

***Principles of Managerial Finance, 15e (Zutter)***  
**Chapter 3 Financial Statements and Ratio Analysis**

**3.1 The stockholder's report**

1) The Financial Accounting Standards Board (FASB) is the federal regulatory body that governs the sale and listing of securities.

Answer: FALSE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

2) GAAP is the accounting profession's rule-setting body.

Answer: FALSE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

3) Generally accepted accounting principles are authorized by the Financial Accounting Standards Board (FASB).

Answer: TRUE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

4) The Sarbanes-Oxley Act of 2002 established the Public Company Accounting Oversight Board (PCAOB) which is a not-for-profit corporation that oversees auditors of public corporations.

Answer: TRUE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

5) The Sarbanes-Oxley Act of 2002 was passed to eliminate many of the disclosure and conflict-of-interest problems of corporations.

Answer: TRUE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

6) The Sarbanes-Oxley Act of 2002 established the Private Company Accounting Oversight Board (PCAOB) which is a for-profit corporation that oversees CEOs of public corporations.

Answer: FALSE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

7) Publicly owned corporations with more than \$5 million assets are required by the Securities and Exchange Commission (SEC) to provide their stockholders with an annual stockholders' report.

Answer: TRUE

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

8) The letter to stockholders is the primary communication from management in an annual report.

Answer: TRUE

Diff: 1

Topic: The Letter to Stockholders

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

9) Common stock dividends paid to stockholders is equal to the earnings available for common stockholders divided by the number of shares of common stock outstanding.

Answer: FALSE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

10) The income statement is a financial summary of a firm's operating results during a specified period while the balance sheet is a summary statement of a firm's financial position at a given point in time.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

11) The common stock entry in balance sheet is the par value of common stock.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

12) Paid-in capital in excess of par represents the proceeds in excess of par value received from the original sale of common stock.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

13) Earnings per share represents amount earned during the period on each outstanding share of common stock.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

14) Net fixed assets represent the difference between gross fixed assets and the amount of depreciation expense from the most recent year.

Answer: FALSE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

15) Earnings per share results from dividing earnings available for common stockholders by the number of shares of common stock authorized.

Answer: FALSE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

16) Retained earnings represent the cumulative total of all earnings, net of dividends, that have been retained and reinvested in the firm since its inception.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

17) The balance sheet is a statement which balances a firm's assets (what it owns) against its debt (what it owes) and its equity (what is provided by owners).

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

18) The amount paid in by the original purchasers of common stock is shown by two entries in the firm's balance sheet—common stock and paid-in capital in excess of par on common stock.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

19) The original price per share received by the firm on a single issue of common stock is equal to the sum of the common stock and paid-in capital in excess of par accounts divided by the number of shares outstanding.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

20) The statement of cash flows reconciles the net income earned during a given year, and any cash dividends paid, with the change in retained earnings between the start and end of that year.

Answer: FALSE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

21) The statement of cash flows provides insight into a firm's operating, investment, and financing cash flows and reconciles them with changes in its cash and marketable securities during the period of concern.

Answer: TRUE

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

22) A U.S. parent company's foreign equity accounts are translated into dollars using the historical rate or average rate based on the company's discretion.

Answer: FALSE

Diff: 1

Topic: Consolidating International Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-30

AACSB: Analytical Thinking

23) A U.S. parent company's foreign retained earnings are not adjusted for currency movements to reflect each year's operating profits or losses.

Answer: FALSE

Diff: 1

Topic: Consolidating International Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-30

AACSB: Analytical Thinking

24) The Financial Accounting Standards Board (FASB) Standard No. 52 mandates that U.S.-based companies translate their foreign-currency-denominated assets and liabilities into dollars using the current rate (translation) method.

Answer: TRUE

Diff: 1

Topic: Consolidating International Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

25) A firm's annual stockholders' report \_\_\_\_\_.

A) is only accessible to the shareholders of the firm

B) summarizes and documents the firm's financial activities during the past year

C) documents the list of all investors who bought the firm's shares during the past year

D) summarizes and documents the firm's financial plan and budgets during the past year

Answer: B

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

26) The rule-setting body, which authorizes generally accepted accounting principles is the \_\_\_\_\_.

A) IFRS

B) FASB

C) SEC

D) Federal Reserve System

Answer: B

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

27) Accounting practices and procedures used to prepare financial statements are called \_\_\_\_\_.

- A) SEC
- B) IFRS
- C) GAAP
- D) IRB

Answer: C

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

28) The federal regulatory body governing the sale and listing of securities is called the \_\_\_\_\_.

- A) IRS
- B) FASB
- C) GAAP
- D) SEC

Answer: D

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

29) The stockholders' annual report must include \_\_\_\_\_.

- A) common-size financial statements
- B) an income statement
- C) an advance tax statement
- D) the margin of safety report

Answer: B

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

30) The 2002 Sarbanes-Oxley Act was designed to \_\_\_\_\_.

- A) limit the compensation that could be paid to corporate CEOs
- B) eliminate the many disclosure and conflict-of-interest problems of corporations
- C) provide uniform international accounting standards
- D) provide the guidelines to minimize the tax

Answer: B

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

31) The 2002 law that established the Public Company Accounting Oversight Board (PCAOB) was called \_\_\_\_\_.

- A) the McCain-Feingold Act
- B) the Harkins-Oxley Act
- C) the Sarbanes-Harkins Act
- D) the Sarbanes-Oxley Act

Answer: D

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

32) The Public Company Accounting Oversight Board (PCAOB) \_\_\_\_\_.

- A) is a not-for-profit corporation that oversees auditors of public corporations
- B) is a not-for-profit corporation that oversees managers of public corporations
- C) is a for-profit corporation that oversees auditors of public corporations
- D) is a for-profit corporation that oversees managers of public corporations

Answer: A

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

33) The stockholder's report includes \_\_\_\_\_.

- A) an estimated interest cost report
- B) an estimated dividend report
- C) a break-even sales report
- D) a statement of retained earnings

Answer: D

Diff: 1

Topic: The Stockholders' Report

Learning Obj.: LG 1

Learning Outcome: F-01

AACSB: Analytical Thinking

34) Total assets less net fixed assets equals \_\_\_\_\_.

- A) gross assets
- B) current assets
- C) depreciation
- D) liabilities and equity

Answer: B

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

35) A(n) \_\_\_\_\_ provides a financial summary of a firm's operating results during a specified period.

- A) income statement
- B) balance sheet
- C) statement of cash flows
- D) statement of retained earnings

Answer: A

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

36) Gross profit is \_\_\_\_\_.

- A) operating profits minus depreciation
- B) operating profits minus cost of goods sold
- C) sales revenue minus operating expenses
- D) sales revenue minus cost of goods sold

Answer: D

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

37) Operating profit is \_\_\_\_\_.

- A) gross profit minus operating expenses
- B) sales revenue minus cost of goods sold
- C) earnings before depreciation and taxes
- D) sales revenue minus depreciation expense

Answer: A

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

38) Net profit after taxes is \_\_\_\_\_.

- A) gross profits minus operating expenses
- B) sales revenue minus cost of goods sold
- C) EBITDA minus interest
- D) EBIT minus interest and taxes

Answer: D

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking



39) Operating profit is known as \_\_\_\_\_.

- A) earnings after interest and taxes
- B) earnings before interest and taxes
- C) earnings before depreciation and taxes
- D) earnings after tax

Answer: B

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

40) Earnings available for common stockholders is calculated as net profits \_\_\_\_\_.

- A) before taxes minus preferred dividends
- B) after taxes minus preferred dividends
- C) after taxes minus common dividends
- D) before taxes minus common dividends

Answer: B

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

41) Which of the following is a current liability?

- A) accounts receivable
- B) cash
- C) notes payable
- D) inventory

Answer: C

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

42) Which of the following represents a current asset?

- A) automobiles
- B) buildings
- C) marketable securities
- D) equipment

Answer: C

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

43) Which of the following is a fixed asset?

- A) land
- B) accounts payable
- C) accruals
- D) notes payable

Answer: A

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

44) The net value of fixed assets is also called its \_\_\_\_\_.

- A) market value
- B) par value
- C) book value
- D) intrinsic value

Answer: C

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

45) Retained earnings on the balance sheet represents the \_\_\_\_\_.

- A) net profit after taxes
- B) amount of proceeds in excess of the par value received from the original sale of common stock
- C) net profit after taxes minus preferred dividends
- D) cumulative total of all earnings reinvested in the firm

Answer: D

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

46) The \_\_\_\_\_ represents a summary statement of a firm's financial position at a given point in time.

- A) income statement
- B) balance sheet
- C) statement of cash flows
- D) statement of retained earnings

Answer: B

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

47) The statement of cash flows \_\_\_\_\_.

- A) shows the financial position of a firm at a given point of time.
- B) summarizes all the purchase and sale of fixed assets and raw materials
- C) provides insight into a firm's operating, investment, and financing cash flows
- D) classifies a firm's cash flows as operating, investing, financing, and other activities

Answer: C

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

48) When preparing the retained earnings statement, \_\_\_\_\_ is(are) subtracted in order to derive at the ending balance of retained earnings.

