

1. A deposit of \$280 earns the following interest rates:

- a. 10 percent in the first year.
- b. 8 percent in the second year.
- c. 7 percent in the third year.

What would be the third year future value? (Round your answer to 2 decimal places.)

2. If you start making \$225 monthly contributions today and continue them for four years, what is their future value if the compounding rate is 12.00 percent APR? (Do not round intermediate calculations. Round your final answer to 2 decimal places.)

Future value annuity

\$

What is the present value of this annuity? (Do not round intermediate calculations. Round your final answer to 2 decimal places.)

Present value annuity

\$

3. Last year, K9 WebbWear, Inc., reported an ROE of 20 percent. The firm's debt ratio was 50 percent, sales were \$20 million, and the capital intensity was 1.25 times. This year, K9 WebbWear plans to increase its debt ratio to 60 percent. The change will not affect sales or total assets, however, it will reduce the firm's profit margin to 12 percent.

Calculate the net income and profit margin for K9 WebbWear last year. (Enter your answer in millions of dollars rounded to 2 decimal places. Round your percentage answer to 2 decimal places.)

Net income (Last year)

\$ million

Profit margin (Last year)

%

By how much will the change in K9 WebbWear's debt ratio affect its ROE?

4. You are considering a stock investment in one of two firms (NoEquity, Inc., and NoDebt, Inc.), both of which operate in the same industry and have identical operating income of \$12.5 million. NoEquity, Inc., finances its \$70 million in assets with \$69 million in debt (on which it pays 10 percent interest annually) and \$1 million in equity. NoDebt, Inc., finances its \$70 million in assets with no debt and \$70 million in equity. Both firms pay a tax rate of 30 percent on their taxable income.

Calculate the net income and return on assets for the two firms. (Enter your dollar answers in millions of dollars. Round all answers to 2 decimal places.)

NoEquity

NoDebt

Net income

\$ m

\$ m

Return on assets

%

%

5. *The Wall Street Journal* reports that the rate on 3-year Treasury securities is 1.80 percent and the rate on 5-year Treasury securities is 2.75 percent. According to the unbiased expectations theory, what does the market expect the 2-year Treasury rate to be three years from today, $E_{(3)}r_2$? (Do not round intermediate calculations and round your answer to 2 decimal places.)

Treasury rate %

6. A 4.80 percent coupon bond with 16 years left to maturity is offered for sale at \$964.11. What yield to maturity is the bond offering? (Assume interest payments are semiannual.) **(Round your answer to 2 decimal places.)**

Yield to maturity _____ %

7. Consider the following annual returns of Molson Coors and International Paper:

Molson Coors International Paper

Year 1	18.8%	5.0%
Year 2	– 8.9	–18.0
Year 3	39.0	– 0.7
Year 4	– 7.9	27.1
Year 5	16.7	–11.6

Compute each stock's average return, standard deviation, and coefficient of variation. **(Round your answers to 2 decimal places.)**

	Molson Coors	International Paper
Average return	<input type="text"/>	<input type="text"/> %
Standard deviation	<input type="text"/>	<input type="text"/> %
Coefficient of variation	<input type="text"/>	<input type="text"/>

Which stock appears better?

- a. International Paper
- b. Molson Coors

8. A fast-growing firm recently paid a dividend of \$0.65 per share. The dividend is expected to increase at a 20 percent rate for the next four years. Afterwards, a more stable 10 percent growth rate can be assumed.

If an 11.5 percent discount rate is appropriate for this stock, what is its value? **(Do not round intermediate calculations. Round your final answer to 2 decimal places.)**

9. A manager believes his firm will earn a 18.60 percent return next year. His firm has a beta of 1.25, the expected return on the market is 15.60 percent, and the risk-free rate is 7.60 percent.

Compute the return the firm should earn given its level of risk. **(Round your answer to 2 decimal places.)**

Required return %

Determine whether the manager is saying the firm is undervalued or overvalued.

- a. Undervalued
- b. Overvalued

10. Compute the NPV for Project M if the appropriate cost of capital is 7 percent. (Negative amount should be indicated by a minus sign. Do not round intermediate calculations. Round your final answer to 2 decimal places.)

Project M						
Time:	0	1	2	3	4	5
Cash flow	-\$3,400	\$730	\$860	\$900	\$980	\$480
NPV \$						

Should the project be accepted or rejected?

- a. Rejected
- b. Accepted

11. Suppose that LilyMac Photography has annual sales of \$240,000, cost of goods sold of \$175,000, average inventories of \$5,500, average accounts receivable of \$27,000, and an average accounts payable balance of \$18,200.

Assuming that all of LilyMac's sales are on credit, what will be the firm's cash cycle? (Use 365 days a year. Do not round intermediate calculations. Round your final answer to 2 decimal places.)

Cash cycle _____ days

12. Suppose that TapDance, Inc.'s, capital structure features 75 percent equity, 25 percent debt, and that its before-tax cost of debt is 7 percent, while its cost of equity is 12 percent. Assume the appropriate weighted average tax rate is 34 percent.

What will be TapDance's WACC? (Round your answer to 2 decimal places.)

WACC %