

# Module 1

## Framework for Analysis and Valuation

<b>Learning Objectives – coverage by question</b>					
	True/False	Multiple Choice	Exercises	Problems	Essays
<b>LO1</b> – Identify and discuss the users and suppliers of financial statement information.	1-4	1, 2	-	1	1, 2
<b>LO2</b> – Identify and explain the four financial statements, and define the accounting equation.	5-10	3-19	1-8	2-5	3, 4
<b>LO3</b> – Describe business analysis within the context of a competitive environment.	11	20, 21	-	6	-
<b>LO4</b> – Explain and apply the basics of profitability analysis.	12-14	22-27	9, 10	7, 8	5

## Module 1: Framework for Analysis and Valuation

### True/False

#### Topic: Users of Financial Statement Information

##### LO: 1

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: 1

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: 1

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: 1

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

*Answer:* False

*Rationale:* Quarterly reports do not need to be audited.

#### Topic: Balance Sheet

##### LO: 2

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: 2**

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: 2**

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: 2**

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: 2**

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: 2**

10. An increase in treasury 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 treasury stock.

**Topic: Financial Accounting and Business Analysis**

**LO: 3**

11. 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.

**Topic: Return on Assets**

**LO: 4**

12. 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: 4**

13. 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: 4**

14. Consider two companies (A and B) with equal profit margins of 15%. 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 is expensive to turn 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:  $15\% \times 1.2 = 18\%$  whereas Company B's ROA is  $15\% \times 1.5 = 22.5\%$ .

## Multiple Choice

### Topic: Users of Financial Statement Information

#### LO: 1

1. Which of the following groups would likely *not* be interested in the financial statements of a large public company such as Berkshire Hathaway?
  - 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: 1

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: 2

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: 2**

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) Sales
  - E) Cost of Goods Sold

*Answer:* D and E

*Rationale:* The balance sheet reports assets (including property, plant and equipment), liabilities (including nonowner financing) and equity. Sales and Cost of Goods Sold appear on the income statement.

**Topic: Profit and Cash Flow**

**LO: 2**

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: 2**

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: 2**

7. The Goodyear Tire & Rubber Company's December 31, 2013 financial statements reported the following (in millions)

Total assets	\$17,527
Total liabilities	15,659
Total shareholders' equity	1,868
Net income (loss)	675
Retained earnings, December 31, 2012	\$ 1,370

What did Goodyear report for retained earnings at December 31, 2013?

- A) \$1,624 million
- B) \$1,173 million
- C) \$ 523 million
- D) \$2,833 million
- E) There is not enough information to determine the answer.

*Answer:* E

*Rationale:* To determine the balance in retained earnings at the end of the year we must also know the amount of dividends (if any) paid by the company during the year.

**Topic: Balance Sheet – Numerical calculations required**

**LO: 2**

8. American Airlines' 2012 balance sheet reported the following (in millions)

Total Assets	\$25,612
Total Liabilities	35,272
Contributed Capital	\$5,361

What was American Airlines' total liabilities and stockholders' equity at December 31, 2012?

- A) \$33,226 million
- B) \$25,612 million
- C) \$37,695 million
- D) \$ 4,469 million
- E) There is not enough information to determine the answer.

*Answer:* B

*Rationale:* Assets = Liabilities + Stockholders Equity. Assets = \$25,612 so this is the total of liabilities and equity combined.

**Topic: Balance Sheet – Numerical calculations required**

**LO: 2**

9. On September 29, 2013 Starbucks Corporation reported, on its Form 10-K, the following (in millions):

Total assets	\$11,516.7
Total stockholders' equity	4,482.3
Total current liabilities	5,377.3

What did Starbucks report as total liabilities on September 29, 2013?

- A) \$11,516.7 million
- B) \$ 5,377.3 million
- C) \$ 895.0 million
- D) \$ 7,034.4 million
- E) None of the above

*Answer:* D

*Rationale:* Assets = Liabilities + Stockholders Equity.  $\$11,516.7 = \text{Liabilities} + \$4,482.3$ .  
Therefore, Liabilities = \$7,034.4 on September 29, 2013.

