

Module 1

Framework for Analysis and Valuation

Learning Objectives – Coverage by question					
	True/False	Multiple Choice	Exercises	Problems	Essays
LO1 – Explain and assess the four main business activities.					1
LO2 – Identify and discuss the users and suppliers of financial statement information.	1-4	1, 2			2
LO3 – Describe and examine the four financial statements.	5-10	3-19	1-8	1-5, 10	3, 4
LO4 – Assess business operations within the context of a competitive environment.	14	26, 27		8	
LO5 – Explain and apply the basics of profitability analysis.	11-13	20-25	1, 9, 10	6, 7	5

Module 1: Framework for Analysis and Valuation

True/False

Topic: Users of Financial Statement Information

LO: 2

1. Shareholders demand financial information primarily to assess profitability and risk whereas bankers demand information primarily to assess cash flows to repay loan interest and principal.

Answer: True

Rationale: While both shareholders and bankers are interested in all the information companies provide, shareholders care about more about a company's profitability and bankers care more about solvency and creditworthiness.

Topic: Publicly Available Financial Reports

LO: 2

2. Publicly traded companies are required to provide quarterly financial reports directly to the public.

Answer: False

Rationale: Companies provide electronic versions of quarterly financial statements to the SEC, which posts them to the Internet for the public to access them.

Topic: Users of Financial Statement Information

LO: 2

3. Publicly traded companies provide financial information primarily to satisfy the SEC and the tax authorities (that is, the Internal Revenue Service).

Answer: False

Rationale: Demand for information extends to many users; the regulators such as the SEC and the IRS are only one class of users.

Topic: SEC Filings

LO: 2

4. Publicly traded companies must provide to the Securities Exchange Commission annual audited financial statements (10-K reports) and quarterly audited financial statements (10-Q reports).

Answer: False

Rationale: Quarterly reports do not need to be audited.

Topic: Balance Sheet

LO: 3

5. If a company reports retained earnings of \$175.3 million on its balance sheet, it must also report \$175.3 million in cash.

Answer: False

Rationale: The accounting equation requires total assets to equal total liabilities plus stockholders' equity. That does not imply, however, that liability and equity accounts relate directly to specific assets.

Topic: Balance Sheet**LO: 3**

6. A balance sheet shows a company's position over a period of time, whereas an income statement, statement of stockholders' equity, and statement of cash flows show its position at a point in time.

Answer: False

Rationale: The statement is reversed: A balance sheet shows a company's position at a point in time, whereas an income statement, statement of equity, and statement of cash flows show its position over a period of time.

Topic: Accounting Equation**LO: 3**

7. Assets must always equal liabilities plus equity.

Answer: True

Rationale: The accounting equation is $\text{Assets} = \text{Liabilities} + \text{Equity}$. This relation must always hold.

Topic: Income Statement**LO: 3**

8. The income statement reports net income which is defined as the company's profit after all expenses and dividends have been paid.

Answer: False

Rationale: The statement contains two errors. First, net income does not include any dividends during the period; these are a distribution of profits and not part of its calculation. Second, the income statement is prepared on an accrual basis and thus includes expenses incurred (as opposed to paid).

Topic: Statement of Cash Flows**LO: 3**

9. A statement of cash flows reports on cash flows for operating, investing and financing activities at a point in time.

Answer: False

Rationale: A statement of cash flows reports on cash flows for operating, investing, and financing activities over a period of time.

Topic: Statement of Stockholders' Equity**LO: 3**

10. An increase in common stock would be reflected in the statement of stockholders' equity.

Answer: True

Rationale: The statement of stockholders' equity reports on changes in the accounts that make up stockholders' equity. This includes contributed capital, retained earnings, and other equity.

Topic: Return on Assets

LO: 5

11. Return on Assets (ROA) measures the profit the company makes on each dollar of total assets it uses.

Answer: True

Rationale: Return on Assets is a profitability metric that measures how much profit the company made for each dollar of assets the company holds on average during the year.

Topic: Return on Assets

LO: 5

12. Return on Assets (ROA) = (Net Income / Sales) × Asset Turnover

Answer: True

Rationale: Return on Assets = Net Income / Average Assets. This is the disaggregation of the ROA into its components

Topic: Asset Turnover

LO: 5

13. Consider two companies (A and B) with equal profit margins of 18%. Company A has an asset turnover of 1.2 and Company B has an asset turnover of 1.5. If all else is equal, Company B with its' higher asset turnover, is less profitable because it requires more revenue to turn its assets over.

Answer: False

Rationale: Asset turnover is an efficiency metric. The higher the turnover, the more efficient the company is with its assets and thus, the more profitable. Algebraically, $ROA = PM \times AT$. Company A above is less profitable: $18\% \times 1.2 = 21.6\%$ whereas Company B's ROA is $18\% \times 1.5 = 27.0\%$.

Topic: Financial Accounting and Business Analysis

LO: 4

14. Financial statements are influenced by five important forces that determine a company's competitive intensity: (A) industry competition, (B) buyer power, (C) supplier power, (D) product substitutes, and (E) threat of entry.

Answer: True

Rationale: By systematically considering these five business forces, we can gain better insights from financial statements.

Multiple Choice

Topic: Users of Financial Statement Information

LO: 2

1. Which of the following groups would likely *not* be interested in the financial statements of a large public company such as Procter & Gamble?
 - A) Shareholders
 - B) Employees
 - C) Competitors
 - D) Taxing agencies
 - E) None of the above

Answer: E

Rationale: All of these parties would use the financial statements, albeit in different ways and for different purposes.

