# Chapter 2

# Corporate Financial Statements

# CONCEPT QUESTIONS

**1.** The three main forms of businesses are 1) sole proprietorships, where there is one owner, 2) partnerships, where ownership is spread over two or more people, and 3) corporations, where a separate legal entity is established in a state and ownership is spread over investors.

**2.** The advantages of a sole proprietorship are the owner maintains complete control of the business and reaps all of the profits. A disadvantage is that the owner bears all the risks of failure.

The advantages of a partnership are expanded expertise through pooled skills, additional capital for the business, and spreading of the financial risk among several people. Disadvantages include shared ownership and decision-making and personal liability for the debts of the business.

The advantages of a corporation include the ability to raise capital through the sale of ownership interests and limited liability of the owners for the corporation’s debts. The disadvantages are ownership is spread among owners, the business is subject to government regulations, and profits are taxable to the corporation and to the owners if distributed as dividends.

**3.** GAAP refers to Generally Accepted Accounting Principles, which are those accounting standards, terms, methods, principles, etc. that have been accepted and used over time by the accounting profession.

**4.** GAAP are determined by a number of institutions such as the Securities and Exchange Commission, the Financial Accounting Standards Board, and the American Institute of Certified Public Accountants.

**5.** The main classifications on a classified Balance Sheet are as follows:

Assets: current assets, long-term investments, fixed assets, intangible assets, and other assets.

Liabilities: current liabilities and long-term liabilities.

Equity: capital stock and retained earnings

**6.** Fixed assets are tangible resources that are used in a company’s operations for more than one year and are not intended for resale. Examples include land, buildings, equipment, furniture, fixtures, etc. Intangible assets are also used for more than one year and are not intended for resale, but they have no physical substance. They give the business certain rights or privileges. Examples include trademarks, patents, franchise rights, copyrights, and goodwill.

**7.** Current liabilities and long-term liabilities both represent obligations of the business. Current liabilities are reasonably expected to be satisfied within the normal operating cycle of a business or within one year. Long-term liabilities are not expected to be satisfied within the next year.

**8.** Equity is classified as capital stock or retained earnings. Capital stock is the portion of equity contributed by stockholders through the purchase of common or preferred stock. Retained earnings are the profits that a company earns over time and retains in the business.

**9.** The Income Statement is divided into multiple steps in order to provide information on the profitability of various aspects of the company’s operations.

**10.** The subtotals of income on a multiple-step income statement include gross margin, operating profit, income before taxes, and net income. Gross margin is calculated by subtracting cost of sales from sales revenue. Operating profit represents the difference between gross margin and operating expenses. Income before taxes is calculated by adding other revenues and subtracting other expenses, such as interest income or interest expense, to or from operating profit. Net income results from subtracting income taxes from the income before taxes.

**11.** Horizontal analysis is used to calculate the change in an account balance from one period to the next and expresses that change in both absolute and percentage terms.

**12.** Vertical analysis is used to show how various balances relate to a larger base account by stating each account balance as a percentage of the base account.

**13.** Horizontal analysis shows the growth or decline in each account, but it does not explain the reason for the change. Vertical analysis shows how various balances relate to a larger base amount.

**14.** The Statement of Stockholders’ Equity shows the changes in all equity accounts, including Retained Earnings and Contributed Capital, over a period of time.

**15.** Retained earnings is calculated by adding net income (or subtracting a net loss) to the previous period’s ending retained earnings and subtracting dividends paid. Retained earnings is one element of stockholder’s equity along with contributed capital.

**16.** In addition to providing the financial statements in an Annual Report, companies also disclose Notes to the Financial Statements, the Auditor’s Report, and Management’s Discussion and Analysis. Notes to the Financial Statements include disclosure of accounting methods used to prepare financial statements, additional detail and explanation of financial statement account balances, and additional information such as contingencies and future commitments. The Auditor’s Report, which is prepared by an independent Certified Public Accountant, states an opinion as to the fairness of the financial statements in representing the company’s financial condition, results of operations, and cash flows in conformity with generally accepted accounting principles (GAAP). Management’s Discussion and Analysis discusses and analyzes the company’s financial activities.

**MULTIPLE CHOICE**

**1.** B

**2.** C

**3.** D

**4.** C

**5.** A

**6.** C

**7.** D

**8.** B ($24,000 - $10,000)

**9.** A ($24,000 - $10,000 - $8,500 – 1,500)

**10.** D

**11.** C

**12.** C

**13.** B

**14.** C (($120,000 - $100,000 ) ÷ $100,000 = 20%)

**15.** A ($15,000 ÷ $85,000 = 17.6%)

**16.** D ($12,000 ÷ $90,000 = 13%)

**17.** B ((115,000 - 123,000) ÷ 123,000 = (6.5%))

**18.** D

**19.** D

**20.** B

**BRIEF EXERCISES**

**1.**  1. A form of business in which multiple entities join together. **Partnership**

2. Information following the financial statements that provides additional information and disclosures. **Notes to the financial statements**

3. A form of business that is established by filing proper forms in a state. **Corporation**

4. A report that attests to the fair presentation of a company’s financial statements. **Auditor’s report**

5. The most common form of business. **Sole proprietorship**

6. Analysis of a company’s financial activities that focuses on results of operations, ability to pay debts, and expansion plans. **Management’s discussion and analysis**

***Teaching Tip:*** One of the first decisions that any new business faces is the form that it will take. In addition to financial statements, the notes to the financial statements, the auditor’s report, and management’s discussion and analysis provide information that is useful to creditors and investors.

**2.** 1.The accounting rules followed by U.S. corporations. **GAAP**

2. The governmental entity whose mission is to protect investors. **SEC**

3. The accounting organization that contributes rules for more technical issues. **AICPA**

4. The major accounting rule-making body in the United States. **FASB**

5. The international accounting rule-making body. **IASB**

***Teaching Tip:*** The accounting standards, rules, principles, and procedures (GAAP) that compose authoritative practice for financial accounting have been developed over time by the FASB, AICPA, SEC, and IASB. This question provides an excellent opportunity to emphasize the role of each of these regulatory bodies.

***Helpful Hint for Students:*** Several regulatory bodies play an important role in the development of accounting standards, principles, and procedures.