- A) net profits after taxes
- B) interest expense
- C) depreciation
- D) dividends

Answer: D

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

49) A firm has the following accounts and financial data for 2019:

Sales revenue	\$3,060	Cost of goods sold	\$1,800
Accounts receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total operating expenses	600	Number of shares of common	1,000
Accounts payable	240	stocks outstanding	

The firm's earnings available to common shareholders for 2019 is \_\_\_\_\_.

- A) -\$224.25
- B) \$195.40
- C) \$302.40
- D) \$516.60

Answer: C

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

50) A firm has the following accounts and financial data for 2019:

Sales revenue	\$3,060	Cost of goods sold	\$1,800
Accounts receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total operating expenses	600	Number of common shares	1,000
Accounts payable	240	outstanding	

The firm's earnings per share for 2019 is \_\_\_\_\_.

A) \$0.5335

B) \$0.5125

C) \$0.3204

D) \$0.3024

Answer: D

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

51) A firm had the following accounts and financial data for 2019:

Sales revenue	\$3,060	Cost of goods sold	\$1,800
Accounts receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total operating expenses	600	Number of common shares	1,000
Accounts payable	240	outstanding	

The firm's net profit after taxes for 2019 is \_\_\_\_\_.

A) -\$206.40

B) \$213.80

C) \$320.40

D) \$206.25

Answer: C

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

52) On the balance sheet, net fixed assets represent \_\_\_\_\_.

- A) gross fixed assets at cost minus depreciation expense
- B) gross fixed assets at market value minus depreciation expense
- C) gross fixed assets at cost minus accumulated depreciation
- D) gross fixed assets at market value minus accumulated depreciation

Answer: C

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

53) Paid-in capital in excess of par represents the amount of proceeds \_\_\_\_\_.

- A) in deficit of the par value from the original sale of common stock
- B) in excess of the par value from the original sale of common stock
- C) in excess of the par value from the current value of common stock
- D) in excess of the par value from the intrinsic value of common stock

Answer: B

Diff: 1

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

54) Firm ABC had operating profits of \$100,000, taxes of \$17,000, interest expense of \$34,000, and preferred dividends of \$5,000. What was the firm's net profit after taxes?

- A) \$66,000
- B) \$49,000
- C) \$44,000
- D) \$83,000

Answer: B

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

55) Candy Corporation had pretax profits of \$1.2 million, an average tax rate of 34 percent, and it paid preferred stock dividends of \$50,000. There were 100,000 shares outstanding and no interest expense. What was Candy Corporation's earnings per share?

- A) \$3.91
- B) \$4.52
- C) \$7.42
- D) \$7.59

Answer: C

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

56) A firm's year-end retained earnings balances are \$670,000 and \$560,000, for 2018 and 2019 respectively. The firm paid \$10,000 in dividends in 2019. The firm's net profit after taxes in 2019 was \_\_\_\_\_.

- A) -\$100,000
- B) -\$110,000
- C) \$100,000
- D) \$110,000

Answer: A

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

57) A firm's year-end retained earnings balances are \$320,000 and \$400,000, for 2018 and 2019 respectively. The firm reported net profits after taxes of \$100,000 in 2019. The firm's dividend payment for 2019 is \_\_\_\_\_.

- A) \$0
- B) \$20,000
- C) \$80,000
- D) \$100,000

Answer: B

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

58) A firm has a year-end retained earnings balance of \$220,000 for 2018. The firm reported net profits after taxes of \$50,000 and paid dividends of \$30,000 in 2019. The firm's retained earnings balance at 2019 year end is \_\_\_\_\_.

- A) \$240,000
- B) \$250,000
- C) \$270,000
- D) \$300,000

Answer: A

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

59) A firm's year-end retained earnings balance are \$670,000 and \$560,000 for 2018 and 2019, respectively. The firm reported net profits after taxes of \$100,000 in 2019. The firm paid dividends of \_\_\_\_\_ in 2019.

- A) \$10,000
- B) \$100,000
- C) \$110,000
- D) \$210,000

Answer: D

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

60) Information on the accounting policies, procedures, calculations, and transactions underlying entries in the financial statements can be found on \_\_\_\_\_.

- A) the notes to the financial statements
- B) the statement of retained earnings
- C) the proxy statement
- D) the management discussion and analysis (MD&A)

Answer: A

Diff: 1

Topic: Notes to the Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

61) FASB Standard No. 52 mandates that U.S.-based companies must translate their foreign-currency-denominated assets and liabilities into dollars using the \_\_\_\_\_.

- A) historical rate
- B) current rate
- C) average rate
- D) rate prescribed by the SEC

Answer: B

Diff: 1

Topic: Consolidating International Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-30

AACSB: Analytical Thinking

62) At the end of 2019, Long Life Light Bulb Corporation announced a gross profit of \$1 million. The company has also established that over the course of this year that it has incurred \$345,000 in operating expenses and \$125,000 in interest expenses. The company is subject to a 21% tax rate and has declared \$57,000 of total preferred stock dividends.

(a) Calculate the earnings available for common stockholders?

(b) Compute the increased retained earnings for 2019 if the company were to declare a \$4.25 common stock dividend. The company has 15,000 shares of common stock outstanding.

Answer:

(a) Gross profits	\$1,000,000
Less: Operating expenses	<u>(345,000)</u>
Operating profits	\$ 655,000
Less: Interest expense	<u>(125,000)</u>
Net profits before taxes	\$ 530,000
Less: Taxes (21%)	<u>(111,300)</u>
Net profits after taxes	\$ 418,700
Less: Preferred stock dividends	<u>(57,000)</u>
Earnings available for common stock	\$ 361,700
(b) Earnings available for common stock	\$ 361,700
Dividend = (4.25)(15,000 shares)	<u>(63,750)</u>
Increased Retained earnings	\$ 297,950

Diff: 3

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking



63) Reliable Auto Parts has 5,000 shares of common stock outstanding. The company also has the following amounts in revenue and expense accounts.

Sales revenue	\$85,000
General and administrative expense	7,500
Interest expense	3,500
Depreciation expense	5,000
Preferred stock dividends	500
Selling expense	4,000
Cost of goods sold	50,000

Calculate

- gross profits.
- operating profits.
- net profits before taxes.
- net profits after taxes (assume a 21 percent tax rate).
- earnings available to common stockholders.
- earnings per share.

Answer:

(a) Sales revenue		\$85,000
Less: Cost of goods sold		<u>50,000</u>
Gross profits		\$35,000
(b) Gross profits		\$35,000
Less: Operating expenses		
Selling expense	4,000	
General & administrative expense	7,500	
Depreciation expense	<u>5,000</u>	<u>\$16,500</u>
Operating profits		\$18,500
(c) Operating profits		\$18,500
Less: Interest expense		<u>3,500</u>
Net profits before taxes		\$15,000
(d) Net profits before taxes		\$15,000
Less: Taxes (40%)		<u>-3,150</u>
Net profits after taxes		\$ 11,850
(e) Net profits after taxes		\$11,850
Less: Preferred dividends		<u>-500</u>
Earnings available for C.S.		\$11,350
(f) Earnings available for C.S.		\$11,350
		= \$2.27/share
No. of common shares outstanding		

Diff: 3

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

64) Colonial Furniture's net profits before taxes for 2019 totaled \$354,000. The company's total retained earnings were \$338,000 for 2018 year-end and \$389,000 for 2019 year-end. Colonial is subject to a 21 percent tax rate. What was the cash dividend declared by Colonial Furniture in 2019?

Answer:

Net profits before taxes	\$354,000
Less: Taxes (21%)	<u>74,340</u>
Net profits after taxes	\$279,660
Retained earnings (2018)	\$338,000
Net profits after taxes (2019)	279,660
Dividends	X
-----	-----
Retained earnings (2019)	\$389,000
Dividends = \$228,660	

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

65) On December 31, 2018, Bradshaw Corporation had \$485,000 as an ending balance for its retained earnings account. During 2019, the corporation declared a \$3.50/share dividend to its stockholders. The company has 35,000 shares of common stock outstanding. When the books were closed for 2019 year end, the corporation had a final retained earnings balance of \$565,000. What was the net profit earned by Bradshaw Corporation during 2019?

Answer:

Dividends = (\$3.50/share)(35,000 shares)	= \$122,500
Retained earnings (2019)	\$485,000
Net profits after taxes (2019)	X
Dividends	122,500
-----	-----
Retained earnings (2019)	\$565,000
Net profits after taxes = \$202,500	

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

66) Ag Silver Mining, Inc. has \$500,000 of earnings before interest and taxes at the year end. Interest expenses for the year were \$10,000. The firm expects to distribute \$100,000 in dividends. Calculate the earnings after taxes for the firm assuming a 21 percent tax on ordinary income.

Answer:

Earnings before interest and taxes	\$500,000
Less: Interest expense	<u>10,000</u>
Earnings before taxes	\$490,000
Less: Taxes (21%)	<u>102,900</u>
Earnings after taxes	<u>\$387,100</u>

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

67) Sunshine Corporation had a retained earnings balance of \$850,000 at the beginning of 2019. By the end of 2019, the company's retained earnings balance stood at \$950,000. During 2019, the company earned \$245,000 as net profits after paying its taxes. The company was then able to pay its preferred stockholders a sum of \$45,000. Compute the common stock dividend per share in 2019 assuming 10,000 shares of common stock outstanding.