Topic: Users of Financial Statement Information

LO: 2

2. The SEC adopted Regulation FD, to curb public companies' practice of:
 - A) Routinely filing extensions for annual reports (Form 10-K)
 - B) Selectively disclosing information
 - C) Reporting pro forma (non-GAAP) numbers
 - D) Hiring auditors for non-audit services such as consulting engagements
 - E) None of the above

Answer: B

Rationale: Reg FD reads as follows: "Whenever an issuer discloses any material nonpublic information regarding that issuer, the issuer shall make public disclosure of that information . . . simultaneously, in the case of an intentional disclosure; and . . . promptly, in the case of a non-intentional disclosure."

Topic: Components of the Balance Sheet

LO: 3

3. A list of assets, liabilities and equity can be found on which of the following?
 - A) Balance Sheet
 - B) Income Statement
 - C) Statement of Assets and Liabilities
 - D) Statement of Cash Flows
 - E) Statement of Stockholders' Equity

Answer: A

Rationale: A balance sheet lists amounts for assets, liabilities and equity at a point in time.

Topic: Balance Sheet

LO: 3

4. Which of the following items would *not* be found on a balance sheet? (Select all that apply)
- A) Stockholders' Equity
 - B) Property, plant and equipment
 - C) Nonowner financing
 - D) Cash
 - E) Dividends

Answer: E

Rationale: The balance sheet reports assets (including cash and property, plant and equipment), liabilities (including nonowner financing) and equity. Dividends are reported on statement of stockholders' equity.

Topic: Profit and Cash Flow

LO: 3

5. A company's net cash flow will equal its net income ...
- A) Almost always
 - B) Rarely
 - C) Occasionally
 - D) Only when the company has no investing cash flow for the period
 - E) Only when the company has no investing or financing cash flow for the period

Answer: B

Rationale: Net income reflects the company's revenue minus expenses for the given period. Net cash flow represents the amount of money received (spent) on operating, investing and financing activities for the given period. These values are rarely the same.

Topic: Financial Statement Information

LO: 3

6. Which of the following statements are correct (*select all that apply*)?
- A) A balance sheet reports on investing and financing activities.
 - B) An income statement reports on financing activities.
 - C) The statement of equity reports on changes in the accounts that make up equity.
 - D) The statement of cash flows reports on cash flows from operating, investing, and financing activities over a period of time.
 - E) A balance sheet reports on a company's assets and liabilities over a period of time.

Answer: A, C, and D

Rationale: Statement (B) is incorrect—the statement of cash flows reports on financing activities that are reflected on the balance sheet. Statement (E) is incorrect—the balance sheet reports on a company's assets and liabilities at a point in time.

Topic: Balance Sheet—Numerical calculations required

LO: 3

7. The Goodyear Tire & Rubber Company's December 31, 2016 financial statements reported the following (in millions):

Total assets	\$16,511
Total liabilities	11,786
Total shareholders' equity	4,725
Dividends	82
Net income (loss)	1,264
Retained earnings, December 31, 2015	4,570

What did Goodyear report for retained earnings at December 31, 2016?

- A) \$5,907 million
- B) \$5,752 million
- C) \$5,916 million
- D) \$5,834 million
- E) There is not enough information to determine the answer.

Answer: B

Rationale: $\$4,570 + \$1,264 - \$82 = \$5,752$

Topic: Balance Sheet—Numerical calculations required

LO: 3

8. United Airlines' 2016 balance sheet reported the following (in millions)

Total Assets	\$40,091
Total Liabilities	31,485
Contributed Capital	3,573

What was United Airlines' total liabilities and stockholders' equity at December 31, 2016?

- A) \$36,518 million
- B) \$40,091 million
- C) \$35,058 million
- D) \$8,606 million
- E) \$36,518 million

Answer: B

Rationale: Assets = Liabilities + Stockholders Equity. Assets = \$40,091 so this is the total of liabilities and equity combined.

Topic: Balance Sheet—Numerical calculations required

LO: 3

9. On October 2, 2016 Starbucks Corporation reported, on its Form 10-K, the following (in millions):

Total assets	\$14,329.5
Total stockholders' equity	5,890.7
Total current liabilities	4,546.9

What did Starbucks report as total liabilities on October 2, 2016?

- A) \$ 12,516.7 million
- B) \$ 6,377.3 million
- C) \$ 995.0 million
- D) \$ 8,438.8 million
- E) None of the above

Answer: D

Rationale: Assets = Liabilities + Stockholders Equity. \$14,329.5 = Liabilities + \$5,890.7
Therefore, Liabilities = \$8,438.8 on October 2, 2016.

Topic: Balance Sheet—Numerical calculations required

LO: 3

10. In its 2016 annual report, Snap-On Incorporated reported the following (in millions):

Current assets	\$1,884.0
Total shareholders' equity	\$2,635.2
Total liabilities	\$2,088.0

What did Snap-On report as total assets at year-end 2016?

- A) \$3,885.8 million
- B) \$2,796.2 million
- C) \$4,723.2 million
- D) \$3,526.6 million
- E) None of the above

Answer: C

Rationale: Assets = Liabilities + Stockholders Equity. Assets = \$2,088.0 + \$2,635.2
Therefore, Assets = \$4,723.2

Topic: Balance Sheet—Numerical calculations required

LO: 3

11. In its 2016 annual report, Kohl's Corporation reported the following (in millions):

Total assets	\$13,574
Total shareholders' equity	\$ 5,177
Total liabilities	\$ 8,397

What proportion of Kohl's Corporation is financed by nonowners?