**3. Supplies** is an *asset* that is classified as a *current asset*

**Retained earnings** is an *equity* account that is classified as *retained earnings*

**Prepaid insurance** is an *asset* that is classified as a *current* *asset*

**Interest payable** is a *liability* that is classified as a *current* *liability*

**Equipment** is an *asset* that is classified as a *fixed* *asset*

**Salaries payable** is a *liability* that is classified as a *current* *liability*

**4.** Current assets:

Cash $ 7,330

Short-term investments 800

Accounts receivable 1,200

Inventory 3,150

Prepaid insurance 2,800

Total current assets $ 15,280

**5.** Gross profit = Sales – Cost of sales = $15,000 – $11,500 = $3,500

**6.** Operating profit = Gross profit – Operating expenses

= $7,750,000 – $1,500,000 – $2,100,000 = $4,150,000

Net income = Operating profit – Income Tax Expense

= $4,150,000 – $2,000,000 = $2,150,000

**7.**

**Horizontal Analysis:**

Dollar change = $66,540 – $63,180 = $3,360 increase

Percentage change = $3,360/$63,180 = 5.3% increase

**Vertical Analysis: Current year Prior Year**

Inventory/Total assets $66,540/$270,450 = 24.6% $63,180/$240,680 = 26.3%

**8.**

**Horizontal Analysis:**

Dollar change = $1,787 – $1,252 = $535 increase

Percentage change = $535/$1,252 = 42.7% increase

**Vertical Analysis: Current year Prior Year**

Gross profit/Net sales $1,787/$4,605 = 38.8% $1,252/$3,758 = 33.3%

The company was more profitable in the current year. Both horizontal and vertical analyses prove this. Horizontal analysis shows that gross profit increased 42.7% in the current year. Vertical analysis shows that gross profit as a percentage of net sales grew from 33.3% in the prior year to 38.8% in the current year.

**9.** Either (a) or (c) could explain the 22.8% increase in sales revenue from 2009 to 2010.

a. A sales promotion was highly successful. **Yes—would mean more customers buying more products.**

b. A manufacturing plant was offline for much of the year due to maintenance. **No—this would explain a decrease in sales.**

c. The company opened several new stores. **Yes—would likely generate new sales from new customers.**

d. The company lost market share to a new competitor. **No—this would explain a decrease in sales.**

e. The company issued $1.5 million of stock during the year. **No—this explains a source of cash, not revenue.**

***Teaching Tip:*** Horizontal analysis is a method of analyzing a company’s account balances over time and is very useful in identifying trends in a company.

***Helpful Hint for Students:*** Consider what activities would cause sales to increase for a company. Effective advertising and sales promotions? Opening of additional stores? Did the company’s market share increase?

**10.**

**Statement of Stockholders’ Equity**

**Year End**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Common Stock** | **APIC** | **Retained Earnings** | **Treasury Stock** | **Total** |
| **Balance at year-end** | 20,600 | 100,000 | 75,129 | (22,000) | 173,729 |

Note: Retained Earnings = Retained Earnings + Net Income – Dividends

= $62,496 + $22,133 – $9,500 = $75,129

## EXERCISES

**11.**  Mortgage payable – Long-term liability

Short-term investments – Current asset

Cash – Current asset

Prepaid rent – Current asset

Patents – Intangible asset

Common stock – Contributed capital

Accounts payable – Current liability

Buildings – Fixed asset

Notes payable – Current liability

***Teaching Tip:*** A classified balance sheet groups together accounts of similar nature and reports them in a few major classifications that help when reviewing and analyzing a company. Assets are generally grouped into five main categories on a classified balance sheet: current assets, long-term investments, fixed assets, intangible assets, and other assets. Liabilities are generally grouped as current liabilities and long-term liabilities. Stockholders’ equity is classified as contributed capital and retained earnings.

***Helpful Hint for Students:*** The five classifications of assets can be remembered as follows: **C**olorful **L**eaves **F**all **I**n **O**ctober. (**C**urrent, **l**ong-term investments, **f**ixed, **i**ntangible, and **o**ther)

**12.**  Additional paid-in capital – Contributed capital

Land – Fixed asset

Treasury stock – Contributed capital

Income taxes payable – Current liability

Long-term investments – Long-term investments

Accounts receivable – Current asset

Bonds payable – Long-term liability

Copyrights – Intangible asset

Dividends payable – Current liability

Notes payable – Long-term liability

**13.**

1. f 6. a

2. b 7. c

3. e 8. i

4. g 9. d

5. h

**14.**

**Sally’s Fish and Chips:**

Other assets = $13,500 Total assets minus current assets, long-term investments, fixed assets, and intangible assets

Total liabilities = $60,500 Current liabilities plus long-term liabilities

Retained earnings = $104,500 Total liabilities and stockholders’ equity minus total liabilities and capital stock

**Brina’s Bar and Grill:**

Long-term investments = $32,500 Total assets minus current assets, fixed assets, intangible assets, and other assets

Long-term liabilities = $68,000 Total liabilities minus current liabilities

Capital stock = $45,750 Total liabilities and stockholders’ equity minus total liabilities and retained earnings

Total liabilities and

stockholders’ equity = $225,750 Same as total assets

**Ely’s Tanning Salon:**

Total assets = $236,000 Current assets plus long-term investments plus fixed assets plus intangible assets plus other assets

Current liabilities = $3,500 Total liabilities minus long-term liabilities

Retained earnings = $99,500 Total liabilities and stockholders’ equity minus total liabilities and capital stock

Total liabilities and

stockholders’ equity = $236,000 Same as total assets

***Teaching Tip:*** This is a good opportunity to reinforce the accounting equation introduced in Chapter 1. The new classifications do not change the premise of the accounting equation.

***Helpful Hint for Students:*** Byusing your knowledge of the accounting equation and the relationship among the balance sheet accounts, you can make this a simple math problem.

**15.**

**Auburn Bowling Lanes**

**Balance Sheet**

**December 31**

**ASSETS**

Current assets:

Cash $20,840

Accounts receivable 14,520

Prepaid insurance 4,680

Total current assets $ 40,040

Fixed assets:

Building, net $60,200

Equipment, net 63,680

Land 61,200

Total fixed assets 185,080

Total assets $225,120

**LIABILITIES AND STOCKHOLDERS’ EQUITY**

Current liabilities:

Accounts payable $12,480

Interest payable 3,600

Mortgage payable—due next year 13,600

Total current liabilities $ 29,680

Mortgage payable 89,440

Total liabilities $119,120

Stockholders’ equity:

Common stock $66,000

Retained earnings 40,000

Total stockholders’ equity 106,000

Total liabilities and stockholders’ equity $225,120

***Teaching Tip:*** A classified balance sheet groups together accounts of similar nature and reports them in a few major classifications that help when reviewing and analyzing a company. Assets are generally grouped into five main categories on a classified balance sheet: current assets, long-term investments, fixed assets, intangible assets, and other assets. Liabilities are generally grouped as current liabilities and long-term liabilities. Stockholders’ equity is classified as contributed capital and retained earnings.

***Helpful Hint for Students:*** Even though a classified balance sheet groups together accounts of similar nature and reports them in a few major classifications, the accounting equation still prevails. Therefore, Assets = Liabilities + Stockholders’ equity.