Answer:

Retained earnings (2018)	\$850,000
Net profits after taxes (2019)	245,000
Preferred stock dividend	(45,000)
Common stock dividend	X
-----	-----
Retained earnings (2019)	\$950,000

Total common stock dividend = \$100,000

Common stock dividend per share =  $100,000 / 10,000 = \$10$

Diff: 2

Topic: The Four Key Financial Statements

Learning Obj.: LG 1

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.2 Using financial ratios

1) The basic inputs to an effective financial analysis are the firm's income statement and the balance sheet.

Answer: TRUE

Diff: 1

Topic: Using Financial Ratios

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

2) Both current and prospective shareholders are interested in the firm's current and future level of risk and return, which directly affect share price.

Answer: TRUE

Diff: 1

Topic: Interested Parties

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

3) Creditors are primarily interested in short-term liquidity of the company and its ability to make interest and principal payments.

Answer: TRUE

Diff: 1

Topic: Interested Parties

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

4) Time-series analysis is the evaluation of a firm's financial performance in comparison to other firm(s) at the same point in time.

Answer: FALSE

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

5) Cross-sectional analysis involves the comparison of different firms' financial ratios at the same point in time.

Answer: TRUE

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

6) Benchmarking is a type of cross-sectional analysis in which a firm's ratios are compared to a key competitor firm within the same industry, primarily to identify areas for improvement.

Answer: TRUE

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

7) Time-series analysis evaluates the performance of various firms at the same point in time using financial ratios.

Answer: FALSE

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

8) Ratios merely direct an analyst to potential areas of concern and it does not provide conclusive evidence as to the existence of a problem.

Answer: TRUE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

9) A single key ratio of a firm provides all the information required to judge the overall performance of the firm.

Answer: FALSE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

10) Due to inflationary effects, inventory costs and depreciation write-offs can differ from their replacement values, thereby distorting profits.

Answer: TRUE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

11) In ratio analysis, the financial statements being used for comparison should be dated at the same point in time during the year. If not, the effect of seasonality may produce erroneous conclusions and decisions.

Answer: TRUE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

12) The use of the unaudited financial statements for ratio analysis is preferable because it reflects the firm's true financial condition.

Answer: FALSE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

13) The use of differing accounting treatments—especially relative to inventory and depreciation—can distort the results of ratio analysis, regardless of whether cross-sectional or time-series analysis is used.

Answer: TRUE

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Reflective Thinking

14) Ratios provide a \_\_\_\_\_ measure of a company's performance and condition.

A) definitive

B) gross

C) relative

D) absolute

Answer: C

Diff: 1

Topic: Using Financial Ratios

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

15) Present and prospective shareholders are mainly concerned with a firm's \_\_\_\_\_.

A) risk and return

B) profitability

C) leverage

D) liquidity

Answer: A

Diff: 1

Topic: Interested Parties

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

16) \_\_\_\_\_ analysis involves the comparison of different firms' financial ratios at the same point in time.

- A) Time-series
- B) Cross-sectional
- C) Marginal
- D) Technical

Answer: B

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

17) \_\_\_\_\_ analysis involves comparison of current to past performance and the evaluation of developing trends.

- A) Time-series
- B) Cross-sectional
- C) Marginal
- D) Break-even

Answer: A

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

18) Which of the following is used to analyze a firm's financial performance over different years?

- A) time-series analysis
- B) break-even analysis
- C) gap analysis
- D) marginal analysis

Answer: A

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

19) Which of the following is true of benchmarking?

- A) It is an analysis in which a firm's ratio values are analyzed to project the fundamental values of the assets for upcoming years or business cycle.
- B) It is an analysis in which a firm's ratio values are compared with those of a key competitor or with a group of competitors that it wishes to emulate.
- C) It is an analysis in which a firm's financial performance over time is evaluated using financial ratio analysis.
- D) It is a financial statement analysis technique which is primarily used for forecasting future performance.

Answer: B

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

20) Cross-sectional ratio analysis is used to \_\_\_\_\_.

- A) correct expected problems in operations
- B) isolate the causes of problems
- C) provide conclusive evidence of the existence of a problem
- D) measure relative performance of a firm with its peers

Answer: D

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

21) Time-series analysis is often used to \_\_\_\_\_.

- A) assess developing trends
- B) correct errors of judgment
- C) evaluate the value of a firm or its assets
- D) standardize results

Answer: A

Diff: 1

Topic: Types of Ratio Comparisons

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking



22) Which of the following is a limitation of ratio analysis?

- A) Financial ratios cannot be used to assess a firm's profitability.
- B) Ratios that reveal large deviations from the norm merely indicate the possibility of a problem.
- C) It is difficult to access audited financial statements for ratio analysis.
- D) Ratio analysis assumes that inflation has no effect on a firm's business.

Answer: B

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

23) An analyst should be careful when conducting ratio analysis to ensure that \_\_\_\_\_.

- A) the overall performance of a firm is not judged on a single ratio
- B) the role of inflation is ignored
- C) ratios being compared should be calculated using financial statements dated at different points in time during the year
- D) different accounting procedures are used

Answer: A

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

24) Without adjustment, inflation may tend to cause \_\_\_\_\_ firms to appear more efficient and profitable than \_\_\_\_\_ firms.

- A) larger; smaller
- B) older; newer
- C) smaller; larger
- D) newer; older

Answer: B

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

25) Which of the following groups of ratios primarily measure risk?

- A) liquidity, activity, and profitability
- B) liquidity, profitability, and market
- C) liquidity, activity, and debt
- D) activity, debt, and profitability

Answer: C

Diff: 1

Topic: Categories of Financial Ratios

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

26) Discuss the limitations of ratio analysis and the cautions which must be taken when reviewing a cross-sectional and time-series analysis.

Answer: In summarizing a large number of ratios, all aspects of a firm's activities can be assessed. However, limitations of ratio analysis must be recognized. A comparison of current and past ratios may reveal mismanagement. But, the ratio does not give definitive cause to the problem. Additional investigation is necessary to confirm the possible problem. The analyst must be cautious of the following points: 1) a single ratio does not provide sufficient information to judge the overall performance of the firm, 2) the dates of the financial statements should be the same, 3) audited statements should be used, 4) similar accounting treatment of comparative data is essential, and 5) inflation and differing asset ages can distort ratio comparisons.

Diff: 1

Topic: Cautions About Using Ratio Analysis

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.3 Liquidity ratios

1) The liquidity of a business firm refers to its ability to pay its short-term obligations as they come due.

Answer: TRUE

Diff: 1

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

2) The two basic measures of liquidity are the debt-to-equity ratio and the asset turnover ratio.

Answer: FALSE

Diff: 1

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

3) The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they come due.

Answer: FALSE

Diff: 1

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

4) The current ratio provides a measure of a firm's ability to meet its long-term obligations.

Answer: FALSE

Diff: 1

Topic: Quick Ratio

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

5) The \_\_\_\_\_ of a business firm is measured by its ability to satisfy its short-term obligations as they come due.

- A) activity
- B) liquidity
- C) debt
- D) profitability

Answer: B

Diff: 1

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

6) The two basic measures of liquidity are \_\_\_\_\_.

- A) inventory turnover and current ratio
- B) current ratio and quick ratio
- C) gross profit margin and ROE
- D) current ratio and total asset turnover

Answer: B

Diff: 1

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

7) A firm has a current ratio of 1. To increase that ratio the firm might \_\_\_\_\_.

- A) develop a better inventory management system so the firm doesn't have to hold as many items in inventory at one time
- B) hold lower cash balances at the bank and increase holdings of interest-earning marketable securities
- C) take out a long-term bank loan and simultaneously offer customers better credit terms, allowing them to pay their bills more slowly
- D) issue bonds and use the proceeds to purchase new equipment

Answer: C

Diff: 2

Topic: Current Ratio

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

8) If the only information you are given about Ryan Corporation, a large public company in business for many years, is that it has a current ratio of 2.9, what could you infer from this?

- A) It can likely meet its short-term obligations without difficulty.
- B) You could determine that Ryan has too much liquidity because the average current ratio among firms in Ryan's industry is 2.0.
- C) Nothing, you would also need the current ratio's from the last few years of the S&P 500 Index.
- D) You could determine that Ryan is running a great risk that it will not be able to pay short-term liabilities when they come due.

Answer: A

Diff: 1

Topic: Current Ratio

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

9) Which of the following is true of the current ratio?

- A) The more predictable a firm's cash flows, the higher the acceptable current ratio.
- B) A higher current ratio indicates a higher return on equity.
- C) The more predictable a firm's current ratio, the higher the current liabilities.
- D) A higher current ratio indicates a greater degree of liquidity.

Answer: D

Diff: 2

Topic: Current Ratio

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

10) Which of the following is excluded when calculating the quick ratio?