- A) 61.9%
- B) 44.2%
- C) 53.5%
- D) 77.0%
- E) None of the above

Answer: A

Rationale: Nonowner financing for Kohl's assets is provided from liabilities (the shareholders are the owners). $\$8,397 / \$13,574 = 61.9\%$

Topic: Balance Sheet—Numerical calculations required (more challenging; requires calculation of total assets before ratio can be calculated.)

LO: 3

12. In its 2016 annual report, Mattel Inc. reported the following (in millions):

Total liabilities	\$ 4,086.0
Total shareholders' equity	\$2,407.8

What proportion of Mattel is financed by nonowners?

- A) 64.6%
- B) 53.0%
- C) 78.6%
- D) 62.9%
- E) None of the above

Answer: D

Rationale: Nonowner financing for Mattel's assets is provided from liabilities (the shareholders are the owners). Assets = Liabilities + Equity.

Assets = $\$4,086.0 + \$2,407.8 = \$6,493.8$

$\$4,086.0 / \$6,493.8 = 62.92\%$

Topic: Income Statement—Numerical calculations required

LO: 3

13. The Goodyear Tire & Rubber Company's December 31, 2016 financial statements reported the following (in millions)

Sales	\$15,158
Cost of sales	\$10,972
Other expenses (excluding cost of sales)	\$ 2,902

What did Goodyear report for net income for the year ending December 31, 2016?

- A) \$29,032 million
- B) \$ 1,284 million
- C) \$ 4,186 million
- D) \$13,874 million
- E) \$ 8,070 million

Answer: B

Rationale: Sales – Cost of sales – Other expenses = Net income
 $\$15,158 - \$10,972 - \$2,902 = \$1,284$

Topic: Income Statement—Numerical calculations required

LO: 3

14. Intel Corporation reported the following on its 2016 income statement (in millions)

Sales revenue	\$59,387
Gross profit	\$36,191
Total expenses	\$23,317

What did Intel report for cost of goods sold during 2016?

- A) \$23,196 million
- B) \$15,502 million
- C) \$36,478 million
- D) \$12,874 million
- E) None of the above

Answer: A

Rationale: Sales – Cost of goods sold = Gross profit
 $\$59,387 - \text{Cost of goods sold} = \$36,191$
Therefore, Cost of goods sold = \$23,196

Topic: Income statement—Numerical calculations required**LO: 3**

15. On October 2, 2016, Starbucks Corporation reported, on its Form 10-K, the following (in millions):

	2016	2015
Total expenses	\$18,497.0	\$16,403.4
Operating income	\$4,171.9	\$3,601.0
Net earnings	\$2,818.9	\$2,759.3

What amount of revenues did Starbucks report for the year ending October 2, 2016?

- A) \$24,883.4
- B) \$25,208.8
- C) \$24,558.0
- D) \$21,315.9
- E) None of the above

Answer: D

Rationale: Revenues – Total expenses = Net earnings

Revenues – \$18,497.0 = \$2,818.9

Therefore, Revenues were \$21,315.9

Topic: Income Statement—Numerical calculations required (more challenging; requires calculation of growth rate.)**LO: 3**

16. On October 2, 2016, Starbucks Corporation reported, on its Form 10-K, the following (in millions):

	2016	2015
Operating income	\$4,171.9	\$3,601.0
Net earnings	\$2,818.9	\$2,759.3

Calculate year-over-year increase or (decrease) in net earnings, in percentage terms.

- A) (33.8)%
- B) 22.0%
- C) 16.5%
- D) 2.2%
- E) None of the above

Answer: D

Rationale: During the year, net earnings increased compared to the prior year. This increase is calculated as $(\$2,818.9 - \$2,759.3) / \$2,759.3 = 2.2\%$.

Topic: Income Statement—Numerical calculations required (more challenging; requires calculation of gross profit and ratios for two years.)

LO: 3

17. In its 2016 annual report, Caterpillar Inc. reported the following (in millions):

	2016	2015
Sales	\$38,537	\$47,011
Cost of goods sold	\$28,309	\$33,546

As a percentage of sales, did Caterpillar's gross profit increase or decrease during 2016?

- A) Gross profit increased from 26.8% to 28.6%
- B) Gross profit decreased from 28.6% to 26.5%
- C) Gross profit increased from 71.4% to 73.2%
- D) Gross profit decreased from 73.2% to 71.4%
- E) There is not enough information to answer the question.

Answer: B

Rationale: Sales – Cost of goods sold = Gross profit. In 2015, gross profit to sales was 28.6%. This ratio decreased to 26.5% in 2016.

Topic: Statement of Cash Flows—Numerical calculations required

LO: 3

18. The Goodyear Tire & Rubber Company's December 31, 2016, financial statements reported the following (in millions).

Cash December 31, 2016	\$1,132
Cash from operating activities	\$1,504
Cash from investing activities	\$(973)
Cash from financing activities	\$(875)

What did Goodyear report for cash on its December 31, 2015 balance sheet?

- A) \$1,476 million
- B) \$2,281 million
- C) \$3,711 million
- D) \$ 715 million
- E) None of the above

Answer: A

Rationale: Cash, beginning of year + Cash from operating activities + Cash from investing activities + Cash from financing activities = Cash at end of year
Cash, beginning of year + \$1,504 – \$973 – \$875 = \$1,132.
Cash, beginning of year = \$1,476

Topic: Statement of Cash Flows—Numerical calculations required

LO: 3

19. Procter & Gamble's June 30, 2016, financial statements reported the following (in millions):

Cash, beginning of year	\$ 6,836
Cash, end of year	\$ 7,102
Cash from operating activities	\$15,435
Cash from investing activities	\$ (5,575)

What did Procter & Gamble report for cash from financing activities for the year ended June 30, 2016?