**Topic: Balance Sheet – Numerical calculations required**

**LO: 2**

10. In its 2013 annual report, Snap-On Incorporated reported the following (in millions):

Current assets	\$1,796.2
Total shareholders' equity	\$2,130.4
Total liabilities	\$1,979.6

What did Snap-On report as total assets at year-end 2013?

- A) \$3,775.8 million
- B) \$1,796.2 million
- C) \$4,110.0 million
- D) \$3,926.6 million
- E) None of the above

*Answer:* C

*Rationale:* Assets = Liabilities + Stockholders Equity. Assets =  $\$1,979.6 + \$2,130.4$ .  
Therefore, Assets = \$4,110.0



**Topic: Balance Sheet – Numerical calculations required**

**LO: 2**

11. In its 2013 annual report, Kohl's Corporation reported the following (in millions):

Total assets	\$13,905
Total shareholders' equity	\$ 6,048
Total liabilities	\$ 7,857

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

- A) 56.5%
- B) 54.2%
- C) 43.5%
- 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).  $\$7,857 / \$13,905 = 56.5\%$ .

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

**LO: 2**

12. In its 2013 annual report, Mattel Inc. reported the following (in millions):

Total liabilities	\$ 3,188
Total shareholders' equity	\$ 3,252

What proportion of Mattel is financed by nonowners?

- A) 54.6%
- B) 53.0%
- C) 88.6%
- D) 49.50%
- 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 =  $\$3,188 + \$3,252 = \$6,440$ .  $\$3,188 / \$6,440 = 49.50\%$ .

**Topic: Income Statement – Numerical calculations required**

**LO: 2**

13. The Goodyear Tire & Rubber Company's December 31, 2013 financial statements reported the following (in millions)

Sales	\$19,540
Cost of sales	\$15,422
Other expenses (excluding cost of sales)	\$ 3,443

What did Goodyear report for net income for the year ending December 31, 2013?

- A) \$ 4,118 million
- B) \$ 675 million
- C) \$ (675) million
- D) \$19,238 million
- E) There is not enough information to determine the answer.

*Answer:* B

*Rationale:* Sales – Cost of sales – Other expenses = Net income  
 $\$19,540 - \$15,422 - \$3,443 = \$675$

**Topic: Income Statement – Numerical calculations required**

**LO: 2**

14. Intel Corporation reported the following on its 2013 income statement (in millions)

Sales revenue	\$52,708
Gross profit	\$31,521
Total expenses	\$19,230

What did Intel report for cost of goods sold during 2013?

- A) \$21,187 million
- B) \$ 5,502 million
- C) \$33,478 million
- D) \$12,291 million
- E) None of the above

*Answer:* A

*Rationale:* Sales – Cost of goods sold = Gross profit.  $\$52,708 - \text{Cost of goods sold} = \$31,521$ .  
Therefore, Cost of goods sold = \$21,187.

**Topic: Income statement – Numerical calculations required**

**LO: 2**

15. On September 29, 2013, Starbucks Corporation reported, on its Form 10-K, the following (in millions):

	2013	2012
Total expenses	\$14,883.4	\$11,914.8
Operating income (loss)	\$(325.4)	\$1,997.4
Net earnings	\$8.8	\$1,384.7

What amount of revenues did Starbucks report for the year ending September 29, 2013?