- A) accounts receivable
- B) accounts payable
- C) cash
- D) inventory

Answer: D

Diff: 1

Topic: Quick Ratio

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

11) Clearly firms want to be able to pay their bills when they come due, so having liquidity is important. Can a firm have too much liquidity? Explain.

Answer: Liquid assets like cash generally do not earn a very high rate of return. If a firm holds too much cash (or other short-term assets), the low return on those assets will drag down the overall rate of return that the firm can provide investors, who may complain that by over investing in liquidity the firm is not maximizing shareholder wealth.

Diff: 2

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

12) In general, large retail chain stores (like Walmart and Target) tend to operate with lower current and quick ratios than do firms in the computer hardware industry. Why might this be so?

Answer: Liquidity represents a safety cushion against the ups and down of a business. The grocery business is much less risky than the computer hardware business because people have to buy groceries whether the economy is booming or in recession. Thus, the liquidity needs of a grocery store are more predictable, and they need a smaller safety cushion compared to a hardware manufacturer.

Diff: 2

Topic: Liquidity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

### 3.4 Activity ratios

1) \_\_\_\_\_ ratios are a measure of the speed with which various accounts are converted into sales or cash.

A) Activity

B) Liquidity

C) Debt

D) Profitability

Answer: A

Diff: 1

Topic: Activity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

2) Nico Corporation has cost of goods sold of \$300,000 and inventory of \$30,000, then the inventory turnover is \_\_\_\_\_ and the average age of inventory is \_\_\_\_\_.

A) 36.5; 10

B) 10; 36.5

C) 36.0; 10

D) 30; 36.0

Answer: B

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

3) The \_\_\_\_\_ measures the activity, or liquidity, of a firm's stock of goods.

- A) average collection period
- B) inventory turnover ratio
- C) average payment period
- D) total asset turnover ratio

Answer: B

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

4) A(n) \_\_\_\_\_ is useful in evaluating credit policies.

- A) average payment period
- B) current ratio
- C) average collection period
- D) inventory turnover ratio

Answer: C

Diff: 1

Topic: Average Collection Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

5) The \_\_\_\_\_ ratio may indicate poor collections procedures or a relaxed credit policy.

- A) average payment period
- B) inventory turnover
- C) average collection period
- D) quick

Answer: C

Diff: 1

Topic: Average Collection Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

6) ABC Corp. extends credit terms of 45 days to its customers. Its credit collection would likely be considered poor if its average collection period was \_\_\_\_\_.

- A) 30 days
- B) 36 days
- C) 44 days
- D) 57 days

Answer: D

Diff: 2

Topic: Average Collection Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

7) A firm with a total asset turnover lower than industry standard may have \_\_\_\_\_.

- A) excessive debt
- B) excessive interest costs
- C) insufficient sales
- D) insufficient fixed assets

Answer: C

Diff: 1

Topic: Total Asset Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

8) An unusually high \_\_\_\_\_ may indicate a firm is experiencing stockouts and lost sales.

- A) average payment period
- B) inventory turnover ratio
- C) average collection period
- D) quick

Answer: B

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

9) If you divide the inventory turnover ratio into 365, you get a measure of \_\_\_\_\_.

- A) financial efficiency
- B) the average age of the inventory
- C) sales turnover
- D) the average collection period

Answer: B

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

10) The \_\_\_\_\_ is useful in evaluating credit policies that a firm extends to its customers.

- A) average payment period
- B) current ratio
- C) average collection period
- D) inventory turnover ratio

Answer: C

Diff: 1

Topic: Average Collection Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

11) Which of the following ratios is difficult for the creditors of a firm to analyze from the published financial statements?

- A) debt equity ratio
- B) average payment period
- C) quick ratio
- D) total asset turnover

Answer: B

Diff: 1

Topic: Average Collection Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

12) Nico Corporation has annual purchases of \$300,000 and accounts payable of \$30,000, then average purchases per day are \_\_\_\_\_ and the average payment period is \_\_\_\_\_.

- A) 36.5; 821.9
- B) 82.2; 365
- C) 821.9; 36.5
- D) 833.3; 36.0

Answer: C

Diff: 2

Topic: Average Payment Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

13) The \_\_\_\_\_ ratio indicates the efficiency with which a firm uses its assets to generate sales.

- A) inventory turnover
- B) total asset turnover
- C) quick
- D) current asset turnover

Answer: B

Diff: 1

Topic: Total Asset Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking



14) A firm's total asset turnover increased from 0.75 to 0.90. Which of the following is true about the given data?

- A) The firm is generating more dollars of sales per dollar of assets now than it was before.
- B) The firm is generating fewer dollars of sales per dollar of assets now than it was before.
- C) By cutting back on assets, the firm runs the risk of creating problems like inventory stockouts and production delays.
- D) The firm's stock price will go up because it is using asset more efficiently.

Answer: A

Diff: 2

Topic: Total Asset Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

15) The average age of inventory is viewed as the average length of time inventory is held by a firm or as the average number of days' sales in inventory.

Answer: TRUE

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

16) The average age of inventory can be calculated as inventory divided by 365.

Answer: FALSE

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

17) The average age of inventory can be calculated as inventory turnover divided by 365.

Answer: FALSE

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

18) The average age of inventory can be calculated as 365 divided by inventory turnover.

Answer: TRUE

Diff: 1

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

19) The average payment period can be calculated as accounts payable divided by average sales per day.

Answer: FALSE

Diff: 1

Topic: Average Payment Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

20) The average payment period can be calculated as accounts payable divided by average purchases per day.

Answer: TRUE

Diff: 1

Topic: Average Payment Period

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

21) The total asset turnover ratio measures the liquidity of a firm's assets.

Answer: FALSE

Diff: 1

Topic: Total Asset Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

22) In a recent year Walmart reported total asset turnover of 2.44 whereas Target reported total asset turnover of 1.84. One interpretation of this is that Walmart managed its assets more efficiently than did Target. Can you think of another reason that might explain the difference in turnover ratios that does not imply that Target managers are performing poorly relative to their peers at Walmart?

Answer: This question points out the problem with naively asserting that a higher turnover ratio is better. Target specifically tries to appeal to a more upscale customer than Walmart. Their aisles are not as packed with merchandise (i.e., they do not have as much to sell per square foot of floor space), and they may sell goods that are priced higher and do not sell as fast as the goods that Walmart sells. They may invest more in the look and feel of their interior space. All of these lead to lower asset turnover.

However, by appealing to more upscale consumers, Target may charge slightly higher prices and may be just as profitable as Walmart while pursuing a different type of strategy.

Diff: 2

Topic: Activity Ratios

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

23) Below are recent inventory turnover ratios for four companies. The companies, listed in no particular order are Tiffany & Co. (a manufacturer and retailer of fine jewelry), Deere & Co. (maker of heavy duty agricultural equipment), Boeing (aircraft manufacturer), and Sprouts (a grocery chain focusing on organic products). Think about which of these companies operate in businesses that tend to have very slow or very fast inventory turnover. Which one below is the inventory turnover ratio for Sprouts?

A) 1.7

B) 14.4

C) 0.7

D) 5.7

Answer: B

Diff: 2

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Reflective Thinking

24) In 1979 International Business Machines Corp. (IBM) was one of the world's largest companies, and it dominated the market for huge mainframe computers. Back then, IBM's inventory turnover ratio was about 3.3. Through the years, IBM switched from mainframe to personal computers, and today the company earns most of its revenues from a variety of services rather than from selling hardware. By 2017, IBM's inventory turnover ratio had risen to 23.9. What do you think might account for the tremendous increase in IBM's inventory turnover between 1979 and 2017?

Answer: In the late 70s, IBM's turnover ratio was relatively low because they built a product that took a long time to make, and therefore the company's inventory balances were high. As the firm shifted to personal computers, which took less time to build and sold more rapidly, the inventory turnover ratio increased. Today, IBM is mostly a services business, so there is little need for the company to hold much inventory, thus making its inventory turnover ratio quite high.

Diff: 3

Topic: Inventory Turnover

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.5 Debt ratios

1) The less fixed-cost debt (financial leverage) a firm uses, the greater will be its risk and return.

Answer: FALSE

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

2) In general, the more debt a firm uses, the smaller its financial leverage.

Answer: FALSE

Diff: 2

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

3) The lower the fixed-payment coverage ratio, the lower is the firm's financial leverage.

Answer: FALSE

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

4) The higher the debt ratio, the more the financial leverage a firm has and thus, the greater will be its risk and return.

Answer: TRUE

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

5) Typically, higher coverage ratios are preferred, but a very high ratio may indicate under-utilization of fixed-payment obligations, which may result in unnecessarily low risk and return.

Answer: TRUE

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Reflective Thinking

6) The higher the value of the times interest earned ratio, the higher is the proportion of the firm's interest income compared to its contractual interest payments.

Answer: FALSE

Diff: 1

Topic: Times Interest Earned Ratio

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

7) \_\_\_\_\_ is a term used to describe the magnification of risk and return introduced through the use of fixed-cost financing, such as preferred stock and debt.