**16.**

**Best Buy Inc.**

**Balance Sheet**

**February 26, 2011**

**ASSETS**

Current assets:

Cash $ 1,103

Short-term investments 22

Accounts receivable 2,348

Inventory 5,897

Other current assets 1,103

Total current assets 10,473

Fixed assets 3,823

Intangible assets 2,587

Other assets 966

Total assets $17,849

**LIABILITIES AND STOCKHOLDERS’ EQUITY**

Current liabilities:

Accounts payable $ 4,894

Other current liabilities 3,769

Total current liabilities 8,663

Long-term liabilities 1,894

Total liabilities 10,557

Stockholders’ equity:

Common stock 39

Additional paid-in capital 18

Retained earnings 6,372

Other equity 863

Total stockholders’ equity 7,292

Total liabilities and stockholders’ equity $17,849

**17.**

**Account Reported on:**

Sales Income statement Affects all subtotals of income

Accounts receivable Balance sheet Classified as a current asset

Interest payable Balance sheet Classified as a current liability

Interest expense Income statement Affects Income before taxes and Net income

Supplies Expense Income statement Affects all subtotals except gross profit

Supplies Balance sheet Classified as a current asset

Inventory Balance sheet Classified as a current asset

Cost of sales Income statement Affects all subtotals of income

Salaries payable Balance sheet Classified as a current liability

Salaries expense Income statement Affects all subtotals except gross profit

Income tax expense Income statement Affects net income

Income tax payable Balance sheet Classified as a current liability

**18. The Bike Shop:**

Sales = $63,000 Cost of sales plus gross profit

Selling expenses = $6,000 Total operating expenses minus administrative expenses

Income tax expense = $1,500 Operating profit minus net income

**The Rental Center:**

Net income = $14,400 Operating profit minus income tax expense

Administrative expenses = $4,600 Total operating expenses minus selling expenditures

Gross profit = $39,000 Operating profit plus total operating expenses

Cost of sales = $39,000 Sales minus gross profit

**The Uniform Center:**

Cost of sales = $28,000 Sales minus gross profit

Operating profit = $2,500 Net income plus income tax expense

Total operating expenses = $4,500 Gross profit minus operating profit

Administrative expenses = $1,500 Total operating expenses minus selling expenditures

***Teaching Tip:*** Companies generally use one of two forms for their income statements—a single-step statement or a multi-step statement. A multi-step income statement calculates income by grouping certain revenues and expenses together and calculating several subtotals of income. These subtotals provide information on the profitability of various aspects of the company’s operations.

***Helpful Hint for Students:*** In a multi-step statement, multiple steps are required to calculate net income (or loss). As a result, the income statement has several subtotals: gross profit, operating profit, income before taxes, and finally, net income (or loss).

**19.**

**Brown’s Used Cars**

**Income Statement**

**For the Year Ending December 31**

Net sales $154,900

Cost of sales 75,620

Gross profit $ 79,280

Operating expenses:

Administrative expense $15,230

Selling expense 14,600

Utilities expense 17,650

Total operating expenses 47,480

Operating profit $ 31,800

Other revenue and expenses:

Interest revenue $ 500

Interest expense (50) 450

Income before income taxes $ 32,250

Income tax expense ($32,250 × 30%) 9,675

Net income $ 22,575

***Teaching Tip:*** A multi-step income statement calculates income by grouping certain revenues and expenses together and calculating several subtotals of income. Sales revenue is listed first. Listed next is cost of sales. Subtracting cost of sales from net sales then yields the first subtotal of income, gross profit. After gross profit is reported, operating expenses are listed, and then other revenues and expenses. Finally, net income (or loss) is determined.

***Helpful Hint for Students:*** In addition to cost of sales and operating expenses, companies sometimes generate revenues and expenses that are outside of their normal operations. These are listed separately as “Other revenues and expenses” and are netted against operating profit to yield the third subtotal of income, “Income before taxes.” Usually, the amount of tax in a given period is listed separately on a multi-step statement as provision for income taxes. It this exercise, use 30% × Income before taxes.

**20.**

**Matthews Music Group**

**Income Statement**

**For the Year Ending December 31**

Sales $153,010

Cost of Sales 83,910

Gross profit $ 69,100

Operating expenses:

Advertising $ 6,210

Insurance 3,960

Rent 11,410

Salaries 28,525

Supplies 5,600

Total operating expenses 55,705

Operating income $ 13,395

Other revenues (expenses):

Interest revenue 6,055

Interest expense (4,115)

Income before income tax $ 15,335

Income tax expense 2,250

Net income $ 13,085

**21.**

a. $188,000 ($96,000 + $92,000)

b. Cost of sales or Cost of goods sold

c. Gross profit

d. $28,000 ($92,000 − $11,500 − $52,500)

e. Operating profit

f. $18,400 ($52,500 − $9,200 − $43,300)

g. Income before income taxes

h. $43,300 ($28,310 + $14,990)

i. Income tax expense

**22.**

Treasury stock: **Balance sheet and statement of stockholders’ equity**

Interest revenue: **Income statement**

Buildings: **Balance sheet**

Dividends: **Statement of stockholders’ equity**

Accounts payable: **Balance sheet**

Retained earnings: **Balance sheet and statement of stockholders’ equity**

Interest payable: **Balance sheet**

Common stock: **Balance sheet and statement of stockholders’ equity**

Cost of sales: **Income statement**

Administrative expense: **Income statement**

Additional paid-in capital: **Balance sheet and statement of stockholders’ equity**

Cash: **Balance sheet**

***Teaching Tip:*** Treasury stock is common stock that the company has purchased back from stockholders. Since the purchase of treasury stock is effectively a return of capital to owners, the balance in treasury stock is subtracted from stockholders’ equity.

***Helpful Hint for Students:*** A statement of stockholders’ equity is a financial statement that shows how and why each equity account in the company’s balance sheet changed from one year to the next. It therefore focuses not only on retained earnings, but other equity accounts relating to a company’s contributed capital, including capital stock, dividends, and treasury stock.