- A) \$14,883.4
- B) \$15,208.8
- C) \$14,558.0
- D) \$14,892.2
- E) None of the above

*Answer:* D

*Rationale:* Revenues – Total expenses = Net earnings. Revenues – \$14,883.4 = \$8.8. Therefore, Revenues were \$14,892.2

**Topic: Income Statement – Numerical calculations required (more challenging, requires calculation of negative “growth” rate.)**

**LO: 2**

16. On September 29, 2013, Starbucks Corporation reported, on its Form 10-K, the following (in millions):

	2013	2012
Operating income (loss)	\$(325.4)	\$1,997.4
Net earnings	\$8.8	\$1,384.7

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

- A) (83.7)%
- B) 32.0 %
- C) 156.4 %
- D) (99.4)%
- E) None of the above

*Answer:* D

*Rationale:* During the year, net earnings decreased compared to the prior year. This decrease is calculated as  $(\$8.8 - \$1,384.7) / \$1,384.7 = (99.4)\%$ .

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

**LO: 2**

17. In its 2013 annual report, Caterpillar Inc. reported the following (in millions):

	2013	2012
Sales	\$55,656	\$65,875
Cost of goods sold	\$40,727	\$47,055

As a percentage of sales, did Caterpillar's gross profit increase or decrease during 2013?

- A) Gross profit increased from 26.8% to 28.6%
- B) Gross profit decreased from 28.6% to 26.8%
- 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 2012, gross profit to sales was 28.6%. This ratio decreased to 26.8% in 2013.

**Topic: Statement of Cash Flows – Numerical calculations required**

**LO: 2**

18. The Goodyear Tire & Rubber Company's December 31, 2013, financial statements reported the following (in millions).

Cash December 31, 2013	2,996
Cash from operating activities	\$938
Cash from investing activities	\$(1,136)
Cash from financing activities	\$913

What did Goodyear report for cash on its December 31, 2012 balance sheet?

- A) \$ 2,281 million
- B) \$32,281 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 + \$938 – \$1,136 + \$913 = \$2,996. Cash, beginning of year = \$2,281

**Topic: Statement of Cash Flows – Numerical calculations required**

**LO: 2**

19. Procter & Gamble's June 30, 2013, financial statements reported the following (in millions):

Cash, beginning of year	\$ 4,436
Cash, end of year	\$ 5,947
Cash from operating activities	\$14,873
Cash from investing activities	\$ (6,295)

What did Procter & Gamble report for cash from financing activities for the year ended June 30, 2013?

- A) \$ 13,014 million
- B) \$ 18,961 million
- C) \$(18,961) million
- D) \$ (7,067) 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

$\$4,436 + \$14,873 - \$6,295 + \text{Cash from financing} = \$5,947$ . Cash from financing =  $\$(7,067)$

**Topic: Five Forces of Competitive Industry**

**LO: 3**

20. Which of the following are *not* one of the five forces that determine a company's competitive intensity? (Select all that 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: 3**

21. Which of the following are relevant in an analysis of a company's business environment? (Select all that 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.

**Topic: Return on Assets**

**LO: 4**

22. 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: 4**

23. 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: 4**

24. Sales for the year = \$216,588, Net Income for the year = \$29,288, Income from equity investments = \$6,618, and average Equity during the year = \$95,112. Return on equity (ROE) for the year is:
- A) 30.8%
  - B) 12.1%
  - C) 43.9%
  - D) 227.6%
  - E) There is not enough information to answer the question.

*Answer:* A

*Rationale:* Return on equity = Net income / Average Equity = \$29,288 / \$95,112 = 30.8%.

**Topic: Return on Assets – Numerical calculations required**

**LO: 4**

25. Sales for the year = \$164,458, Net Income for the year = \$18,372, and average Assets during the year = \$104,890. Return on Assets (ROA) for the year is:
- A) 63.8%
  - B) 17.5%
  - C) 10.0%
  - 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  $\$18,372 / \$104,890 = 17.5\%$ .

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

**LO: 4**

26. Sales for the year = \$554,044, Profit margin = 24%, and average Assets during the year = \$518,216. Return on Assets (ROA) for the year is:
- A) 17.1%
  - B) 25.7%
  - C) 84.0%
  - 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 24%. Thus we can calculate:  
Net income as Sales  $\times$  PM = \$132,971.  
ROA =  $\$132,971 / \$518,216 = 25.7\%$ .