- A) \$ 9,514 million
- B) \$ 20,961 million
- C) \$(20,961) million
- D) \$ (9,594) million
- E) \$ 7,067 million

Answer: D

Rationale: Cash, beginning of year + Cash from operating activities + Cash from investing activities + Cash from financing activities = Cash at end of year

$\$6,836 + \$15,435 - \$5,575 + \text{Cash from financing} = \$7,102$

Cash from financing = \$(9,594)

Topic: Return on Assets

LO: 5

20. A company's return on assets (ROA) can be disaggregated to reveal which of the following (select all that apply):

- A) Financial leverage
- B) Profit margin
- C) Sales growth
- D) Asset growth
- E) Asset turnover

Answer: B and E

Rationale: ROA can be disaggregated into profit margin and asset turnover. Financial leverage and sales growth are not components of this ratio. Asset growth affects the calculation via the denominator, but can't be disaggregated directly.

Topic: Return on Equity

LO: 5

21. The ratio of net income to equity is also known as:

- A) Total net equity ratio
- B) Profit margin
- C) Return on equity
- D) Net income ratio
- E) None of the above

Answer: C

Rationale: The ratio of net income to equity is called ROE, return on equity, and measures how profitable the company was given the shareholders' investment.

Topic: Return on Equity—Numerical calculations required

LO: 5

22. Sales for the year = \$324,882, Net Income for the year = \$36,610, Income from equity investments = \$8,603, and average Equity during the year = \$123,650. Return on equity (ROE) for the year is:
- A) 29.6%
 - B) 11.3%
 - C) 22.7%
 - D) 127.6%
 - E) There is not enough information to answer the question.

Answer: A

Rationale: Return on equity = Net income / Average Equity
 $\$36,610 / \$123,650 = 29.6\%$.

Topic: Return on Assets—Numerical calculations required

LO: 5

23. Sales for the year = \$246,687, Net Income for the year = \$22,965, and average Assets during the year = \$136,357. Return on Assets (ROA) for the year is:
- A) 53.8%
 - B) 16.8%
 - C) 9.3%
 - D) There is not enough information to calculate ROA.
 - E) None of the above

Answer: B

Rationale: ROA = Net Income / Average assets
Therefore ROA equals $\$22,965 / \$136,357 = 16.8\%$.

Topic: Return on Assets—Numerical calculations required (more challenging because net income is not provided, must be calculated.)

LO: 5

24. Sales for the year = \$831,066, Profit margin = 18%, and average Assets during the year = \$647,770. Return on Assets (ROA) for the year is:
- A) 17.1%
 - B) 23.1%
 - C) 64.0%
 - D) There is not enough information to calculate ROA.
 - E) None of the above

Answer: B

Rationale: ROA = Net Income / Average assets. We are not given Net income, but we do know that profit margin is 18%. Thus we can calculate:

Net income as Sales \times PM = $\$831,066 \times 18\% = \$149,592$
ROA = $\$149,592 / \$647,770 = 23.1\%$

Topic: Return on Assets—Numerical calculations required (more challenging because average assets are not provided; must be calculated.)

LO: 5

25. On December 31, 2016, Harley-Davidson, Inc., reported, on its Form 10-K, the following (in millions):

	2016	2015
Total assets	\$9,890	\$9,973
Total sales	\$5,996	\$5,995
Net income	\$692	\$752

Calculate return on assets (ROA) for 2016.

- A) 7.0%
- B) 62.8%
- C) 71.5%
- D) 7.5%
- E) None of the above

Answer: A

Rationale: Return on assets = Net income / Average assets. A simple way to calculate average assets is to take the average of the beginning and ending assets: $(\$9,890 + \$9,973) / 2 = \$9,932$.
ROA = $\$692 / \$9,932 = 0.0697 = 7.0\%$

Topic: Five Forces of Competitive Industry

LO: 4

26. Which of the following are *not* one of the five forces that determine a company's competitive intensity? (*Select as many as apply*)

- A) Bargaining power of suppliers
- B) Threat of substitution
- C) Ability to obtain financing
- D) Threat of entry
- E) Threat of regulatory intervention

Answer: C and E

Rationale: The five forces of the competitive industry include: industry competitors, bargaining power of buyers, bargaining power of suppliers, threat of substitution, and threat of entry.

Topic: Business Environment

LO: 4

27. Which of the following are relevant in an analysis of a company's business environment? (*Select as many as apply*)

- A) Financing
- B) Labor
- C) Buyers
- D) Governance
- E) All of the above

Answer: E

Rationale: The components of business analysis are: life cycle, outputs, buyers, inputs, competition, financing, labor, governance, and risk.

Exercises

Topic: Financial Accounting Vocabulary

LO: 3, 5

1. Match the item on the left to a numbered item on the right to complete each sentence.

- | | |
|---|---------------------|
| A) Resources that a company owns or controls are called _____. | 1. liabilities |
| B) The difference between a company's assets and its equity is equal to _____. | 2. return on assets |
| C) Net income divided by average assets is known as _____. | 3. assets |
| D) Sales, cost of goods sold and all other expenses are necessary to calculate a company's _____. | 4. income statement |
| | 5. net income |

Answer:

A) 3 B) 1 C) 2 D) 5

Topic: Financial Accounting Vocabulary

LO: 3

2. Match the item on the left to a numbered item on the right to complete each sentence.

- | | |
|---|-------------------------------------|
| A) Companies report assets, liabilities, and equity on the _____. | 1 income statement |
| B) Sales, cost of goods sold, and net income are found on the _____. | 2 balance sheet |
| C) Changes in contributed capital during the period are explained on the _____. | 3 statement of cash flows |
| D) The _____ reports cash from financing activities. | 4 statement of stockholders' equity |
| | 5 financial statements |