**23.** Round all percentages to one decimal place.

**Horizontal Analysis:**

|  | **Increase/Decrease** | **Computation** |
| --- | --- | --- |
| Sales: | $50,000 Increase | ($850,000 – $800,000) |
|  | 6.3% Increase | [($850,000 – $800,000)/$800,000] |
|  |  |  |
| Cost of sales: | $50,000 Increase | ($325,000 – $275,000) |
|  | 18.2% Increase | [($325,000 – $275,000)/$275,000] |
|  |  |  |
| Gross profit: | $0 Increase/decrease | ($525,000 – $525,000) |
|  | 0% Increase/decrease | [($525,000 – $525,000)/$525,000] |
|  |  |  |
| Operating expenses: | $55,000 Increase | ($175,000 – $120,000) |
|  | 45.8% Increase | [($175,000 – $120,000)/$120,000] |
|  |  |  |
| Operating profit: | $55,000 Decrease | ($350,000 – $405,000) |
|  | 13.6% Decrease | [($350,000 – $405,000)/$405,000] |
|  |  |  |
| Income tax expense: | $16,500 Decrease | ($105,000 – $121,500) |
|  | 13.6 % Decrease | [($105,000 – $121,500)/$121,500] |
|  |  |  |
| Net income: | $38,500 Decrease | ($245,000 – $283,500) |
|  | 13.6 % Decrease | [($245,000 – $283,500)/$283,500] |

**Vertical Analysis:** **2012**

Cost of sales/sales $325,000/$850,000 = 38.2%

Gross profit/sales $525,000/$850,000 = 61.8%

Operating expenses/sales $175,000/$850,000 = 20.6%

Operating profit/sales $350,000/$850,000 = 41.2%

Income tax expense/sales $105,000/$850,000 = 12.4%

Net income/sales $245,000/$850,000 = 28.8%

**2011**

Cost of sales/sales $275,000/$800,000 = 34.4%

Gross profit/sales $525,000/$800,000 = 65.6%

Operating expenses/sales $120,000/$800,000 = 15.0%

Operating profit/sales $405,000/$800,000 = 50.6%

Income tax expense/sales $121,500/$800,000 = 15.2%

Net income/sales $283,500/$800,000 = 35.4%

***Teaching Tip:*** Since financial statements communicate economic information about a company to interested parties, certain comparisons can provide a more thorough understanding of a company’s financial activities. Horizontal analysis is a method of analyzing a company’s account balances over time and is very useful in identifying trends in a company.Vertical analysis is a method of comparing a company’s account balances *within* one year.

***Helpful Hint for Students:*** Horizontal analysis is calculated as follows. First, the dollar change in an account is determined. This is defined as the current year balance less the prior year balance. The dollar change is then divided by the prior year balance to yield a percentage change. Vertical analysis is calculated by dividing each account balance by a base account, yielding a percentage. The base account is total assets for balance sheet accounts and net sales or revenues for income statement accounts.

**24.** Round all percentages to one decimal place.

**Horizontal Analysis Dollar change Percentage change**

Cash $142 – $160 = ($18) ($18) / $160 = (11.3%)

Accounts receivable $35 – $30 = $5 $5 / $30 = 16.7%

Inventory $428 – $382 = $46 $46 / $382 = 12.0%

Current assets $605 – $572 = $33 $33 / $572 = 5.8%

Equipment, net $880 – $790 = $90 $90 / $790 = 11.4%

Total assets $1,485 – $1,362 = $123 $123 / $1,362 = 9.0%

Accounts payable $201 – $220 = ($19) ($19) / $220 = (8.6%)

Salaries payable $169 – $162 = $7 $7 / $162 = 4.3%

Current liabilities $370 – $382 = ($12) ($12) / $382 = (3.1%)

Bonds payable $350 – $300 = $50 $50 / $300 = 16.7%

Total liabilities $720 – $682 = $38 $38 / $682 = 5.6%

Retained Earnings $382 – $300 = $82 $82 / $300 = 27.3%

Common Stock $383 – $380 = $3 $3 / $380 = 0.8%

Total equity $765 – $680 = $85 $85 / $680 = 12.5%

Total liabilities and equity $1,485 – $1,362 = $123 $123 / $1,362 = 9.0%

**Vertical Analysis 2012 2011**

Cash $142 / $1,485 = 9.7% $160 / $1,362 = 11.7%

Accounts receivable $35 / $1,485 = 2.4% $30 / $1,362 = 2.2%

Inventory $428 / $1,485 = 28.8% $382 / $1,362 = 28.0%

Current assets $605 / $1,485 = 40.7% $572 / $1,362 = 42.0%

Equipment, net $880 / $1,485 = 59.3% $790 / $1,362 = 58.0%

Total assets $1,485 / $1,485 = 100.0% $1,362 / $1,362 = 100.0%

Accounts payable $201 / $1,485 = 13.5% $220 / $1,362 = 16.2%

Salaries payable $169 / $1,485 = 11.4% $162 / $1,362 = 11.9%

Current liabilities $370 / $1,485 = 24.9% $382 / $1,362 = 28.0%

Bonds payable $350 / $1,485 = 23.6% $300 / $1,362 = 22.0%

Total liabilities $720 / $1,485 = 48.5% $682 / $1,362 = 50.1%

Retained Earnings $382 / $1,485 = 25.7% $300 / $1,362 = 22.0%

Common Stock $383 / $1,485 = 25.8% $380 / $1,362 = 27.9%

Total equity $765 / $1,485 = 51.5% $680 / $1,362 = 49.9%

Total liabilities and equity $1,485 / $1,485 = 100.0% $1,362 / $1,362 = 100.0%

**25.** Round all percentages to one decimal place.

**Horizontal Analysis:**

|  |  |  |
| --- | --- | --- |
|  | **Increase/Decrease** | **Computation** |
| Total Assets: | $150,000 Increase | ($850,000 – $700,000) |
|  | 21.4% Increase | [($850,000 – $700,000)/$700,000] |
|  |  |  |
| Total Liabilities: | $40,000 Decrease | ($240,000 – $280,000) |
|  | 14.3% Decrease | [($240,000 – $280,000)/$280,000] |
|  |  |  |
| Total Equity: | $190,000 Increase | ($610,000 – $420,000) |
|  | 45.2% Increase | [($610,000 – $420,000)/$420,000] |

**Vertical Analysis:** **2012**

Total Liabilities/Total Assets $240,000/$850,000 = 28.2%

Total Equity/Total Assets $610,000/$850,000 = 71.8%

**2011**

Total Liabilities/Total Assets $280,000/$700,000 = 40%

Total Equity/Total Assets $420,000/$700,000 = 60%

Ellis is less risky in 2012 because it generates more assets through equity. Total liabilities as a percentage of total assets decrease from 40% in 2011 to 28.2% in 2012. Total equity increases from 60% in 2011 to 71.8% in 2012, meaning that more assets came from equity, which is less risky.

***Teaching Tip:*** Since financial statements communicate economic information about a company to interested parties, certain comparisons can provide a more thorough understanding of a company’s financial activities. Horizontal analysis is a method of analyzing a company’s account balances over time and is very useful in identifying trends in a company.Vertical analysis is a method of comparing a company’s account balances *within* one year. An examination of the balance sheet shows overall growth. Total assets increased and total liabilities decreased, which indicates that the company’s asset growth was not generated by borrowing from creditors.