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

**LO: 4**

27. On December 31, 2013, Harley-Davidson, Inc. reported the following on its Form 10-K (in millions):

	2013	2012
Total assets	\$9,405	\$9,171
Total sales	\$5,900	\$5,581
Net income	\$734	\$624

Calculate return on assets (ROA) for 2013.

- A) 7.9%
- B) 62.7%
- C) 71.5%
- D) 8.3%
- 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:  $(\$9,405 + \$9,171) / 2 = \$9,288$ .  
ROA =  $\$734 / \$9,288 = 7.9\%$ .

## Exercises

### Topic: Financial Accounting Vocabulary

#### LO: 2

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: 2

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 shareholders' equity |
|   | 5. financial statements              |

*Answer:*

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



**Topic: Income Statement Components**

**LO: 2**

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

<b>WHOLE FOODS</b> <b>Income Statement</b> <b>For Year Ended September 29, 2013</b>	
Sales	\$12,917
Cost of goods sold and occupancy costs	<u>?</u>
Gross profit	\$ 4,629
Operating expenses	<u>?</u>
Operating income	<u>\$ 883</u>

*Answer:*

<b>WHOLE FOODS</b> <b>Income Statement</b> <b>For Year Ended September 29, 2013</b>	
Sales	\$12,917
Cost of goods sold and occupancy costs	<u><b>8,288</b></u>
Gross profit	\$ 4,629
Operating expenses	<u><b>3,746</b></u>
Operating income	<u>\$ 883</u>

**Topic: Income Statement Components**

**LO: 2**

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

<b>PROCTER &amp; GAMBLE</b> <b>Income Statement</b> <b>For Year Ended June 30, 2013</b>	
Sales	\$ ?
Expenses	<u>69,324</u>
Earnings before income taxes	14,843
Income taxes	<u>?</u>
Net earnings	<u>\$ 11,402</u>

*Answer:*

<b>PROCTER &amp; GAMBLE</b> <b>Income Statement</b> <b>For Year Ended June 30, 2013</b>	
Sales	<u><b>\$ 84,167</b></u>
Expenses	<u>69,324</u>
Earnings before income taxes	14,843
Income taxes	<u><b>3,441</b></u>
Net earnings	<u>\$ 11,402</u>

**Topic: Statement of Cash Flow Components**

**LO: 2**

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

<b>WHOLE FOODS</b> <b>Statement of Cash Flows</b> <b>For Year Ended September 29, 2013</b>	
Net cash from operating activities	\$1,009
Net cash from investing activities	(289)
Net cash from financing activities	<u>(519)</u>
Net change in cash	?
Cash at beginning of year	<u>?</u>
Cash at end of year	<u>\$ 290</u>

*Answer:*

<b>WHOLE FOODS</b> <b>Statement of Cash Flows</b> <b>For Year Ended September 29, 2013</b>	
Net cash from operating activities	\$ 1,009
Net cash from investing activities	(289)
Net cash from financing activities	<u>(519)</u>
Net change in cash	<b>201</b>
Cash at beginning of year	<u><b>89</b></u>
Cash at end of year	<u>\$ 290</u>

**Topic: Balance Sheet Components**

**LO: 2**

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

<b>WHOLE FOODS</b> <b>Balance Sheet</b> <b>September 29, 2013</b>			
Cash	\$ 290	Current liabilities	\$ 1,088
Non-cash assets	?	Long-term liabilities	?
		Stockholders' equity	<u>3,878</u>
Total assets	<u>\$5,538</u>	Total liabilities and equity	<u>\$ ?</u>

*Answer:*

<b>WHOLE FOODS</b> <b>Balance Sheet</b> <b>September 29, 2013</b>			
Cash	\$ 290	Current liabilities	\$ 1,088
Non-cash assets	<b>5,248</b>	Long-term liabilities	<b>572</b>
		Stockholders' equity	<u>3,878</u>
Total assets	<u>\$5,538</u>	Total liabilities and equity	<u>\$ 5,538</u>