Answer:

A) 2 B) 1 C) 4 D) 3

Topic: Income Statement Components**LO: 3**

3. Fill in the blanks to complete Whole Foods' Income Statement (\$ millions).

WHOLE FOODS Income Statement For Year Ended September 25, 2016	
Sales	
Cost of goods sold and occupancy costs	
Gross profit	
Operating expenses	
Operating income	

Answer:

WHOLE FOODS Income Statement For Year Ended September 25, 2016	
Sales	
Cost of goods sold and occupancy costs	
Gross profit	
Operating expenses	
Operating income	

Topic: Income Statement Components**LO: 3**

4. Fill in the blanks to complete Procter & Gamble's Income Statement (\$ millions).

PROCTER & GAMBLE Income Statement For Year Ended June 30, 2016	
Sales	\$?
Expenses	<u>51,930</u>
Earnings before income taxes	13,369
Income taxes	<u>?</u>
Net earnings from continuing operations	\$10,027
Net earnings from discontinued operations	<u>577</u>
Net earnings	<u>\$10,604</u>

Answer:

PROCTER & GAMBLE Income Statement For Year Ended June 30, 2016	
Sales	\$65,299
Expenses	<u>51,930</u>
Earnings before income taxes	13,369
Income taxes	<u>3,342</u>
Net earnings from continuing operations	\$10,027
Net earnings from discontinued operations	<u>577</u>
Net earnings	<u>\$10,604</u>

Topic: Statement of Cash Flow Components**LO: 3**

5. Fill in the blanks to complete Whole Food's Statement of Cash Flows (\$ millions).

WHOLE FOODS Statement of Cash Flows For Year Ended September 25, 2016	
Net cash from operating activities	\$1,116
Net cash from investing activities	(895)
Net cash from financing activities	<u>(107)</u>
Net change in cash	?
Cash at beginning of year	<u>?</u>
Cash at end of year	<u>\$ 351</u>

Answer:

WHOLE FOODS Statement of Cash Flows For Year Ended September 25, 2016	
Net cash from operating activities	\$1,116
Net cash from investing activities	(895)
Net cash from financing activities	<u>(107)</u>
Net change in cash	114
Cash at beginning of year	<u>237</u>
Cash at end of year	<u>\$ 351</u>

Topic: Balance Sheet Components**LO: 3**

6. Fill in the blanks to complete Whole Foods' Balance Sheet (\$ millions).

WHOLE FOODS Balance Sheet September 25, 2016			
Cash	\$ 351	Current liabilities	\$ 1,341
Non-cash assets	?	Long-term liabilities	?
		Stockholders' equity	<u>3,224</u>
Total assets	<u>\$6,341</u>	Total liabilities and equity	<u>\$?</u>

Answer:

WHOLE FOODS Balance Sheet September 25, 2016			
Cash	\$ 351	Current liabilities	\$ 1,341
Non-cash assets	5,990	Long-term liabilities	1,776
		Stockholders' equity	<u>3,224</u>
Total assets	<u>\$6,341</u>	Total liabilities and equity	<u>\$ 6,341</u>

Topic: Balance Sheet Components**LO: 3**

7. Fill in the blanks to complete the Procter & Gamble Balance Sheet (\$ millions).

PROCTER & GAMBLE Balance Sheet June 30, 2016			
Cash	\$ 7,102	Current liabilities	\$?
Non-cash assets	?	Long-term liabilities	38,383
		Stockholders' equity	57,983
Total assets	<u>\$?</u>	Total liabilities and equity	<u>\$127,136</u>

Answer:

PROCTER & GAMBLE Balance Sheet June 30, 2016			
Cash	\$ 7,102	Current liabilities	\$ 30,770
Non-cash assets	120,034	Long-term liabilities	38,383
		Stockholders' equity	57,983
Total assets	<u>\$127,136</u>	Total liabilities and equity	<u>\$127,136</u>

Topic: Retained Earnings Reconciliation**LO: 3**

8. Whole Foods reports the following balances in its stockholders' equity accounts. Fill in the blanks.

(\$ millions)	2016	2015	2014
Retained earnings beginning of year	?	?	\$1,265
Net income	?	536	579
Dividends	(174)	(186)	?
Other	(1)	(1)	0
Retained earnings end of year	<u>\$2,349</u>	<u>\$2,017</u>	<u>?</u>

Answer:

(\$ millions)	2016	2015	2014
Retained earnings beginning of year	\$2,017	\$1,668	\$1,265
Net income	507	536	579
Dividends	(174)	(186)	(176)
Other	(1)	(1)	0
Retained earnings end of year	<u>\$2,349</u>	<u>\$2,017</u>	<u>\$1,668</u>

Topic: Return on Assets**LO: 5**

9. Procter & Gamble reports the following items in their financial statements. Fill in the blanks.

(\$ millions)	2016	2015
Average assets	\$128,316	\$136,881
Net earnings	10,604	?
Return on assets	?	5.219%

Answer:

(\$ millions)	2016	2015
Average assets	\$128,316	\$136,881
Net earnings	10,604	7,144
Return on assets	8.264%	5.219%

Topic: Return on Assets**LO: 5**

10. Whole Foods reports the following items in their financial statements. Fill in the blanks.

(\$ millions)	2016
Average assets	
Sales	
Net income	
Return on assets	
Profit margin	
Asset turnover	

Answer:

(\$ millions)	2016
Average assets	
Sales	
Net income	
Return on assets	
Profit margin	
Asset turnover	

Problems

Topic: Other Financial Information

LO: 3

1. In addition to the four financial statements, list three sources of financial information available to external stakeholders?