A) Financial leverage

B) Operating leverage

C) Fixed-payment coverage

D) Benchmarking

Answer: A

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

8) The \_\_\_\_\_ ratio measures the proportion of total assets financed by the firm's creditors.

- A) total asset turnover
- B) inventory turnover
- C) current
- D) debt

Answer: D

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

9) The \_\_\_\_\_ ratio measures a firm's ability to pay contractual interest payments.

- A) times interest earned
- B) fixed-payment coverage
- C) debt
- D) average payment period

Answer: A

Diff: 1

Topic: Times Interest Earned Ratio

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

10) The \_\_\_\_\_ ratio indicates whether a firm will be able to meet interest obligations due on outstanding debt.

- A) debt-to-equity
- B) interest turnover
- C) total assets turnover
- D) times interest earned

Answer: D

Diff: 1

Topic: Times Interest Earned Ratio

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

11) The higher, the value of the \_\_\_\_\_ ratio, the better able a firm is to fulfill its interest obligations.

- A) dividend payout
- B) average collection period
- C) times interest earned
- D) average payment period

Answer: C

Diff: 1

Topic: Times Interest Earned Ratio

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

12) When assessing the fixed-payment coverage ratio, \_\_\_\_\_.

- A) the lower its value the more risky is the firm
- B) the lower its value, the higher is the firm's financial leverage
- C) preferred stock dividend payments can be disregarded
- D) the higher its value, the more difficult it is for a firm to pay its debts

Answer: A

Diff: 2

Topic: Fixed Payment Coverage Ratio

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

13) The magnification of risk and return introduced through the use of fixed-cost financing, such as debt and preferred stock is called financial leverage.

Answer: TRUE

Diff: 1

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-14

AACSB: Analytical Thinking

14) The financial leverage multiplier is the ratio of a firm's total assets to common stock equity.

Answer: TRUE

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 3

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.6 Profitability ratios

1) The gross profit margin measures the percentage of each sales dollar left after a firm has paid for its goods and operating expenses.

Answer: FALSE

Diff: 1

Topic: Gross Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

Ratio (% of Sales)	Key Financial Data	
	Dreamscape, Inc. For the Year Ended December 31, 2019	Industry Average For the Year Ended December 31, 2019
Cost of goods sold	74.5%	70.0%
Gross profits	25.5	30.0
Selling expense	8.0	7.0
Gen. & admin. expense	5.1	4.9
Depreciation expense	2.4	2.0
Total operating expense	15.5	13.9
Operating profits	10.0	16.1
Interest expense	1.4	1.0
Net profits before taxes	8.6	15.1
Taxes	2.4	6.0
Net profits after taxes	5.2	9.1

**Income Statement, Dreamscape, Inc.  
For the Year Ended December 31, 2020**

Sales revenue	\$1,000,000
Less: Cost of goods sold	<u>750,000</u>
Gross profits	\$ 250,000
Less: Operating expenses	
Selling Expense	\$ 70,000
Gen. & admin. expense	48,000
Depreciation expense	<u>20,000</u>
Total operating expense	<u>\$ 138,000</u>
Operating profits	\$ 112,000
Less: Interest expense	<u>\$ 20,000</u>
Net profits before taxes	\$ 92,000
Less: Taxes	<u>\$ 36,800</u>
Net profits after taxes	<u>\$ 55,200</u>

Prepare a common-size income statement for Dreamscape, Inc. for the year ended December 31, 2020. Evaluate the company's performance against industry average ratios and against last year's results.

Answer: **Common-Size Income Statement**  
**Dreamscape, Inc.**  
**For the Year Ended December 31, 2020**

Sales revenue		100%
Less: Cost of goods sold		<u>75%</u>
Gross profits		25%
Less: Operating expenses		
Selling expense	7.0%	
Gen. & admin. expense	4.8%	
Depreciation expense	<u>2.0%</u>	
Total operating expense		<u>13.8%</u>
Operating profits		11.2%
Less: Interest expense		<u>2.0%</u>
Net profits before taxes		9.2%
Less: Taxes		<u>3.68%</u>
Net profits after taxes		<u>5.52%</u>

Dreamscape, Inc. performs significantly below industry average. All profitability ratios (gross profit margin, operating profit margin, and net profit margin) trail the industry norms. In 2019 expenses as a percent of sales were high.

Dreamscape, Inc. improved the management of operating expenses in 2020 meeting industry averages. However, cost of goods sold as a percent of sales increased and is a full 5 percent above the industry average, further reducing the gross profit margin. Interest expense is two times the average indicating high cost of debt or a high debt level. The firm must concentrate on reducing the cost of goods sold and interest expense to improve performance.

Diff: 2

Topic: Common Size Income Statements

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

3) Two frequently cited ratios of profitability that can be read directly from the common-size income statement are \_\_\_\_\_.

- A) the earnings per share and the return on total assets
- B) the gross profit margin and the earnings per share
- C) the gross profit margin and the return on total assets
- D) the gross profit margin and the net profit margin

Answer: D

Diff: 1

Topic: Common Size Income Statements

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking



4) The \_\_\_\_\_ is a popular approach for evaluating profitability in relation to sales by expressing each item on the income statement as a percent of sales.

- A) retained earnings statement
- B) common-size balance sheet
- C) common-size income statement
- D) profit and loss statement

Answer: C

Diff: 1

Topic: Common Size Income Statements

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

5) In 2018, Walmart reported sales of \$500.3 billion, gross profits of \$126.9 billion, EBIT of \$20.4 billion, and net income of \$9.9 billion. The company's cost of goods sold that year equalled \_\_\_\_\_.

- A) 2%
- B) \$373.4 billion
- C) \$353 million
- D) 4.1%

Answer: B

Diff: 2

Topic: Gross Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

6) In 2017, Apple Inc. reported sales of \$229.2 billion, cost of goods sold of \$141 billion, and net income of \$48.4 billion. Apple's gross profit margin that year was \_\_\_\_\_.

- A) 38.4%
- B) 21.1%
- C) 61.5%
- D) 17.4%

Answer: A

Diff: 2

Topic: Gross Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

7) In 2018, Target Corp. reported sales of \$71.9 billion, cost of goods sold of \$51.1 billion, operating profit of \$4.3 billion, and net income of \$2.9 billion. Target has no preferred stock outstanding. Its net profit margin that year was \_\_\_\_\_.

- A) 6%
- B) 28.9%
- C) 4%
- D) 5.7%

Answer: C

Diff: 1

Topic: Net Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

8) In 2018, Target Corp. reported sales of \$71.9 billion, cost of goods sold of \$51.1 billion, operating profit of \$4.3 billion, and net income of \$2.9 billion. Target has no preferred stock outstanding. Its operating profit margin that year was \_\_\_\_\_.

- A) 20.7%
- B) 8.4%
- C) 4.0%
- D) 6.0%

Answer: D

Diff: 1

Topic: Net Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

9) The \_\_\_\_\_ indicates the percentage of each sales dollar remaining after the firm has paid for its goods.

- A) net profit margin
- B) operating profit margin
- C) gross profit margin
- D) earnings available to common shareholders

Answer: C

Diff: 1

Topic: Gross Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

10) The \_\_\_\_\_ measures the percentage of profit earned on each sales dollar before interest and taxes but after all costs and expenses.

- A) net profit margin
- B) operating profit margin
- C) gross profit margin
- D) earnings available to common shareholders

Answer: B

Diff: 1

Topic: Operating Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

11) A firm with a gross profit margin which meets industry standard and a net profit margin which is below industry standard may have excessive \_\_\_\_\_.

- A) general and administrative expenses
- B) cost of goods sold
- C) dividend payments
- D) principal payments

Answer: A

Diff: 1

Topic: Net Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

12) The \_\_\_\_\_ measures the percentage of each sales dollar remaining after all costs and expenses, including interest, taxes, and preferred stock dividends, have been deducted.

- A) net profit margin
- B) operating profit margin
- C) gross profit margin
- D) earnings available to common shareholders

Answer: A

Diff: 1

Topic: Net Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

13) The \_\_\_\_\_ measures the overall effectiveness of management in generating profits with its available assets.

- A) total asset turnover
- B) price/earnings ratio
- C) return on equity
- D) return on total assets

Answer: D

Diff: 1

Topic: Return on Total Assets

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

14) The \_\_\_\_\_ ratio measures the return earned on the common stockholders' investment in the firm.

- A) net profit margin
- B) price/earnings
- C) return on equity
- D) return on total assets

Answer: C

Diff: 1

Topic: Return on Equity

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

15) A firm with sales of \$1,000,000, net profits after taxes of \$30,000, total assets of \$1,500,000, and common stockholders' investment of \$750,000 has a return on equity of \_\_\_\_\_.

- A) 2 percent
- B) 15 percent
- C) 3 percent
- D) 4 percent

Answer: D

Diff: 1

Topic: Return on Equity

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

16) The net profit margin measures the percentage of each sales dollar remaining after all costs and expenses, including interest, taxes, and common stock dividends, have been deducted.

Answer: TRUE

Diff: 1

Topic: Net Profit Margin

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

17) If a firm has no liabilities or debt of any kind on its balance sheet, then which of the following is true?