**Topic: Balance Sheet Components**

**LO: 2**

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

<b>PROCTER &amp; GAMBLE</b>			
<b>Balance Sheet</b>			
<b>June 30, 2013</b>			
Cash	\$ 5,947	Current liabilities	\$ ?
Non-cash assets	?	Long-term liabilities	40,517
		Shareholders' equity	<u>68,709</u>
Total assets	<u>\$ ?</u>	Total liabilities and equity	<u>\$139,263</u>

*Answer:*

<b>PROCTER &amp; GAMBLE</b>			
<b>Balance Sheet</b>			
<b>June 30, 2013</b>			
Cash	\$ 5,947	Current liabilities	<b>\$ 30,037</b>
Non-cash assets	<b>133,316</b>	Long-term liabilities	40,517
		Shareholders' equity	<u>68,709</u>
Total assets	<u><b>\$ 139,263</b></u>	Total liabilities and equity	<u>\$139,263</u>

**Topic: Retained Earnings Reconciliation**

**LO: 2**

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

<i>(\$ millions)</i>	2013	2012	2011
Retained earnings beginning of year	?	?	\$598
Net income	?	466	343
Dividends	<u>(519)</u>	<u>(103)</u>	?
Retained earnings end of year	<u>\$1,265</u>	<u>\$1,233</u>	?

*Answer:*

<i>(\$ millions)</i>	2013	2012	2011
Retained earnings beginning of year	<b>\$1,233</b>	<b>\$870</b>	\$598
Net income	<b>551</b>	466	343
Dividends	<u>(519)</u>	<u>(103)</u>	<b>(71)</b>
Retained earnings end of year	<u>\$1,265</u>	<u>\$1,233</u>	<b>\$870</b>

**Topic: Return on Assets****LO: 4**

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

<i>(\$ millions)</i>	2013	2012
Average assets	\$135,754	\$135,299
Net earnings	11,402	?
Return on assets	?	8.059%

*Answer:*

<i>(\$ millions)</i>	2013	2012
Average assets	\$135,754	\$135,299
Net earnings	11,402	<b>10,904</b>
Return on assets	<b>8.400%</b>	8.059%

**Topic: Return on Assets****LO: 4**

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

<i>(\$millions)</i>	2013
Average assets	\$5,416
Sales	12,917
Net income	551
Return on assets	?
Profit margin	?
Asset turnover	?

*Answer:*

<i>(\$millions)</i>	2013
Average assets	\$5,416
Sales	12,917
Net income	551
Return on assets	10.17%
Profit margin	4.27%
Asset turnover	2.38

## Problems

### Topic: Other Financial Information

#### LO: 1

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: 2

2. In its September 29, 2013 annual report, Starbucks Corporation reports the following items.

<i>(\$ millions)</i>	2013
Cash flows from operations	\$2,908.3
Total revenues	14,892.2
Shareholders' equity	4,482.3
Cash flows from financing	(110.0)
Total liabilities	7,034.4
Cash, ending year	2,575.7
Expenses	14,883.4
Noncash assets	8,941.0
Cash flows from investing	(1,411.2)
Net earnings	8.8
Cash, beginning year	1,188.6

- a. Prepare the balance sheet for Starbucks for September 29, 2013.
- b. Prepare the income statement for Starbucks for the year ended September 29, 2013.
- c. Prepare the statement of cash flows for Starbucks for the year ended September 29, 2013.

Answer:

a.

<b>STARBUCKS CORPORATION</b>			
<b>Balance Sheet</b>			
<b>September 29, 2013</b>			
(\$ millions)			
Cash	\$2,575.7	Total liabilities	\$7,034.4
Non-cash assets	8,941.0	Shareholders' equity	4,482.3
Total assets	<u>\$11,516.7</u>	Total liabilities and equity	<u>\$11,516.7</u>

b.