***Helpful Hint for Students:*** Horizontal analysis is calculated as follows. First, the dollar change in an account is determined. This is defined as the current year balance less the prior year balance. The dollar change is then divided by the prior year balance to yield a percentage change. Vertical analysis is calculated by dividing each account balance by a base account, yielding a percentage. The base account is total assets for balance sheet accounts, and net sales or revenues for income statement accounts.

**26.**

**Horizontal Analysis:**

|  |  |  |
| --- | --- | --- |
|  | **Increase/Decrease** | **Computation** |
| Net sales: | $1,473 Increase | ($121,345 – $119,872) |
|  | 1.2% Increase | $1,473/$119,872 |
|  |  |  |
| Accounts receivable: | $17,516 Increase | ($30,192 – $12,676) |
|  | 138.2% Increase | $17,516)/$12,676 |
|  |  |  |
| Total assets: | $3,428 Decrease | ($246,933 – $250,361) |
|  | 1.4% Decrease | $(3,428)/$250,361 |

**Vertical Analysis:**  **Current year**

Accounts receivable/Total assets $30,192/$246,933 = 12.2%

**Prior year**

Accounts receivable/Total assets $12,676/$250,361 = 5.1%

Yes – the company should be concerned. Although horizontal analysis of net sales shows some growth in sales of 1.2%, overall total assets shrank by 1.4% during the year. Most concerning is that accounts receivable increased 138.2% (which is more than doubling). Moreover, accounts receivable as a percentage of assets rose from 5.1% in the prior year to 12.2% in the current year. These analyses suggest that the increase to receivables is not because sales or assets increased but because the company is having difficulty collecting its sales.

**27.**

a. 3

b. 2

c. 4

d. 5

e. 1

f. 6

## PROBLEMS

**28.**

**Bay Company**

**Balance Sheet**

**December 31**

**ASSETS**

Current assets:

Cash $ 8,000   
Accounts receivable 12,000

Other current assets 4,000

Total current assets $ 24,000

Fixed assets:

Land $20,000

Buildings 70,000

Equipment 41,000

Total fixed assets 131,000

Total assets $155,000

**LIABILITIES AND STOCKHOLDERS’ EQUITY**

Current liabilities:

Accounts payable $16,000

Interest payable 14,000

Total current liabilities $30,000

Bonds payable 40,000

Total liabilities $ 70,000

Stockholders’ equity:

Common stock $35,000

Retained earnings 50,000

Total stockholders’ equity 85,000

Total liabilities and stockholders’ equity $155,000

***Teaching Tip:*** A classified balance sheet groups together accounts of similar nature and reports them in a few major classifications that help when reviewing and analyzing a company. Assets are generally grouped into five main categories on a classified balance sheet: current assets, long-term investments, fixed assets, intangible assets, and other assets. Liabilities are generally grouped as current liabilities and long-term liabilities. Stockholders’ equity is classified as contributed capital and retained earnings.

***Helpful Hint for Students:*** The five classifications of assets can be remembered as follows: **C**olorful **L**eaves **F**all **I**n **O**ctober. (**C**urrent, **l**ong-term investments, **f**ixed, **i**ntangible, and **o**ther). Current assets are listed in order of liquidity.

**29.**

**Foshee Corporation**

**Income Statement**

**For the Year Ending December 31**

Sales $130,000

Cost of sales 80,000

Gross profit $ 50,000

Selling expense $ 13,000

Total operating expenses (13,000)

Operating profit $ 37,000

Other revenue and expenses

Interest revenue $ 16,500

Interest expense (15,000) 1,500

Income before taxes $ 38,500

Income tax expense 12,850

Net income $ 25,650

***Teaching Tip:*** A multi-step income statement calculates income by grouping certain revenues and expenses together and calculating several subtotals of income. Sales revenue is listed first. Listed next is cost of sales. Subtracting cost of sales from net sales then yields the first subtotal of income, gross profit. After gross profit is reported, operating expenses are listed and then other revenues and expenses. Finally, net income (or loss) is determined.

***Helpful Hint for Students:*** In addition to cost of sales and operating expenses, companies sometimes generate revenues and expenses that are outside of their normal operations. These are listed separately as “Other revenues and expenses” and are netted against operating profit to yield the third subtotal of income, “Income before taxes.” Usually, the amount of tax in a given period is listed separately on a multi-step statement as provision for income taxes.

**30.**

**Wilson Inc.**

**Income Statement**

**For the Year Ending December 31, 2012**

Sales $78,480

Cost of sales 41,250

Gross profit $37,230

Operating expenses:

Utilities $ 4,180

Advertising 4,200

Insurance 4,680

Salaries 17,420

Total operating expenses 30,480

Operating profit $ 6,750

Income tax expense 3,260

Net income $ 3,490

**Wilson Inc.**

**Balance Sheet**

**December 31, 2012**

**ASSETS**

Current assets:

Cash $16,080

Accounts receivable 8,470

Prepaid insurance 5,970

Total current assets 30,520

Equipment, net 45,420

Total assets $75,940

**LIABILITIES AND STOCKHOLDERS’ EQUITY**

Current liabilities:

Accounts payable $15,780

Salaries payable 5,210

Total current liabilities $20,990

Long-term liabilities 9,920

Total liabilities $30,910

Stockholders’ equity:

Common stock $ 15,400

Retained earnings 29,630

Total stockholders’ equity 45,030

Total liabilities and stockholders’ equity $75,940

Note: Retained earnings for the balance sheet is calculated as follows:

Retained Earnings, Jan 1 + Net Income – Dividends

= $28,450 + $3,490 – $2,310 = $29,630

**31.**

a. **Carnell Inc.**

**Comparative Balance Sheets**

**December 31**

**ASSETS 2012 2011**

Current assets:

Cash $ 15,000 $ 25,635

Accounts receivable 50,000 85,065

Inventory 25,650 27,270

Supplies 12,500 13,500

Prepaid rent 10,150 12,275

Total current assets $113,300 $163,745

Long-term investments $125,000 $100,000

Fixed assets:

Buildings, net $240,000 $300,000

Equipment, net 24,000 24,000

Land 300,000 200,000

Total fixed assets $564,000 $524,000

Patents $ 6,000 $ 6,000

Total assets $808,300 $793,745

**LIABILITIES AND STOCKHOLDERS’ EQUITY**

Current liabilities

Accounts payable $ 75,500 $ 35,035

Interest payable 13,755 7,550

Income taxes payable 12,250 16,465

Notes payable 100,000 –

Salaries payable 35,500 33,560

Total current liabilities $237,005 $ 92,610

Long-term liabilities

Notes payable, due 6/30/13 – $100,000

Bonds payable, due 12/31/16 125,000 25,000

Total long-term liabilities $125,000 $125,000

Total liabilities $362,005 $217,610

Stockholders’ equity

Capital stock, $5 par $100,000 $ 80,000

Additional paid-in capital 200,000 190,000

Retained earnings 146,295 306,135

Total stockholders’ equity $446,295 $576,135

Total liabilities and stockholders’ equity $808,300 $793,745

b.Round all percentages to one decimal place.