- A)  $ROE > ROA$
- B)  $ROE < ROA$
- C)  $ROE = ROA$
- D)  $ROA = \text{net profit margin}$

Answer: C

Diff: 2

Topic: Return on Equity

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

18) If a firm uses any debt at all and if the firm generates positive earnings for common stockholders, then which of the following below is true?

- A)  $ROE > ROA$
- B)  $ROE < ROA$
- C)  $ROE = ROA$
- D)  $\text{Gross profit margin} < \text{net profit margin}$

Answer: A

Diff: 2

Topic: Return on Equity

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

19) Return on total assets (ROA) measures the overall effectiveness of management in generating profits with its available assets.

Answer: TRUE

Diff: 1

Topic: Return on Total Assets

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

20) The more money a firm borrows \_\_\_\_\_.

- A) the lower is its ROE because more interest expense reduces earnings
- B) the larger is the gap between its ROA and its ROE
- C) the lower is its operating profit margin
- D) the higher is its gross profit margin

Answer: B

Diff: 3

Topic: Return on Equity

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

21) The \_\_\_\_\_ ratios are primarily used as measures of return.

- A) liquidity
- B) activity
- C) debt
- D) profitability

Answer: D

Diff: 1

Topic: Categories of Financial Ratios

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.7 Market ratios

1) A firm's P/E ratio tends to be higher if \_\_\_\_\_.

- A) its risk and its growth prospects are lower
- B) its risk is higher and its growth prospects are lower
- C) its risk and its growth prospects are higher
- D) its risk is lower and its growth prospects are higher

Answer: D

Diff: 2

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

2) All other things being equal, a firm's P/E ratio will be lower if investors think the firm's growth prospects are very good.

Answer: FALSE

Diff: 1

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

3) Earnings per share represents the dollar amount earned and distributed to shareholders.

Answer: FALSE

Diff: 1

Topic: Earnings Per Share

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

4) The \_\_\_\_\_ ratio reflects how much investors are willing to pay for a company's stock per dollar of earnings that the company generates.

- A) debt
- B) price/earnings
- C) return on equity
- D) return on total assets

Answer: B

Diff: 1

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

5) Holding all other factors constant, a higher price/earnings (P/E) ratio indicates that investors have more confidence in a firm's future performance.

Answer: TRUE

Diff: 1

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

6) Suppose a firm that is normally very profitable barely does better than breaking even this year, i.e., it earns a very small profit. That firm's P/E ratio is likely to be \_\_\_\_\_.

- A) very high
- B) zero
- C) negative
- D) the lowest among all firms in its industry

Answer: A

Diff: 2

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

7) The P/E ratio measures the \_\_\_\_\_.

- A) market value of the stock relative to earnings per share
- B) intrinsic value of the stock relative to earnings per share
- C) book value of the stock relative to earnings per share
- D) market price of the stock relative to retained earnings

Answer: A

Diff: 1

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

8) Book value per share is the ratio of \_\_\_\_\_.

- A) common stock equity to number of outstanding common shares
- B) retained earnings to number of outstanding common shares
- C) fixed assets to number of outstanding common shares
- D) total liabilities to number of outstanding common shares

Answer: A

Diff: 1

Topic: Market/Book Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

9) During the 2008-2009 recession, the average P/E ratio of firms in the U.S. stock market reached an extraordinarily high level because \_\_\_\_\_.

- A) investors believed short-term growth prospects for U.S. firms were extraordinarily good at that time
- B) stock prices generally boomed during the recession
- C) earnings per share were unusually low during the recession
- D) investors believed long-term growth prospects coming out of the recession were not very good

Answer: C

Diff: 2

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

10) Over long periods of time, the average P/E ratio of firms in the U.S. stock market is closest to \_\_\_\_\_.

- A) 0.2
- B) 2.0
- C) 20
- D) 200

Answer: C

Diff: 1

Topic: P/E Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking



11) In its 2018 fiscal year, the data storage company, NetApp Inc., reported that it had 267.9 million shares of common stock outstanding, trading at a price of about \$68 per share. On the firm's balance sheet, the value of common stock equity was reported as \$2.067 billion. NetApp's market/book ratio was \_\_\_\_\_.

- A) 8.8
- B) 7.7
- C) 68
- D) greater than 100

Answer: A

Diff: 2

Topic: Market/Book Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

12) Which of the following is true?

- A) For most companies the market/book ratio is less than 1.0 because book value is a conservative estimate of what a firm's equity is really worth.
- B) For most companies the market/book ratio is greater than 1.0 because the stock market tends to overvalue things.
- C) For most companies the market/book ratio is greater than 1.0 because book value is a backward-looking measure based largely on historical costs, whereas market value is forward looking and depends on how investors believe the company will perform in the future.
- D) For most companies the market/book ratio is very close to 1.0 because on average, book value provides a good estimate of the market value of a firm's equity.

Answer: C

Diff: 2

Topic: Market/Book Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

13) In early 2018, Facebook's market/book ratio was close to 7.0. A market/book ratio that much greater than 1.0 for Facebook means that \_\_\_\_\_.

- A) Facebook has a huge number of common shares outstanding
- B) the book value of Facebook's equity is far less than the total market value of the company's stock
- C) Facebook's stock is overvalued
- D) Facebook's book value is inflated because so many of its assets are intangible

Answer: B

Diff: 2

Topic: Market/Book Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

14) For most companies we would expect the market/book ratio to be greater than 1.0.

Answer: TRUE

Diff: 1

Topic: Market/Book Ratio

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Reflective Thinking

15) Market ratios only measure a firm's risk.

Answer: FALSE

Diff: 1

Topic: Categories of Financial Ratios

Learning Obj.: LG 2

Learning Outcome: F-02

AACSB: Analytical Thinking

### 3.8 A complete ratio analysis

1) Earnings per share represents the dollar amount earned and distributed to shareholders.

Answer: FALSE

Diff: 1

Topic: Earnings Per Share

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

2) The DuPont formula allows a firm to break down its return into the net profit margin, which measures the firm's profitability on sales, and its total asset turnover, which indicates how efficiently the firm has used its assets to generate sales.

Answer: TRUE

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

3) The DuPont system allows a firm to break its return on equity into a profit-on-sales component, an efficiency-of-asset-use component, and a liquidity component.

Answer: FALSE

Diff: 1

Topic: DuPont Formula

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

4) According to the basic DuPont equation, a firm's ROA is the product of what other two ratios?

- A) net profit margin and return on equity
- B) net profit margin and total asset turnover
- C) net profit margin and the financial leverage multiplier
- D) ROE and the financial leverage multiplier

Answer: B

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

5) The \_\_\_\_\_ is used by financial managers as a structure for dissecting a firm's financial statements to assess its financial condition.

- A) statement of cash flows
- B) DuPont system of analysis
- C) break-even analysis
- D) technical analysis

Answer: B

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

6) The modified DuPont formula relates the firm's return on total assets (ROA) to its \_\_\_\_\_.

- A) return on equity (ROE)
- B) operating leverage multiplier
- C) net profit margin
- D) total asset turnover

Answer: A

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

7) In the DuPont system of analysis, the return on equity is equal to \_\_\_\_\_.

- A) (net profit margin)  $\times$  (total asset turnover)
- B) (stockholders' equity)  $\times$  (financial leverage multiplier)
- C) (return on total assets)  $\times$  (financial leverage multiplier)
- D) (return on total assets)  $\times$  (total asset turnover)

Answer: C

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

8) A firm with a low net profit margin can improve its return on total assets by \_\_\_\_\_.

- A) increasing its debt ratio
- B) increasing its total asset turnover
- C) decreasing its fixed asset turnover
- D) decreasing its total asset turnover

Answer: B

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

9) Other things being equal, a decrease in total asset turnover will result in \_\_\_\_\_ in the return on total assets.

- A) an increase
- B) a decrease
- C) no change
- D) an undetermined change

Answer: B

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

10) The modified DuPont equation says that a firm with a low return on total assets can improve its return on equity, all else remaining the same, by \_\_\_\_\_.

- A) financing more of its assets with debt.
- B) increasing its total asset turnover
- C) using less debt
- D) decreasing its total asset turnover

Answer: A

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

11) The three basic ratios used in the DuPont system of analysis are \_\_\_\_\_.

- A) net profit margin, total asset turnover, and return on investment
- B) net profit margin, total asset turnover, and return on equity
- C) net profit margin, total asset turnover, and financial leverage multiplier
- D) net profit margin, financial leverage multiplier, and return on equity

Answer: C

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

12) The financial leverage multiplier is an indicator of how much \_\_\_\_\_ a corporation is utilizing.

- A) operating leverage
- B) long-term debt
- C) total debt
- D) total assets

Answer: C

Diff: 2

Topic: Leverage Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

13) The financial leverage multiplier is the ratio of \_\_\_\_\_.

- A) current assets to common stockholders' equity
- B) total assets to common stockholders' equity
- C) total assets to total debt
- D) current assets to current liabilities

Answer: B

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

14) Using the DuPont system of analysis, holding other factors constant, an increase in financial leverage will result in \_\_\_\_\_.