<b>STARBUCKS CORPORATION</b>	
<b>Income Statement</b>	
<b>For Year Ended September 29, 2013</b>	
(\$ millions)	
Total revenues	\$14,892.2
Expenses	14,883.4
Net earnings	<u>\$8.8</u>

c.

<b>STARBUCKS CORPORATION</b>	
<b>Statement of Cash Flows</b>	
<b>For Year Ended September 29, 2013</b>	
(\$ millions)	
Cash flows from operations	\$2,908.3
Cash flows from investing	(1,411.2)
Cash flows from financing	(110.0)
Net change in cash	1,387.1
Cash, beginning year	1,188.6
Cash at end of year	<u>\$2,575.7</u>

**Topic: Constructing Financial Statements**

**LO: 2**

3. In its December 31, 2013 annual report, Mattel, Inc. reports the following items.

(\$ thousands)	2013
Net cash flows from operating activities	\$698,426
Net sales	6,484,892
Stockholders' equity	3,251,559
Net cash flows from financing activities	(752,815)
Total assets	6,439,626
Cash, ending year	1,039,216
Expenses	5,580,948
Noncash assets	5,400,410
Net cash flows from investing activities	(242,106)
Net income	903,944
Cash, beginning year	\$1,335,711

- Prepare the balance sheet for Mattel, Inc. for December 31, 2013.
- Prepare the income statement for Mattel, Inc. for the year ended December 31, 2013.
- Prepare the statement of cash flows for Mattel, Inc. for the year ended December 31, 2013.

*Answer:*

a.

<b>MATTEL, INC.</b>			
<b>Balance Sheet</b>			
<b>December 31, 2013</b>			
(\$ thousands)			
Cash	\$1,039,216	Total liabilities	\$3,188,067
Non-cash assets	5,400,410	Stockholders' equity	3,251,559
Total assets	<u>\$6,439,626</u>	Total liabilities and equity	<u>\$6,439,626</u>

b.

<b>MATTEL, INC.</b>	
<b>Income Statement</b>	
<b>For Year Ended December 31, 2013</b>	
(\$ thousands)	
Net sales	\$6,484,892
Expenses	<u>5,580,948</u>
Net income	<u>\$903,944</u>

c.

<b>MATTEL, INC.</b>	
<b>Statement of Cash Flows</b>	
<b>For Year Ended December 31, 2013</b>	
(\$ thousands)	
Net cash flows from operating activities	\$698,426
Net cash flows from investing activities	(242,106)
Net cash flows from financing activities	<u>(752,815)</u>
Net change in cash	(296,495)
Cash, beginning year	1,335,711
Cash at end of year	<u>\$1,039,216</u>

**Topic: Statement of stockholders' equity from raw data****LO: 2**

4. In its December 31, 2013, annual report, Mattel, Inc. reports the following items:

(\$ thousands)	2013
Retained earnings, December 31, 2012	\$3,515,181
Treasury stock, December 31, 2012	(2,152,702)
Treasury stock, December 31, 2013	(2,448,701)
Net income for 2013	903,944
Contributed capital, December 31, 2012	2,169,051
Dividends during 2013	501,003
Stock issued during 2013	56,763

Prepare the statement of stockholders' equity for Mattel, Inc. for the year ended December 31, 2013.

*Answer:*

<b>MATTEL, INC.</b>	
<b>Statement of Stockholders' Equity</b>	
<b>For Year Ended December 31, 2013</b>	
Contributed capital, beginning of year	\$2,169,051
Stock issued during 2013	56,763
Contributed capital, end of year	<u>\$2,225,814</u>
Treasury stock, beginning of year	\$(2,152,702)
Stock repurchased during 2013	(295,999)
Treasury stock, end of year	<u>\$(2,448,701)</u>
Retained earnings, beginning of year	\$ 3,515,181
Net income for 2013	903,944
Dividends during 2013	(501,003)
Retained earnings, end of year	<u>\$ 3,918,122</u>

**Topic: Balance Sheet Relations****LO: 2**

5. Nike, Inc. has a fiscal year-end of May 31. On May 31, 2012, Nike, Inc. reported \$15,465 million in assets and \$10,381 million in equity. During fiscal 2013, Nike's assets increased by \$2,119 million while its equity increased by \$775 million.

