4

FORMULA

$$= \frac{\text{Net Income}}{\text{Revenue}} * \frac{\text{Revenue}}{\text{Avg. Total Assets}} * \frac{\text{Avg. Total Assets}}{\text{Avg. Equity}}$$



©2021

FPAC EXAM PREP PLATFORM

EBIT Margin

PART 1, CHAPTER 4, TOPIC 4

FORMULA

$$= \frac{\text{EBIT}}{\text{Revenue}}$$



©2021

FPAC EXAM PREP PLATFORM

EBITDA Margin

PART 1, CHAPTER 4, TOPIC 4

FORMULA

$$= \frac{\text{EBITDA}}{\text{Revenue}}$$



©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

Economic Value Added (EVA)

FORMULA

$$= \text{NOPAT} - (\text{Average Capital Employed} * \text{WACC})$$

PART 1, CHAPTER 4, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

Free Cash Flow (FCF)

FORMULA

$$= \text{Cash Flow from Operating Activities} - \text{Capital Expenditures}$$

PART 1, CHAPTER 4, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

Free Cash Flow to Equity (FCFE)

FORMULA

$$= \text{Net Income} + \text{Depreciation} - \text{Capital Expenditures} - \text{Change in net Working Capital} + \text{Change in Total Debt}$$

PART 1, CHAPTER 4, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

Free Cash Flow to the Firm (FCFF)

FORMULA

$$= \text{Cash Flow from Operating Activities} + (\text{Interest Expense} * (1 - \text{Tax Rate})) - \text{Capital Expenditures}$$

PART 1, CHAPTER 4, TOPIC 4



©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

Gross Margin

FORMULA

$$= \frac{\text{Revenue} - \text{Cost of Goods Sold}}{\text{Revenue}}$$

PART 1, CHAPTER 4, TOPIC 4

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Pretax Profit Margin

FORMULA

$$= \frac{\text{Income Before Tax}}{\text{Revenue}}$$

PART 1, CHAPTER 4, TOPIC 4

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Profit Margin (Operating Margin)

FORMULA

$$= \frac{\text{Net Income}}{\text{Revenue}} \text{ or } \frac{\text{Revenue} - \text{Total Costs}}{\text{Revenue}}$$

PART 1, CHAPTER 4, TOPIC 4

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Return on Average Assets (ROA)

FORMULA

$$= \frac{\text{Net Income}}{\text{Average Total Assets}}$$

PART 1, CHAPTER 4, TOPIC 4

ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Return on Average Equity (ROE)

FORMULA

$$= \frac{\text{Net Income}}{\text{Average Shareholders' Equity}}$$

PART 1, CHAPTER 4, TOPIC 4



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Return on Capital Employed (ROCE)

FORMULA

$$= \frac{\text{EBIT}}{\text{Total Assets} - \text{Current Liabilities}}$$

PART 1, CHAPTER 4, TOPIC 4



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Dividend Yield

FORMULA

$$= \frac{\text{Annual Dividends per Share}}{\text{Stock Price per Share}}$$

PART 1, CHAPTER 4, TOPIC 5



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Earnings Yield

FORMULA

$$= \frac{\text{Earnings per Share}}{\text{Stock Price per Share}}$$

PART 1, CHAPTER 4, TOPIC 5



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

EBITDA Multiple (Total Capital to EBITDA)

PART 1, CHAPTER 4, TOPIC 5

FORMULA

$$= \frac{\text{Enterprise Value}}{\text{EBITDA}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Price to Book (Market to Book)

PART 1, CHAPTER 4, TOPIC 5

FORMULA

$$= \frac{\text{Stock Price per Share}}{\text{Book Value per Share}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Price to Cash Flow

PART 1, CHAPTER 4, TOPIC 5

FORMULA

$$= \frac{\text{Stock Price per Share}}{\text{Operating Cash Flow per Share}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC EXAM PREP PLATFORM

Price to Earnings

PART 1, CHAPTER 4, TOPIC 5

FORMULA

$$= \frac{\text{Stock Price per Share}}{\text{Earnings per Share}}$$



ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

©2021

FPAC Exam Prep Platform Formula Flashcards

FOLD



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Price to EBITDA

FORMULA

$$= \frac{\text{Stock Price per Share}}{\text{EBITDA per Share}}$$

PART 1, CHAPTER 4, TOPIC 5



©2021

FPAC EXAM PREP PLATFORM

Price to Sales

FORMULA

$$= \frac{\text{Stock Price per Share}}{\text{Total Sales per Share}}$$

PART 1, CHAPTER 4, TOPIC 5



©2021

FPAC EXAM PREP PLATFORM

Contribution Margin

FORMULA

$$= \text{Total Revenues} - \text{Total Variable Costs}$$

PART 1, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

Contribution Margin per Unit

FORMULA

$$= \text{Selling Price} - \text{Variable Costs per Unit}$$

PART 1, CHAPTER 5, TOPIC 1



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Contribution Margin Ratio

FORMULA

$$= \frac{\text{Contribution Margin per Unit}}{\text{Selling Price}}$$

PART 1, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

Unit Cost

FORMULA

$$= \frac{\text{Total Fixed Cost} + \text{Total Variable Cost}}{\text{Quantity}}$$