- A) an increase in the return on equity
- B) a decrease in the gross profit margin
- C) an increase in the gross profit margin
- D) an increase in retained earnings

Answer: A

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

**Table 3.2****Dana Dairy Products Key Ratios**

	<b>Industry Average</b>	<b>Actual 2018</b>	<b>Actual 2019</b>
Current ratio	1.3	1.0	
Quick ratio	0.8	0.75	
Average collection period	23 days	30 days	
Inventory turnover	21.7	19	
Debt ratio	64.7%	50%	
Times interest earned	4.8	5.5	
Gross profit margin	13.6%	12.0%	
Net profit margin	1.0%	0.5%	
Return on total assets	2.9%	2.0%	
Return on equity	8.2%	4.0%	

**Income Statement**  
**Dana Dairy Products**

**For the Year Ended December 31, 2019**

Sales revenue	\$100,000
Less: Cost of goods sold	<u>87,000</u>
Gross profits	\$ 13,000
Less: Operating expenses	<u>11,000</u>
Operating profits	\$ 2,000
Less: Interest expense	<u>500</u>
Net profits before taxes	\$ 1,500
Less: Taxes (40%)	<u>600</u>
Net profits after taxes	<u>\$ 900</u>

**Balance Sheet**  
**Dana Dairy Products**  
**December 31, 2019**

<b>Assets</b>		
Cash		\$ 1,000
Accounts receivable		8,900
Inventories		<u>4,350</u>
Total current assets		\$14,250
Gross fixed assets	\$35,000	
Less: Accumulated depreciation	<u>13,250</u>	
Net fixed assets		<u>21,750</u>
Total assets		\$36,000
<b>Liabilities &amp; Stockholders' Equity</b>		
Accounts payable		\$ 9,000
Accruals		<u>6,675</u>
Total current liabilities		\$15,675
Long-term debt		<u>4,125</u>
Total liabilities		\$19,800
Common stock		1,000
Retained earnings		<u>15,200</u>
Total stockholders' equity		\$16,200
Total liabilities & stockholders equity		\$36,000

15) The current ratio for Dana Dairy Products in 2019 was \_\_\_\_\_. (See Table 3.2)

- A) 1.58
- B) 0.63
- C) 1.10
- D) 0.91

Answer: D

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

16) Since 2018, the liquidity of Dana Dairy Products \_\_\_\_\_. (See Table 3.2)

- A) has deteriorated
- B) has remained the same
- C) has improved
- D) is not determinable

Answer: A

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

17) The net working capital for Dana Dairy Products in 2019 was \_\_\_\_\_. (See Table 3.2)

A) \$10,325

B) -\$10,325

C) -\$1,425

D) \$14,250

Answer: C

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

18) The inventory turnover for Dana Dairy Products in 2019 was \_\_\_\_\_. (See Table 3.2)

A) 43

B) 5

C) 20

D) 25

Answer: C

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

19) The inventory management at Dana Dairy Products \_\_\_\_\_ since 2018. (See Table 3.2)

A) has deteriorated

B) has remained the same

C) has improved slightly

D) cannot be determined

Answer: C

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

20) The average collection period for Dana Dairy Products in 2019 was \_\_\_\_\_. (See Table 3.2)

A) 32.5 days

B) 11.8 days

C) 25.3 days

D) 35.9 days

Answer: A

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking



21) If Dana Dairy Products has credit terms which specify that accounts receivable should be paid in 25 days, the average collection period \_\_\_\_\_ since 2018. (See Table 3.2)

- A) has deteriorated
- B) has remained the same
- C) has improved
- D) cannot be determined

Answer: A

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

22) Dana Dairy Products had a \_\_\_\_\_ degree of financial leverage than the industry standard, resulting in \_\_\_\_\_. (See Table 3.2)

- A) lower; lower return on total assets
- B) lower; lower return on equity
- C) higher; higher return on equity
- D) higher; higher return on total assets

Answer: B

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-14

AACSB: Reflective Thinking

23) The debt ratio for Dana Dairy Products in 2019 was \_\_\_\_\_. (See Table 3.2)

- A) 50 percent
- B) 11 percent
- C) 55 percent
- D) 44 percent

Answer: C

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

24) Dana Dairy Products' gross profit margin was inferior to the industry standard. This may have resulted from \_\_\_\_\_. (See Table 3.2)

- A) a high sales price
- B) the high cost of goods sold
- C) excessive selling and administrative expenses
- D) excessive interest expense

Answer: B

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Reflective Thinking

25) The gross profit margin and net profit margin for Dana Dairy Products in 2019 were \_\_\_\_\_. (See Table 3.2)

- A) 13 percent and 0.9 percent, respectively
- B) 13 percent and 1.5 percent, respectively
- C) 2 percent and 0.9 percent, respectively
- D) 2 percent and 1.5 percent, respectively

Answer: A

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

26) The return on total assets for Dana Dairy Products for 2019 was \_\_\_\_\_. (See Table 3.2)

- A) 0.9 percent
- B) 5.5 percent
- C) 25 percent
- D) 2.5 percent

Answer: D

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

27) The return on equity for Dana Dairy Products for 2019 was \_\_\_\_\_. (See Table 3.2)

- A) 0.6 percent
- B) 5.6 percent
- C) 0.9 percent
- D) 50 percent

Answer: B

Diff: 1

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

28) Using the modified DuPont formula allows the analyst to break Dana Dairy Products return on equity into 3 components: the net profit margin, the total asset turnover, and a measure of leverage (the financial leverage multiplier). Which of the following mathematical expressions represents the modified DuPont formula relative to Dana Dairy Products' 2019 performance? (See Table 3.2)

- A)  $5.6(\text{ROE}) = 2.5(\text{ROA}) \times 2.22(\text{Financial leverage multiplier})$
- B)  $5.6(\text{ROE}) = 3.3(\text{ROA}) \times 1.70(\text{Financial leverage multiplier})$
- C)  $4.0(\text{ROE}) = 2.5(\text{ROA}) \times 2.00(\text{Financial leverage multiplier})$
- D)  $2.5(\text{ROE}) = 5.6(\text{ROA}) \times 2.22(\text{Financial leverage multiplier})$

Answer: A

Diff: 1

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

29) As the financial leverage multiplier increases, this may result in \_\_\_\_\_.

- A) an increase in the net profit margin and return on investment, due to the decrease in interest expense as debt decreases
- B) an increase in the net profit margin and return on investment, due to the increase in interest expense as debt increases
- C) a decrease in the net profit margin and return on investment, due to the increase in interest expense as debt increases
- D) a decrease in the net profit margin and return on investment, due to the decrease in interest expense as debt decreases

Answer: C

Diff: 2

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Reflective Thinking

30) In an effort to analyze Clockwork Company finances, Jim realized that he was missing the company's net profits after taxes for the current year. Find the company's net profits after taxes using the following information.

Return on total assets = 2%

Total asset turnover = 0.5

Cost of goods sold = \$105,000

Gross profit margin = 0.30

Answer: Sales = Cost of goods sold / (1 - Gross profit margin) =  $105,000 / (1 - 0.30) = \$150,000$

Total assets = Sales / (Total asset turnover)

$$= 150,000 / 0.50 = \$300,000$$

Net profits after taxes = (ROA) × (Total assets)

$$= (0.02) \times (300,000) = \$6,000$$

Diff: 2

Topic: A Complete Ratio Analysis

Learning Obj.: LG 5

Learning Outcome: F-02

AACSB: Analytical Thinking

31) Given the following balance sheet, income statement, historical ratios and industry averages, calculate the Pulp, Paper, and Paperboard, Inc. financial ratios for the most recent year. Analyze its overall financial situation for the most recent year. Analyze its overall financial situation from both a cross-sectional and time-series viewpoint. Break your analysis into an evaluation of the firm's liquidity, activity, debt, and profitability.