Answer:

Any three from the list below

- Management Discussion and Analysis (MD&A)
- Management's report on internal controls
- Annual corporate report
- Auditor's report and opinion
- Notes to financial statements
- Proxy statements
- Various regulatory filings for SEC and IRS, etc.

Topic: Constructing Financial Statements

LO: 3

2. In its October 2, 2016 annual report, Starbucks Corporation reports the following items.

(\$ millions)	2016
Cash flows from operations	\$4,575.1
Total revenues	21,315.9
Shareholders' equity	5,890.7
Cash flows from financing	(1,753.5)
Total liabilities	8,438.8
Cash, ending year	2,128.8
Expenses	18,497.0
Noncash assets	12,200.7
Cash flows from investing	(2,222.9)
Net earnings	2,818.9
Cash, beginning year	1,530.1

- a. Prepare the balance sheet for Starbucks for October 2, 2016.
- b. Prepare the income statement for Starbucks for the year ended October 2, 2016.
- c. Prepare the statement of cash flows for Starbucks for the year ended October 2, 2016.

Answer:

a.

STARBUCKS CORPORATION			
Balance Sheet			
October 2, 2016			
(\$ millions)			
Cash	\$2,128.8	Total liabilities	\$8,438.8
Non-cash assets	<u>12,200.7</u>	Shareholders' equity	<u>5,890.7</u>
Total assets	<u>\$14,329.5</u>	Total liabilities and equity	<u>\$14,329.5</u>

b.

STARBUCKS CORPORATION	
Income Statement	
For Year Ended October 2, 2016	
(\$ millions)	
Total revenues	\$21,315.9
Expenses	<u>18,497.0</u>
Net earnings	<u>\$2,818.9</u>

c.

STARBUCKS CORPORATION	
Statement of Cash Flows	
For Year Ended October 2, 2016	
(\$ millions)	
Cash flows from operations	\$4,575.1
Cash flows from investing	(2,222.9)
Cash flows from financing	<u>(1,753.5)</u>
Net change in cash	598.7
Cash, beginning year	<u>1,530.1</u>
Cash at end of year	<u>\$2,128.8</u>

Topic: Constructing Financial Statements**LO: 3**

3. In its December 31, 2016 annual report, Mattel, Inc. reports the following items.

(\$ thousands)	2016
Net cash flows from operating activities	\$594,509
Net sales	5,456,650
Stockholders' equity	2,407,782
Net cash flows from financing activities	(305,882)
Total assets	6,493,794
Cash, ending year	869,531
Expenses	5,138,628
Noncash assets	5,624,263
Net cash flows from investing activities	(311,910)
Net income	318,022
Cash, beginning year	\$892,814

- Prepare the balance sheet for Mattel, Inc. for December 31, 2016.
- Prepare the income statement for Mattel, Inc. for the year ended December 31, 2016.
- Prepare the statement of cash flows for Mattel, Inc. for the year ended December 31, 2016.

Answer:

a.

MATTEL, INC. Balance Sheet December 31, 2016 (\$ thousands)			
Cash	\$869,531	Total liabilities	\$4,086,012
Noncash assets	5,624,263	Stockholders' equity	2,407,782
Total assets	<u>\$6,493,794</u>	Total liabilities and equity	<u>\$6,493,794</u>

b.

MATTEL, INC. Income Statement For Year Ended December 31, 2016 (\$ thousands)	
Net sales	\$5,456,650
Expenses	<u>5,138,628</u>
Net income	<u>\$318,022</u>

c.

MATTEL, INC. Statement of Cash Flows For Year Ended December 31, 2016 (\$ thousands)	
Net cash flows from operating activities	\$594,509
Net cash flows from investing activities	(311,910)
Net cash flows from financing activities	<u>(305,882)</u>
Net change in cash	(23,283)
Cash, beginning year	<u>892,814</u>
Cash at end of year	<u>\$869,531</u>

Topic: Statement of stockholders' equity from raw data**LO: 3**

4. In its December 31, 2016, annual report, Mattel, Inc. reports the following items:

(\$ thousands)	2016
Retained earnings, December 31, 2015	\$3,745,815
Treasury stock, December 31, 2015	(2,494,901)
Treasury stock, December 31, 2016	(2,246,749)
Net income for 2016	318,022
Contributed capital, December 31, 2015	2,231,239
Dividends during 2016	518,478
Stock issued during 2016	962

Prepare the statement of stockholders' equity for Mattel, Inc. for the year ended December 31, 2016.

Answer:

MATTEL, INC. Statement of Stockholders' Equity For Year Ended December 31, 2016				
	Contributed Capital	Retained Earnings	Other Equity	Total
December 31, 2015	\$2,231,239	\$3,745,815	\$(2,494,901)	\$3,482,153
Net income		318,022		318,022
Stock issuance	962			962
Dividends		(518,478)		(518,478)
Other (Treasury stock)			68,152	68,152
December 31, 2016	<u>\$2,232,201</u>	<u>\$3,545,359</u>	<u>\$(2,426,749)</u>	<u>\$3,350,811</u>

Topic: Balance Sheet Relations**LO: 3**

5. Nike, Inc. has a fiscal year-end of May 31. On May 31, 2015, Nike, Inc. reported \$21,597 million in assets and \$12,707 million in equity. During fiscal 2016, Nike's assets decreased by \$201 million while its equity decreased by \$449 million.

What were Nike's total liabilities at May 31, 2015 and May 31, 2016?