PART 1, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

Operating Income

FORMULA

$$= [(\text{Price} * \text{Quantity Sold}) - (\text{Variable Cost per Unit} * \text{Quantity Sold})] - \text{Fixed Costs}$$

PART 1, CHAPTER 5, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

Break-Even Revenues

FORMULA

$$= \frac{\text{Fixed Costs}}{\text{Contribution Margin Ratio}}$$

PART 1, CHAPTER 5, TOPIC 2



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

FORMULA

Break-Even Units

$$= \frac{\text{Fixed Costs}}{\text{Contribution Margin per Unit}}$$

PART 1, CHAPTER 5, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Units to Sell for Target Operating Income

$$= \frac{(\text{Fixed Costs} + \text{Target Operating Income})}{(\text{Selling Price per Unit} - \text{Variable Cost per Unit})}$$

PART 1, CHAPTER 5, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Consumer Price Index (CPI)

$$= \frac{\text{Updated Cost}}{\text{Base Cost}} * 100$$

PART 1, CHAPTER 6, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Elasticity of Demand

$$= \frac{\text{Percent Change in Quantity Demanded of Product}}{\text{Percent Change in Price of Product}}$$

PART 1, CHAPTER 7, TOPIC 2



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Price Elasticity Coefficient

PART 1, CHAPTER 7, TOPIC 2

FORMULA

$$= \frac{\frac{|\text{Change in Quantity}|}{(\text{Sum of Quantities} \div 2)}}{\frac{|\text{Change in Price}|}{(\text{Sum of Prices} \div 2)}}$$



©2021

FPAC EXAM PREP PLATFORM

Annual Growth Rate

PART 1, CHAPTER 12, TOPIC 2

FORMULA

$$= \text{Prior Year} * (1 + \text{Growth Rate})$$



©2021

FPAC EXAM PREP PLATFORM

Slope Intercept Equation

PART 2, CHAPTER 1, TOPIC 1

FORMULA

$$y = mx + b$$

Where:

b = Y-intercept

m = the slope of the line

x = the known variable



©2021

FPAC EXAM PREP PLATFORM

Exponential Smoothing

PART 2, CHAPTER 1, TOPIC 3

FORMULA

$$Y'_{t+1} = \alpha Y_t + (1 - \alpha) Y'_t$$

Where:

Y_t = the most recent actual data

Y'_t = the most recent smoothed forecast value

α = the smoothing constant



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Least Squares Formula for Slope

PART 2, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{n\sum tY - (\sum Y)(\sum t)}{n\sum t^2 - (\sum t)^2}$$

Where:

Y = the independent value

t = the time period

n = the number of data periods



©2021

FPAC EXAM PREP PLATFORM

Least Squares Formula for Y-intercept

PART 2, CHAPTER 1, TOPIC 3

FORMULA

$$= \frac{\sum t}{n} - b \left(\frac{\sum t}{n} \right)$$

Where:

Y = the independent value

t = the time period

n = the number of data periods

b = slope



©2021

FPAC EXAM PREP PLATFORM

Average Seasonal Index

PART 2, CHAPTER 1, TOPIC 4

$$= \frac{\text{Sum of Single Year Indices}}{\text{Number of Years}}$$



©2021

FPAC EXAM PREP PLATFORM

De-seasonalized Data

PART 2, CHAPTER 1, TOPIC 4

$$= \frac{\text{Raw Data Value}}{\text{Month's Seasonal Index}}$$



©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

FORMULA

Single Year Monthly Index

$$= \frac{\text{Month Data}}{\text{Year Average}}$$

PART 2, CHAPTER 1, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Re-seasonalized Data

$$= \text{Month's Average Seasonal Index} * \text{Month's Deseasonalized Forecast}$$

PART 2, CHAPTER 1, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Discounted Payback Period

$$= \frac{\text{Original Investment}}{\text{Discounted Annual Cash Flow}}$$

PART 2, CHAPTER 3, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Payback Period

$$= \frac{\text{Original Investment}}{\text{Annual Cash Flow}}$$

PART 2, CHAPTER 3, TOPIC 3



©2021



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

Profitability Index (PI)