**Horizontal Analysis:**

Cash 41.5% decrease [($15,000 – 25,635)/$25,635]

Accounts receivable 41.2% decrease [($50,000 – 85,065)/$85,065]

Inventory 5.9% decrease [($25,650 – 27,270)/$27,270]

Supplies 7.4% decrease [($12,500 – 13,500)/$13,500]

Prepaid rent 17.3% decrease [($10,150 – 12,275)/$12,275]

Total current assets 30.8% decrease [($113,300 – 163,745)/$163,745]

Long-term investments 25% increase [($125,000 – 100,000)/$100,000]

Buildings, net 20% decrease [($240,000 – 300,000)/$300,000]

Equipment , net No change

Land 50% increase [($300,000 – 200,000)/$200,000]

Total fixed assets 7.6% increase [($564,000 – 524,000)/$524,000]

Patents No change

Total assets 1.8% increase [($808,300 – 793,745)/$793,745]

Accounts payable 115.5% increase [($75,500 – 35,035)/$35,035]

Interest payable 82.2% increase [($13,755 – 7,550)/$7,550]

Income taxes payable 25.6% decrease [($12,250 – 16,465)/$16,465]

Notes payable No change

Salaries payable 5.8% increase [($35,500 – 33,560)/$33,560]

Total current liabilities 155.9% increase [($237,005 – 92,610)/$92,610]

Bonds payable 400% increase [($125,000 – 25,000)/$25,000]

Total liabilities 66.4% increase [($362,005 – 217,610)/$217,610]

Capital stock 25% increase [($100,000 – 80,000)/$80,000]

Additional paid-in capital 5.3% increase [($200,000 – 190,000)/$190,000]

Retained earnings 52.2% decrease [($146,295 – 306,135)/$306,135]

Total stockholders’ equity 22.5% decrease [($446,295 – 576,135)/$576,135]

Total liabilities and equity 1.8% increase [($808,300 – 793,745)/$793,745]

**Vertical Analysis:**

Cash/Total assets $15,000/$808,300 = 1.9%

Accounts receivable/Total assets $50,000/$808,300 = 6.2%

Inventory/Total assets $25,650/$808,300 = 3.2%

Supplies/Total assets $12,500/$808,300 = 1.5%

Prepaid rent/Total assets $10,150/$808,300 = 1.3%

Total current assets/Total assets $113,300/$808,300 = 14%

Long-term investments/Total assets $125,000/$808,300 = 15.5%

Buildings/Total assets $240,000/$808,300 = 29.7%

Equipment/Total assets $24,000/$808,300 = 3.0%

Land/Total assets $300,000/$808,300 = 37.1%

Total fixed assets/Total assets $564,000/$808,300 = 69.8%

Patents/Total assets $6,000/$808,300 = 0.7%

Accounts payable/Total assets $75,500/$808,300 = 9.3%

Notes payable/Total assets $100,000/$808,300 = 12.4%

Salaries payable/Total assets $35,500/$808,300 = 4.4%

Interest payable/Total assets $13,755/$808,300 = 1.7%

Income tax payable/Total assets $12,250/$808,300 = 1.5%

Total current liabilities/Total assets $237,005/$808,300 = 29.3%

Bonds payable/Total assets $125,000/$808,300 = 15.5%

Total liabilities/Total assets $362,005/$808,300 = 44.8%

Capital stock/Total assets $100,000/$808,300 = 12.4%

Additional paid-in-capital/Total assets $200,000/$808,300 = 24.7%

Retained earnings/Total assets $146,295/$808,300 = 18.1%

Total Stockholders’ equity/Total assets $446,295/$808,300 = 55.2%

Horizontal analysis shows that total assets were stable with only a 1.8% increase from 2011 to 2012. However, there were some significant changes within assets—current assets decreased 30.8%; long-term investments increased 25%; and land increased 50%. It appears that the company used its cash and collected receivables to purchase additional investments and land. Total liabilities increased over 66%, with most of that coming from an increase in bonds (400%) and a more than doubling of accounts payable. Equity was significantly lower due to a significant drop in retained earnings. Overall, horizontal analysis shows a shift to more long-term assets and a shift from equity to liabilities. Thus, investors and creditors may be concerned with the company’s ability to pay its obligations in the future, especially in the short term. Vertical analysis confirms this potential concern, as it shows a much higher percentage of liabilities to assets and a much lower percentage of equity to assets in 2012 than 2011.

c.Yes, it does. If bonds payable is $0 and retained earnings is $271,295, then the company has not shifted as much to liabilities from equity. With the new numbers, liabilities would only have grown by 8.9% [($237,005 – 217,610)/$217,610], while retained earnings would have decreased by only 11.4% [($271,295 – 306,135)/$306,135]. Thus the change in the way in which the company finances its assets is not as drastically different across the years. As a result, investors and creditors would not be as concerned about the company’s ability to satisfy its obligations.

***Teaching Tip:*** Since financial statements communicate economic information about a company to interested parties, certain comparisons can provide a more thorough understanding of a company’s financial activities. Horizontal analysis is a method of analyzing a company’s account balances over time and is very useful in identifying trends in a company.Vertical analysis is a method of comparing a company’s account balances *within* one year.

***Helpful Hint for Students:*** Horizontal analysis is calculated as follows. First, the dollar change in an account is determined. This is defined as the current year balance less the prior year balance. The dollar change is then divided by the prior year balance to yield a percentage change. Vertical analysis is calculated by dividing each account balance by a base account, yielding a percentage. The base account is total assets for balance sheet accounts and net sales or revenues for income statement accounts.

**32.**

a. **Dansby Inc.**

**Comparative Income Statements**

**For The Years Ending December 31**

**2012 2011**

Sales $95,950 $106,569

Cost of sales 48,596 58,896

Gross profit $47,354 $ 47,673

Operating expenses

Advertising $ 7,765 $ 9,789

Commissions 4,879 6,010

Insurance 4,897 5,236

Rent 7,634 7,856

Salaries 19,320 21,012

Supplies 1,654 2,106

Total operating expenses $46,149 $ 52,009

Operating profit 1,205 (4,336)

Other revenue (expenses)

Interest revenue $ 4,287 $ 4,189

Interest expense (2,584) (2,695)

Income before income tax $ 2,908 $ (2,842)

Income tax expense 2,217 2,684

Net income (loss) $ 691 $ (5,526)

b.Round all percentages to one decimal place.