Answer:

Assets = Liabilities + Equity

May 31, 2015: \$21,597 = Liabilities + \$12,707; Liabilities = \$8,890

May 31, 2016: \$21,597 - \$201 = Liabilities + (\$12,707 - \$449); Liabilities = \$9,138.

Topic: Calculating ROA**LO: 5**

6. Use Southwest Airlines' 2016 financial statement information, below to answer the following:

- a. Calculate Southwest Airlines' return on assets (ROA) for the year ending December 31, 2016.
- b. Disaggregate Southwest Airlines' ROA into profit margin (PM) and asset turnover (AT). Explain what each ratio measures.

(\$ millions)	
Total operating revenues	\$20,425
Net income	2,244
Total assets, beginning of year	21,312
Total assets, end of year	23,286
Equity, end of year	8,441

Answer:

- a. $\text{Return on Assets} = \text{Net income} / \text{Average assets}$
 $= \$2,244 / [0.5 \times (\$21,312 + \$23,286)] = 10.06\%$

Return on assets measures profitability of a company—specifically, how well a company has employed its average assets in generating net income.

- b. $\text{Profit Margin} = \text{Net income} / \text{Sales}$
 $= \$2,244 / \$20,425 = 10.99\%$

Profit Margin is an income to sales ratio that reflects the profitability of sales of a company. Southwest Airlines has a profit margin of 10.99% meaning the company records 10.99 cents of net income (after paying taxes) for every dollar of sales.

$$\text{Asset Turnover} = \text{Sales} / \text{Average assets}$$
$$= \$20,425 / [0.5 \times (\$21,312 + \$23,286)] = 0.916$$

Asset turnover reflects the effectiveness in generating sales from assets. Southwest Airlines' asset turnover ratio of 0.916, means that the company generates \$0.916 in sales for every \$1.00 of assets.

Topic: Calculating ROA and ROE**LO: 5**

7. Below are several financial statement items for fiscal year 2016 for two grocery chains, Whole Foods Market, an upscale organic grocer, and The Kroger Co. a mainstream grocer. (\$ millions)

(\$ millions)	Whole Foods Market	The Kroger Co.
Net income	\$ 507	\$ 1,957
Sales	15,724	115,337
Average assets	6,041	35,201
Average stockholders' equity	3,497	6,754

- Calculate each company's return on assets (ROA) and return on equity (ROE). Comment on any differences you observe.
- Disaggregate the ROA for each company into profit margin (PM) and asset turnover (AT). Explain why Whole Foods has a higher ROA, is it because of PM or AT or both?

Answer:

- Return on Assets = Net income / Average assets

Whole Foods = $\$507 / \$6,041 = 8.39\%$;

Kroger = $\$1,957 / \$35,201 = 5.56\%$

Return on equity = Net income / Average stockholders' equity

Whole Foods: = $\$507 / \$3,497 = 14.50\%$;

Kroger = $\$1,957 / \$6,754 = 28.98\%$

While Whole Foods has a higher return on assets than Kroger; Kroger has a higher return on equity.

- Profit margin = Net income / Sales

Whole Foods = $\$507 / \$15,724 = 3.22\%$;

Kroger = $\$1,957 / \$115,337 = 1.70\%$

Asset turnover = Sales / Average assets

Whole Foods = $\$15,724 / \$6,041 = 2.60$;

Kroger = $\$115,337 / \$35,201 = 3.28$

Whole Foods has a higher return on assets because its profit margin is higher than Kroger's. This appears reasonable since Whole Foods is an upscale grocer. Kroger's asset turnover is higher than Whole Foods turnover. Thus, Kroger is more efficient.

Topic: Competitive Analysis**LO: 4**

8. List three of the five competitive forces that confront the company and determine its competitive intensity. Briefly explain each force that you list.

Answer:

These following are the five forces that are key determinants of profitability.

- 1) Industry competition: Competition and rivalry raise the cost of doing business as companies must hire and train competitive workers, advertise products, research and develop products, and other related activities.
- 2) Bargaining power of buyers: Buyers with strong bargaining power can extract price concessions and demand a higher level of service and delayed payment terms; this force reduces both profits from sales and the operating cash flows to sellers.
- 3) Bargaining power of suppliers: Suppliers with strong bargaining power can demand higher prices and earlier payments, yielding adverse effects on profits and cash flows to buyers.
- 4) Threat of substitution: As the number of product substitutes increases, sellers have less power to raise prices and/or pass on costs to buyers; accordingly, threat of substitution places downward pressure on profits of sellers.
- 5) Threat of entry: New market entrants increase competition; to mitigate that threat, companies expend monies on activities such as new technologies, promotion, and human development to erect barriers to entry and to create economies of scale.

Topic: The Effect of the Sarbanes-Oxley Act**LO: 5**

10. Accounting debacles, such as in the case of Enron, brought to light the necessity of accuracy in financial reporting and accountability of management. Describe how the introduction of the Sarbanes-Oxley Act has changed the requirements of financial reporting.

Answer:

Congress introduced the Sarbanes-Oxley act as a way of restoring confidence in the integrity of financial statement reporting of publicly traded companies. The Act requires the chief executive officer and chief financial officer of the company to personally sign-off on the accuracy and completeness of financial statements and the integrity of the company's system of internal controls. This requirement is designed to hold management personally accountable for negligence in financial reporting and encourage vigilance in monitoring the company's financial accounting system.