What were Nike's total liabilities at May 31, 2012, and May 31, 2013?

*Answer:*

Assets = Liabilities + Equity

May 31, 2012: \$15,465 = Liabilities + \$10,381, Liabilities = \$5,084

May 31, 2013: \$15,465 + \$2,119 = Liabilities + \$10,381 + \$775, Liabilities = \$6,428.



## Topic: Competitive Analysis

### LO: 3

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

*Answer:*

The 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: Calculating ROA

### LO: 4

7. Use Southwest Airlines' 2013 financial statement information, below to answer the following.
- a. Calculate Southwest Airlines' return on assets (ROA) for the year ending December 31, 2013.
  - b. Disaggregate Southwest Airlines' ROA into profit margin (PM) and asset turnover (AT). Explain what each ratio measures.

In millions	
Total operating revenues	17,699
Net income	754
Total assets, beginning of year	18,596
Total assets, end of year	19,345
Equity, end of year	7,336

*Answer:*

- a. Return on Assets = Net income / Average assets =  $\$754 / [0.5 * (\$18,596 + \$19,345)] = 4.0\%$   
Return on assets measures profitability of a company—specifically, how well a company has employed its average assets in generating net income.
- b. Profit Margin = Net income / Sales =  $\$754 / \$17,699 = 4.3\%$   
Profit Margin is an income to sales ratio that reflects the profitability of sales of a company. Southwest Airlines has a profit margin of 4.3% meaning the company records 4.3 cents of net income (after paying taxes) for every dollar of sales. This is low – the airline industry is performing somewhat poorly in 2013.

Asset Turnover = Sales / Average assets =  $\$17,699 / [0.5 * (\$18,596 + \$19,345)] = 0.93$   
Asset turnover reflects the effectiveness in generating sales from assets. Southwest Airlines' asset turnover ratio of 0.93, means that the company generates \$0.93 in sales for every \$1.00 of assets.

**Topic: Calculating ROA and ROE****LO: 4**

8. Below are several financial statement items for fiscal year 2013 for two grocery chains, Whole Foods Market, an upscale organic grocer, and The Kroger Co. a mainstream grocer. (\$ millions)
- 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?

	Whole Foods Market	The Kroger Co.
Net income	\$551	\$1,508
Sales	12,917	96,751
Average assets	5,416	24,064
Average stockholders' equity	3,840	4,090

*Answer:*

- a. Return on Assets = Net income / Average assets

Whole Foods =  $\$551 / \$5,416 = 10.2\%$

Kroger =  $\$1,508 / \$24,064 = 6.3\%$

Return on equity = Net income / Average stockholders' equity

Whole Foods: =  $\$551 / \$3,840 = 14.3\%$ ; Kroger =  $\$1,508 / \$4,090 = 36.9\%$

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

- b. Profit margin = Net income / Sales

Whole Foods =  $\$551 / \$12,917 = 4.3\%$ ; Kroger =  $\$1,508 / \$96,751 = 1.6\%$

Asset turnover = Sales / Average assets

Whole Foods =  $\$12,917 / \$5,416 = 2.38$ ; Kroger =  $\$96,751 / \$24,064 = 4.02$

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.

## 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: 1

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.

*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.

*Shareholders 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.

*Customers and Sales Staffs* – Customers and sales staffs 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. Customers and sales staffs also wish to estimate the company's profitability to assess fairness of returns on mutual transactions.

*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: 2

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

*Answer:*

1. *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.
2. *Liabilities* – Borrowed funds (accounts payable, accrued liabilities, and obligations to lenders or bond investors).
3. *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: 2

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: 4**

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.