**Horizontal Analysis:**

Sales 10% decrease [($95,950 – 106,569)/$106,569]

Cost of sales 17.5% decrease [($48,569 – 58,896)/$58,896]

Gross profit 0.7 % decrease [($47,354 – 47,673)/$47,673]

Advertising expense 20.7% decrease [($7,765 – 9,789)/$9,789]

Commissions expense 18.8% decrease [($4,879 – 6,010)/$6,010]

Insurance expense 6.5% decrease [($4,897 – 5,236)/$5,236]

Rent expense 2.8% decrease [($7,634 – 7,856)/$7,856]

Salaries expense 8.1% decrease [($19,320 – 21,012)/$21,012]

Supplies expense 21.5% decrease [($1,654 – 2,106)/$2,106]

Total operating expenses 11.3% decrease [($46,149 – 52,009)/$52,009]

Operating profit 127.8% increase [($1,205 – (–4,336))/$4,336]

Interest revenue 2.3% increase [($4,287 – 4,189)/$4,189]

Interest expense 4.1% decrease [($2,584 – 2,695)/$2,695]

Income before income tax 202.3% increase [($2,908 – (–2,842))/$2,842]

Income tax expense 17.4% decrease [($2,217 – 2,684)/$2,684]

Net income (loss) 112.5% increase [($691 – (–5,526))/$5,526]

**Vertical Analysis:** 2012 listed first, 2011 listed second

Cost of sales/Sales 2012: $48,596/$95,950 = 50.6%

2011: $58,896/$106,569 = 55.3%

Gross profit/Sales 2012: $47,354/$95,950 = 49.4%

2011: $47,673/$106,569 = 44.7%

Advertising/Sales 2012: $7,765/$95,950 = 8.1%

2011: $9,789/$106,569 = 9.2%

Commissions/Sales 2012: $4,879/$95,950 = 5.1%

2011: $6,010/$106,569 = 5.6%

Insurance/Sales 2012: $4,897/$95,950 = 5.1%

2011: $5,236/$106,569 = 4.9%

Rent/Sales 2012: $7,634/$95,950 = 8.0%

2011: $7,856/$106,569 = 7.4%

Salaries/Sales 2012: $19,320/$95,950 = 20.1%

2011: $21,012/$106,569 = 19.7%

Supplies/Sales 2012: $1,654/$95,950 = 1.7%

2011: $2,106/$106,569 = 2.0%

Total operating expenses/Sales 2012: $46,149/$95,950 = 48.1%

2011: $52,009/$106,569 = 48.8%

Operating profit/Sales 2012: $1,205/$95,950 = 1.3%

2011: ($4,336)/$106,569 = (4.1%)

Interest expenses/Sales 2012: $2,584/$95,950 = 2.7%

2011: $2,695/$106,569 = 2.5%

Interest revenue/Sales 2012: $4,287/$95,950 = 4.5%

2011: $4,189/$106,569 = 3.9%

Income before income tax/Sales 2012: $2,908/$95,950 = 3.0%

2011: ($2,842)/$106,569 = (2.7%)

Income tax expense/Sales 2012: $2,217/$95,950 = 2.3%

2011: $2,684/$106,569 = 2.5%

Net income (loss)/Sales 2012: $691/$95,950 = 0.7%

2011: ($5,526)/$106,569 = (5.2%)

Both sales and cost of sales decreased in 2012, but cost of sales decreased at a greater rate, so gross profit was stable. A decrease in operating expenses helped the company increase operating profit by 128%. Some minor changes in other income and taxes resulted in a 113% increase in profit in 2012. So, although sales were down, decreases in cost of sales and operating expenses allowed the company to increase net income. The company was much more efficient. Vertical analysis confirms this conclusion. Cost of sales consumed only 50% of sales dollars in 2012, compared to 55% in 2011. Operating expenses also consumed a lower percentage of sales.

c. If cost of sales in 2011 was $45,670 and cost of sales in 2012 was $62,470, conclusions about the company would be much different. Instead of improving from a net loss to net income, the company would generate net income of $7,700 in 2011, only to see it fall to a $13,138 net loss in 2012. This drop in income would be caused entirely by the combination of increasing in cost of sales and decreasing sales. Specifically, horizontal analysis would show a 45% decrease in gross profit [($33,480 – 60,899)/$60,899] from 2011 to 2012. This would be extremely concerning to managers, creditors, and investors.

***Teaching Tip:*** Since financial statements communicate economic information about a company to interested parties, certain comparisons can provide a more thorough understanding of a company’s financial activities. Horizontal analysis is a method of analyzing a company’s account balances over time and is very useful in identifying trends in a company.Vertical analysis is a method of comparing a company’s account balances *within* one year.

***Helpful Hint for Students:*** Horizontal analysis is calculated as follows. First, the dollar change in an account is determined. This is defined as the current year balance less the prior year balance. The dollar change is then divided by the prior year balance to yield a percentage change. Vertical analysis is calculated by dividing each account balance by a base account, yielding a percentage. The base account is total assets for balance sheet accounts and net sales or revenues for income statement accounts.

**33.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Current Year** | **Prior Year** | **$ Change** | **% Change** |
| Net sales | $43,251 | $39,474 | $3,777 | 9.6% |
| Cost of sales | 20,351 | 18,038 | 2,313 | 12.8 |
| Selling and administrative expenses | 15,965 | 14,266 | 1,699 | 11.9 |
| Operating income | 6,935 | 7,170 | (235) | (3.3) |
| Other income | 86 | 461 | (375) | (81.3) |
| Income before taxes | 7,021 | 7,631 | (610) | (8.0) |
| Provision for income taxes | 1,879 | 1,973 | (94) | (4.8) |
| Net income | 5,142 | 5,658 | (516) | (9.1) |

Although PepsiCo’s sales are increasing, net income has decreased from the prior year. This is explained by the almost 13% increase in cost of goods sold and 12% increase in selling and administrative expenses.

**34.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Vertical Analysis** | |
|  | **Current Year** | **Prior**  **Year** | **Horizontal Analysis** | **Current Year** | **Prior Year** |
| Sales | $800,000 | $500,000 | 60.0% | 100.0% | 100.0% |
| Cost of sales | 300,000 | 200,000 | 50.0 | 37.5 | 40.0 |
| Gross profit | 500,000 | 300,000 | 66.7 | 62.5 | 60.0 |
| Operating expenses | 167,000 | 130,000 | 28.5 | 20.9 | 26.0 |
| Operating income | 333,000 | 170,000 | 95.9 | 41.6 | 34.0 |
| One-time gain | 0 | 180,000 | (100.0) | 0 | 36.0 |
| Net income | $333,000 | $350,000 | (4.9) | 41.6 | 70.0 |

Through horizontal analysis, you see sales grew 60% from the prior year, while net income decreased by 4.9%. During the prior year the company experienced a one-time gain of $180,000. Vertical analysis of this gain yields 36.0%, indicating the gain was a significant part of the prior year’s performance. As this gain did not occur again in the current year, net income decreased slightly. However, through horizontal analysis, we see ABC Inc. experienced a 66.7% increase in gross profit, and a 95.9% increase in operating income. Therefore, profits from continuing operations are growing.