FORMULA

$$= \frac{\text{Present Value of Future Cash Flows}}{\text{Initial Cost}}$$

PART 2, CHAPTER 3, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

Capital Asset Pricing Model (CAPM)

FORMULA

$$= r_{RF} + (r_M - r_{RF})\beta_i$$

Where:

r_{RF} = the expected rate of return on a risk-free asset

r_M = expected rate of return on a portfolio consisting of all stocks

β_i = the beta value for stock i

PART 2, CHAPTER 4, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

Probability-Adjusted NPV

FORMULA

$$= \frac{P_1 C_1}{(1 + R)^1} + \frac{P_2 C_2}{(1 + R)^2} + \frac{P_3 C_3}{(1 + R)^3} + \dots + \frac{P_n C_n}{(1 + R)^n} - \text{Cost}$$

Where:

C = Net cash flow in a given year n

P = Probability

i = Risk Adjusted Cost of Capital

Cost = Cash outflow

PART 2, CHAPTER 4, TOPIC 2



©2021

FPAC EXAM PREP PLATFORM

Value at Risk (VAR)

FORMULA

$$95\% \text{ Confidence Level} = (\text{Mean Return} - 1.65 * \text{Standard Deviation}) * \text{Portfolio Value}$$

PART 2, CHAPTER 4, TOPIC 2



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

FORMULA

Flexible Budget Variance

$$= \text{Actual Results} - \text{Flexible Budget}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Sales Volume Variance

$$= \text{Flexible Budget} - \text{Static Budget}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Sales-Mix Variance

$$= \text{Actual Units Sold (All Products)} * (\text{Actual Sales Mix \%} - \text{Budgeted Sales Mix \%}) * \text{Budgeted Contribution Margin/Unit}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Sales-Quantity Variance

$$= (\text{Actual Sales Volume for All Units} - \text{Budgeted Sales Volume for All Units}) * \text{Budgeted Sales Mix \%} * \text{Budgeted Contribution Margin/Unit}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.

**FPAC EXAM PREP PLATFORM**

FORMULA

Selling Price Variance

$$= (\text{Actual Selling Price} - \text{Budgeted Selling Price}) * \text{Actual Units Sold}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Efficiency Variance

$$= (\text{Actual Quantity of Input} - \text{Flexible Budgeted Quantity of Input}) * \text{Budgeted Price of Input}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Price Variance

$$= (\text{Actual Price of Input} - \text{Budgeted Price of Input}) * \text{Actual Quantity of Input}$$

PART 2, CHAPTER 5, TOPIC 1



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Variable Overhead (VOH) Efficiency Variance

$$= (\text{Actual VOH Cost Driver Quantity} - \text{Flexible Budgeted VOH Cost Driver Quantity}) * \text{Budgeted VOH per Unit of Cost Driver}$$

PART 2, CHAPTER 5, TOPIC 1



©2021



- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

FORMULA

Variable Overhead (VOH) Spending Variance

$$= (\text{Actual VOH per Cost Driver Unit} - \text{Budgeted VOH per Cost Driver Unit}) * \text{Actual Cost Driver Quantity}$$

PART 2, CHAPTER 7, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Z-Score

$$= \frac{x - \mu}{\sigma} \text{ or } \frac{\text{Sample Value Being Evaluated} - \text{Population Mean}}{\text{Standard Deviation}}$$

PART 2, CHAPTER 7, TOPIC 3



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Z-Statistic

$$= \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}} \text{ or } \frac{\text{Sample Mean} - \text{Population Mean}}{\frac{\text{Standard Deviation}}{\sqrt{\text{number of samples}}}}$$

PART 2, CHAPTER 7, TOPIC 4



©2021

FPAC EXAM PREP PLATFORM

FORMULA

Cumulative Forecast Error

$$= \text{Cumulative Actuals} - \text{Cumulative Projection}$$

PART 2, CHAPTER 7, TOPIC 4



©2021

FOLD
↓

- 1) Print and fold the sheet in half on the vertical dotted line.
- 2) Cut out your flashcards on the horizontal dashed lines.
- 3) Tape or staple the open edges of your flashcards.



FPAC EXAM PREP PLATFORM

FORMULA

Equivalent Annual Annuity (EAA)

$$NPV = EAA \left[\frac{1 - \frac{1}{(1+r)^t}}{r} \right]$$

PART 2, CHAPTER 8, TOPIC 5



©2021