#### Income Statement

##### Pulp, Paper, and Paperboard, Inc.

##### For the Year Ended December 31, 2019

Sales revenue	\$2,080,976
Less: Cost of goods sold	<u>1,701,000</u>
Gross profits	\$ 379,976
Less: Operating expenses	<u>273,846</u>
Operating profits	\$ 106,130
Less: Interest expense	<u>19,296</u>
Net profits before taxes	\$ 86,834
Less: Taxes (40%)	<u>34,734</u>
Net profits after taxes	<u>\$ 52,100</u>

#### Balance Sheet

##### Pulp, Paper, and Paperboard, Inc.

##### December 31, 2019

<u>Assets</u>	
Cash	\$ 95,000
Accounts receivable	237,000
Inventories	<u>243,000</u>
Total current assets	\$ 575,000
Gross fixed assets	500,000
Less: Accumulated depreciation	<u>75,000</u>
Net fixed assets	\$ 425,000
Total assets	<u>\$1,000,000</u>
<u>Liabilities and stockholders' equity</u>	
Current liabilities	
Accounts payable	\$ 89,000
Notes payable	169,000
Accruals	<u>87,000</u>
Total current liabilities	\$ 345,000
Long-term debt	<u>188,000</u>
Total liabilities	\$ 533,000
Stockholders' equity	
Common stock	255,000
Retained earnings	<u>212,000</u>
Total stockholders' equity	\$ 467,000
Total liabilities and stockholders' equity	<u>\$1,000,000</u>

**Historical and Industry Average Ratios  
Pulp, Paper and Paperboard, Inc.**

<b>Ratio</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Industry 2019</b>
Current ratio	1.6	1.7	–	1.6
Quick ratio	0.9	1.0	–	0.9
Inventory turnover	8.1	9.3	–	8.4
Average collection period	33 days	37 days	–	39 days
Total asset turnover	2.3	2.2	–	2.2
Debt ratio	60%	56%	–	58%
Times interest earned	2.5	3.5	–	2.3
Gross profit margin	21%	19.7%	–	20.4%
Operating profit margin	4.7%	4.8%	–	4.7%
Net profit margin	1.8%	1.6%	–	1.4%
Return on total assets	4.1%	3.5%	–	3.08%
Return on equity	10.3%	7.9%	–	7.3%

Answer:

**Historical and Industry Average Ratios  
Pulp, Paper and Paperboard, Inc.**

<b>Ratio</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Industry 2019</b>
Current ratio	1.6	1.7	1.67	1.6
Quick ratio	0.9	1.0	0.96	0.9
Inventory turnover	8.1	9.3	7.0	8.4
Average collection period	33 days	37 days	42 days	39 days
Total asset turnover	2.3	2.2	2.1	2.2
Debt ratio	60%	56%	53%	58%
Times interest earned	2.5	3.5	5.5	2.3
Gross profit margin	21%	19.7%	18.3%	20.4%
Operating profit margin	4.7%	4.8%	5.1%	4.7%
Net profit margin	1.8%	1.6%	2.5%	1.4%
Return on total assets	4.1%	3.5%	5.21%	3.08%
Return on equity	0.3%	7.9%	11.2%	7.3%

**LIQUIDITY:** The liquidity of the firm is on target with the industry standard in 2019 and shows no trend since 2017. The firm's liquidity is stable.

**ACTIVITY:** Inventory and accounts receivable management has deteriorated since 2018 and is inferior when compared to the industry standard. The low inventory turnover may be caused by overstocking and/or obsolete inventories. The high average collection period may have resulted from poor collections procedures or from relaxed credit terms. Further investigation is necessary to determine the cause of the variances.

**DEBT:** The firm has less debt than the industry average. The trend since 2017 has been toward reducing the debt ratio. The firm, therefore, is subject to less financial risk than any other firm in the industry.

**PROFITABILITY:** Although the gross profit margin is inferior to the industry average, the operating and net profit margin far exceed the standards, boosting return on total assets and return on equity. The trend in the gross profit margin is unfavorable and may either be caused by a slide in product prices or an escalation in cost of sales. The cause of the poor gross profit margin should be investigated.

Overall, the firm needs to focus attention on inventory and accounts receivable management and the cause of the poor gross profit margin. In general, the firm is in good financial condition.

Diff: 3

Topic: Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

32) Complete the balance sheet for General Aviation, Inc. based on the following financial data.

**Balance Sheet**  
**General Aviation, Inc.**  
**December 31, 2019**

<b>Assets</b>	
Cash	\$ 8,005
Marketable securities	—
Accounts receivable	—
Inventories	—
Total current assets	—
Gross fixed assets	—
Less: Accumulated depreciation	\$50,000
Net fixed assets	—
Total assets	—
<b>Liabilities and Stockholders' Equity</b>	
Accounts payable	\$28,800
Notes payable	—
Accruals	\$18,800
Total current liabilities	—
Long-term debts	—
Total liabilities	—
Stockholders' equity	
Preferred stock	2,451
Common stock at par	30,000
Paid-in capital in excess of par	6,400
Retained earnings	90,800
Total stockholders' equity	—
Total liabilities and stockholders' equity	—

Key Financial Data (2019)

1. Sales totaled \$720,000.
2. The gross profit margin was 38.7 percent.
3. Inventory turned 6 times.
4. There are 360 days in a year.
5. The average collection period was 31 days.
6. The current ratio was 2.35.
7. The total asset turnover was 2.81.
8. The debt ratio was 49.4 percent.
9. Total current assets equal \$159,565.

Answer:

**Balance Sheet**  
**General Aviation, Inc.**  
**December 31, 2019**

<b>Assets</b>	
Cash	\$ 8,005
Marketable securities	16,000
Accounts receivable	62,000
Inventories	<u>73,560</u>
Total current assets	\$159,565
Gross fixed assets	146,663
Less: Accumulated depreciation	<u>\$ 50,000</u>
Net fixed assets	<u>\$ 96,663</u>
Total assets	\$256,228
<b>Liabilities and Stockholders' Equity</b>	
Current liabilities	
Accounts payable	\$ 28,800
Notes payable	20,300
Accruals	<u>\$ 18,800</u>
Total current liabilities	\$ 67,900
Long-term debts	<u>58,677</u>
Total liabilities	\$126,577
Stockholders' equity	
Preferred stock	2,451
Common stock at par	30,000
Paid-in capital in excess of par	6,400
Retained earnings	<u>90,800</u>
Total stockholders' equity	\$129,651
Total liabilities and stockholders' equity	\$256,228

Diff: 3

Topic: A Complete Ratio Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking



33) Construct the DuPont system of analysis using the following financial data for Key Wahl Industries and determine which areas of the firm need further analysis.

Key Financial Data	
Key Wahl Industries:	
Sales	\$4,500,000
Net profits after taxes	337,500
Total assets	6,750,000
Total liabilities	3,375,000
Industry Averages:	
Total asset turnover	0.71
Debt ratio	33.00%
Financial leverage multiplier	1.50
Return on total assets	6.75%
Return on equity	10.00%
Net profit margin	9.50%

Answer:

Ratios for Key Wahl Industries

$$\text{Total asset turnover} = \frac{4,500,000}{6,750,000} = 0.67$$

$$\text{Debt ratio} = \frac{3,375,000}{6,750,000} = 50\%$$

$$\text{Financial leverage multiplier} = \frac{1}{1 - 0.5} = 2$$

$$\text{ROA} = \frac{337,500}{6,750,000} = 5\%$$

$$\text{ROE} = \text{ROA} \times \text{Financial leverage multiplier} = 10\%$$

$$\text{Net profit margin} = \frac{337,500}{4,500,000} = 7.5\%$$

DuPont System of Analysis: Key Wahl Industries performs equally to industry averages according to the return on equity. However, when dissecting the financial data further into the three key components of the DuPont system (a profit-on-sale, efficiency-of-asset use, and a use-of-leverage component), some areas of improvement may be highlighted. Key Wahl Industries has a lower net profit margin and return on total assets than industry averages. Nevertheless, the firm makes up for the low profit margin through excessive use of leverage (a 50 percent debt ratio versus 33 percent for the industry). Financial risk could be reduced resulting in the same return on equity by increasing the net profit margin and reducing debt.

Diff: 3

Topic: Dupont System of Analysis

Learning Obj.: LG 6

Learning Outcome: F-02

AACSB: Analytical Thinking

**Table 3.1**

<b>Balance Sheet</b> <b>Cole Eagan Enterprises</b> <b>December 31, 2019</b>			
Cash	\$4,500	Accounts Payable	\$10,000
Accounts Receivable		Notes Payable	
Inventory		Accruals	1,000
Total Current Assets		Total Current Liabilities	
Net Fixed Assets		Long-Term Debt	
Total Assets		Stockholders' Equity	
		Total Liabilities & S.E.	

Information (2019 values)

1. Sales totaled \$110,000
2. The gross profit margin was 25 percent.
3. Inventory turnover was 3.0.
4. There are 360 days in the year.
5. The average collection period was 65 days.
6. The current ratio was 2.40.
7. The total asset turnover was 1.13.
8. The debt ratio was 53.8 percent.

34) Inventory for CEE in 2019 was \_\_\_\_\_. (See Table 3.1)

- A) \$36,667
- B) \$32,448
- C) \$27,500
- D) \$9,167

Answer: C

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

35) Notes payable for CEE in 2019 was \_\_\_\_\_. (See Table 3.1)

- A) \$113,466
- B) \$52,372
- C) \$41,372
- D) \$10,609

Answer: D

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

36) Accounts receivable for CEE in 2019 was \_\_\_\_\_. (See Table 3.1)

A) \$14,056

B) \$19,861

C) \$14,895

D) \$18,333

Answer: B

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

37) Net fixed assets for CEE in 2019 were \_\_\_\_\_. (See Table 3.1)

A) \$45,484

B) \$48,975

C) \$54,511

D) \$69,341

Answer: A

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

38) Total assets for CEE in 2019 were \_\_\_\_\_. (See Table 3.1)

A) \$45,895

B) \$124,300

C) \$ 58,603

D) \$97,345

Answer: D

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking

39) Long-term debt for CEE in 2019 was \_\_\_\_\_. (See Table 3.1)

A) \$30,763

B) \$52,372

C) \$10,608

D) \$41,372

Answer: A

Diff: 3

Topic: Debt Ratios

Learning Obj.: LG 4

Learning Outcome: F-02

AACSB: Analytical Thinking