## CASES

**35.**

**Current Year Prior Year**

a. Current assets $13,479 $13,900

Net property and equipment 25,060 25,550

Total assets 40,125 40,877

Current liabilities 10,122 10,363

Total liabilities 21,236 21,484

Total stockholders’ equity 18,889 19,393

b. Current assets ($13,479 – $13,900) ÷ $13,900 = (3.0%)

Net property and equipment ($25,060 – $25,550) ÷ $25,550 = (1.9%)

Total assets ($40,125 – $40,877) ÷ $40,877 = (1.8%)

Current liabilities ($10,122 – $10,363) ÷ $10,363 = (2.3%)

Total liabilities ($21,236 – $21,484) ÷ $21,484 = (1.2%)

Total stockholders’ equity ($18,889 – $19,393) ÷ $19,393 = (2.6%)

Conclusion: Every balance decreased in the current year. The company reduced its size in almost every area during the year.

**Current Year Prior Year**

c. Gross profit $23,304 $22,412

Operating income 5,839 4,803

Earnings before income taxes 5,273 3,982

Net earnings 3,338 2,661

d. Gross profit ($23,304 – $22,412) ÷ $22,412 = 4.0%

Operating income ($5,839 – $4,803) ÷ $4,803 = 21.6%

Earnings before income taxes ($5,273 – $3,982) ÷ $3,982 = 32.4%

Net earnings ($3,338 – $2,661) ÷ $2,661 = 25.4%

Conclusion: Each subtotal of income increased in the current year. The company was more profitable in every measure in the current year.

**36.**

a. Current Installments of Long-Term Debt represents the portion of long-term debt that is coming due within one year of the balance sheet date. Therefore, the obligation is no longer “long-term” but is rather a short-term, or current, obligation. As a result, the obligation is reported as a current liability.

b. There are six different senior notes that the company has outstanding at the end of the current year. Note that seven are listed, but the first one has a zero balance in the current year. Each outstanding note differs on the interest rate (ranging from 3.95% to 5.875%) and the maturity date (ranging from March 1, 2011, to September 15, 2040).

c. The Deferred Revenue account captures 1) the sale of gift cards and 2) payments received prior to the completion of services.

**37.**

a. The line above net earnings is as follows: Earnings (Loss) from Discontinued Operations, Net of Tax. This would represent the income or loss that Home Depot generated from operations that the company has discontinued and will no longer pursue.

b. According to note 4, Home Depot sold HD Supply. Since the company sold the unit, the earnings and losses from HD Supply are classified as discontinued operations.

c. Yes. Income statements should be as informative as possible. One way to make them more informative is to separate a company’s *continuing* operations from those that have been *discontinued*. Since Home Depot will no longer generate profits and/or losses from HD Supply, those profits and losses should be separately reported so that investors will be informed.

**38.**

Horizontal analysis:

Net sales ($1,980,195 − $1,828,523) ÷ $1,828,523 = 8.3%

Cost of sales ($876,201 − $834,188) ÷ $934,188 = 5.0%

Gross profit ($1,103,994 − $994,335) ÷ $994,335 = 11.0%

Vertical analysis:

**Current Year Prior Year**

Net sales $1,980,195 ÷ $1,980,195 = 100.0% $1,828,523 ÷ $1,828,523 = 100.0%

Cost of sales $876,201 ÷ $1,980,195 = 44.2% $834,188 ÷ $1,828,523 = 45.6%

Gross profit $1,103,994 ÷ $1,980,195 = 55.8% $994,335 ÷ $1,828,523 = 54.4%

Horizontal analysis shows that sales for the current year increased faster than the cost of sales (8.3% versus 5.0%). This yielded an 11.0 increase in gross profit. Therefore, horizontal analysis shows increased profitability. Vertical analysis indicates the same. In the current year, Ann Taylor generated 55.8% of gross profit for every dollar of sales. This is an increase over the 54.4% gross profit in the prior year. In effect, this means that Ann Taylor was able to earn about one and one-half cents more of gross profit from every dollar of sales. While a penny and a half might not sound like much, when you earn an extra penny or so per dollar on almost $2 billion in sales, those pennies add up fast.

**39.**

To: Current and Future Investment Club Members

From: Student

Subject: Explanation of the Income Statement

The income statement shows a company’s revenues and expenses over a period of time. To provide as much information as possible, many companies prepare multi-step income statements. A multi-step income statement calculates and reports several subtotals of income.

The first subtotal is gross profit. Gross profit is the profit generated when considering only the sales price and the cost of the inventory sold. It is calculated as sales less cost of sales. Readers examine gross profit to evaluate a company’s ability to profit from the markup on its products.

The second subtotal is operating profit. Operating profit measures a company’s profitability when considering all expenses associated with operations. It is calculated by subtracting operating expenses such as advertising and salaries from gross profit. Readers examine operating profit to evaluate a company’s ability to profit from its normal operations.

The third subtotal is income before taxes. This subtotal includes all revenues and expenses a company experiences except for income taxes. Readers examine income before taxes to assess profitability from all activities other than taxes.

The final subtotal of income is net income, which includes the effect of all revenues and expenses.

## LOWE’S COMPARATIVE ANALYSIS

## FROM PREP CARDS

**1.** The full company name is *Lowe’s Companies, Inc.* Inc. stands for incorporated. Thus, Lowe’s is a corporation.

**2.** Yes. As the Independent Auditor’s Report (titled “Report of Independent Registered Public Accounting Firm”) states that the financial information is presented “in conformity with accounting principles generally accepted in the United States of America.”

**3.** Lowe’s uses a multi-step income statement. It shows several subtotals (in italics), including:

Net sales

– Cost of sales

*Gross margin*

Expenses:

Selling, general and administrative

Depreciation

Interest - net

Total expenses

*Pretax earnings* Income tax provision

*Net earnings*

**4.** **Horizontal Analysis: 2011**

Inventory:

($8,321 – 8,249)/$8,249 = 0.87%

Cost of sales:

($31,663 – 30,757)/$30,757 = 2.95%

**Vertical Analysis: 2011**

Inventory:

$8,321/$33,699 = 24.69%

Cost of sales:

$31,663/$ 48,815 = 64.86%

The horizontal analyses indicate that both inventory and cost of sales increased during the year, thus showing general growth in the company. As expected, the vertical analyses indicate that inventory is a significant part of Lowe’s business. Inventory makes up about one-fourth of Lowe’s assets. Moreover, for every dollar of sales, Lowe’s spends about 65 cents on the merchandise sold. This leaves only 35 cents to cover all other expense and generate a profit.