Essay Questions

Topic: Costs and Benefits of Disclosure

LO: 1

1. Explain the benefits and costs associated with a company's disclosure of information.

Answer:

Supplying information benefits a company by helping it to compete in capital, labor, input, and output markets. A company's performance hinges on successful business activities and the markets' awareness of that success. Economic incentives exist for those companies that disclose reliable accounting information, especially when the company discloses good news about products, processes, management, etc. Direct costs associated with the disclosure of information pertain to its preparation and dissemination. More significant are other costs including competitive disadvantage, litigation potential, and political costs. Managers must weigh these costs and benefits to determine how much information to voluntarily disclose.

Topic: Demand for Financial Accounting Information

LO: 2

2. List three users of financial accounting information and explain how each might use financial information.

Answer:

Managers and employees—Managers and employees demand financial information on the financial condition, profitability and prospects of their companies for their own well-being and future earnings potential. They also demand comparative financial information on competing companies and other business opportunities. This permits them to conduct comparative analyses to benchmark company performance and condition.

Investment Analysts and information intermediaries—Investment analysts and other information intermediaries, such as financial press writers and business commentators, are interested in predicting companies' future performance. Expectations about future profitability and the ability to generate cash impact stock price and a company's ability to borrow money at favorable terms. Financial reports reflect information about past performance, current resources available to companies, and information about claims on those resources. This information allows analysts to make informed assessments about future financial performance and condition so they can provide stock recommendations or write commentaries.

Creditors and suppliers—Creditors and other lenders demand financial accounting information to help decide loan terms, dollar amounts, interest rates and collateral. Suppliers similarly demand financial information to establish credit sales terms and to determine their long-term commitment to supply-chain relations. Both creditors and suppliers use financial information to continuously monitor and adjust their contracts and commitments with a debtor company.

Stockholders and directors—Shareholders and directors demand financial accounting information to assess the profitability and risks of companies. Shareholders look for information useful in their investment decisions. Both directors and shareholders use accounting information to evaluate manager performance. Managers similarly use such information to request further compensation and managerial power from directors. Outside directors are crucial to determining who runs the company, and these directors use accounting information to evaluate manager performance.

Continued next page

Customers and strategic partners—Customers demand accounting information to assess the ability of the company to provide products or services as agreed and to assess the company's staying power and reliability. Strategic partners wish to estimate the company's profitability to assess the fairness of returns on mutual transactions and strategic alliances.

Regulators and tax agencies—Regulators and tax agencies demand accounting information for tax policies, antitrust assessments, public protection, price setting, import-export analyses and various other uses. Timely and reliable information is crucial to effective regulatory policy. Moreover, accounting information is often central to social and economic policy.

Voters and their representatives—Voters and their representatives to national, state and local governments demand accounting information for policy decisions. The decisions can involve economic, social, taxation and other initiatives. Voters and their representatives also use accounting information to monitor government spending. Contributors to nonprofit organizations also demand accounting information to assess the impact of their donations.

Topic: Balance Sheet Components

LO: 3

3. What are the three broad groups that make up a balance sheet? List and define each.

Answer:

Assets—Investments which are expected to produce revenues, either directly when the asset is sold or indirectly, like a manufacturing plant that produces inventories for sale or a corporate office building that house employees supporting revenue-generating activities of the company.

Liabilities—Borrowed funds (accounts payable, accrued liabilities, and obligations to lenders or bond investors).

Equity—Capital that has been invested by the shareholders, either directly via the purchase of stock (net of any repurchases of stock from its shareholders by the company) or indirectly in the form of retained earnings that have been reinvested into the business and not paid out as dividends.

Topic: Owner vs. Nonowner Financing

LO: 3

4. Businesses rely on financing activities to fund their operating and investments. Explain the difference between owner and nonowner financing, and explain the benefits and risks involved in relying more heavily on each type of financing.

Answer:

Owner financing, also called equity, refers to money given to the business in exchange for partial control of the company. Stocks are the most common form of owner financing. Companies are not obligated to guarantee a return on owner investments. However, if returns are unacceptable to owners, they may use their power to take the business in different directions. In sum, owner financing provides cash inflow to the company without any guarantee of repayment. Control over the company is vested in the shareholders.

Nonowner financing refers to money given to the business in exchange for a guaranteed repayment, usually with interest. Loans and bonds are very common examples of nonowner investment. The risk to the company lies in potential default if operations decline. The benefit is that the company does not need to cede operational control to its creditors, unless it defaults on its repayment. In sum, nonowner financing allows the current owners to maintain full control of the company, but requires repayment with interest.

Companies that rely more heavily on owner financing are said to be financed conservatively. Companies that rely more heavily on nonowner financing are said to be financed less conservatively.

Topic: Usefulness of ROA for Managers

LO: 5

5. Investors and lenders place significant importance on management's effectiveness in generating a high return on assets (ROA). Explain how ROA is also important for managers' analysis of its own performance, particularly when ROA is disaggregated.

Answer:

Return on assets (ROA) is a helpful measure of a company's profitability. In its most basic form, ROA is a ratio between net income and average assets, i.e. it indicates the return the company is earning from its assets. While ROA is a valuable indicator for investors, it is just as valuable for company managers. This is because ROA indicates how successful managers are in acquiring and using investments on behalf of shareholders. ROA is particularly useful for managers when it is disaggregated into more focused, meaningful components.

Return on assets can be disaggregated into profit margin (PM), which measures profitability and asset turnover (AT), which measures efficiency or productivity.

The ratio of net income to sales is called profit margin and the ratio of sales to average assets is called asset turnover. The profit component reflects the amount of profit from each dollar of sales, and the productivity component reflects the effectiveness in generating sales from assets.

This disaggregation yields additional insights into the factors that cause overall ROA to change during the year. It could be that the company is more or less profitable or that the company is more or less efficient or both. This disaggregation provides more information than just knowing that ROA has increased or decreased during the year.