## SOLUTIONS TO ANALYZE, THINK, COMMUNICATE - CHAPTER 1

**ATC 1-1 (All dollar amounts are in millions.)**

**a. $ 2,737**

**b. Net income decreased by $626**

**STOCKHOLDERS’**

**c. ASSETS = LIABILITIES + EQUITY**

**$37,431 = $26,478\* + $10,953**

**\*Liabilities must be computed by subtracting equity from assets.**

**d. Sales decreased by 5.8% from 2015 to 2016.**

**($69,495 − $73,785) ÷ $73,785 = (5.8)%**

**Cost of sales decreased by 6.0% from 2015 to 2016.**

**($48,872 − $51,997) ÷ $51,997 = (6.0)%**

**Selling, general and administrative expenses decreased by 8.9% from 2015 to 2016. ($13,356 − $ 14,665) ÷ $ 14,665 = (8.9)%**

The largest percentage decrease was for selling, general and administrative expenses. Although 2016 cannot be considered a good year for Target, at least the company managed to reduce its major expense categories by a greater percentage than its sales decreased.

**ATC 1-2**

**a.**

**Income Statements (amounts given are in millions)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** |
|  |  |  |  |  |
| **Revenue** | $ 860 | **$1,520** | (a) $2,720 | $1,200 |
| **Cost and Expenses** | **(a) (840)** | **(a) (1,070)** | **(2,400)** | **(860)** |
| **Income from Cont. Op.** | **(b) 20** | **450** | **320** | **(a) 340** |
| **Unusual Items** | **-0-** | **175** | **(b) (145)** | **(b) ( 40)** |
| **Net Income** | **$ 20** | **(b) $ 625** | **$ 175** | $ 300 |
|  |  |  |  |  |
| **Balance Sheets** |  |  |  |  |
| **Cash and Marketable Sec.** | **$ 350** | **$1,720** | (c) $ 750 | $ 940 |
| **Other Assets** | **1,900** | **(c) 1,180** | **2,500** | **(c) 2,560** |
| **Total Assets** | **$2,250** | **$2,900** | **(d) $3,250** | $3,500 |
|  |  |  |  |  |
| **Liabilities** | (c) $ 730 | **(d) $1,555** | $1,001 | **(d) $1,300** |
|  |  |  |  |  |
| **Stockholders’ Equity** |  |  |  |  |
| **Common Stock** | **$ 880** | $ 720 | (e) $1,449 | $ 800 |
| **Retained Earnings** | **(d) 640** | **(e) 625** | **800** | **(e) 1,400** |
| **Total Stockholders’ Equity** | **1,520** | **1,345** | **(f) 2,249** | 2,200 |
|  |  |  |  |  |
| **Total Liab. and Stk. Equity** | **$2,250** | **(f) $2,900** | $3,250 | **$3,500** |
|  |  |  |  |  |

**ATC 1-3**

**1. Ford’s cash payments for expenses related to producing automobiles it sold should be classified as a cash outflow in the operating activities section of the statement of cash flows.**

**2. IBM’s cash purchase of properties from The Weather Company should be classified as a cash outflow in the investing activities section of the statement of cash flows.**

**3. Apple’s borrowing of cash should be classified as a cash inflow in the financing activities section of the statement of cash flows.**

**4. Whole Foods Market’s cash sales should be classified as a cash inflow in the operating activities section of the statement of cash flows.**

**5. Microsoft’s payment of dividends should be classified as a cash outflow in the financing activities section of the statement of cash flows.**

**6. McDonalds’ sale of it’s a major stake in its operations in China and Hong Kong should be classified as a cash inflow in the investing activities section of the statement of cash flows.**

**ATC 1-4**

1. **The percentage growth from Year 1 to Year 2 was 67% [($200,000 − $120,000) ÷ $120,000]. However, this rate of growth will probably not continue from Year 2 to Year 3 because 77.5% ($62,000 ÷ $80,000) of the growth was from the lottery win. If the company continues to grow at the current rate, shareholders should expect an increase in net income of approximately 15%. This is the increase in net income without the lottery win [($138,000 − $120,000) ÷ $120,000 = 15%].**
2. **One could assume that the $200,000 was used to pay off liabilities since the total liabilities were reduced by $200,000. Also, assets and common stock did not change.**
3. **The percentage increase in net income was 15% (see a. above). Therefore, owners could expect net income to be $158,700 ($138,000 x 115%) in Year 3.**

**d.**

|  |  |  |
| --- | --- | --- |
| **Machine Import Company**  **Income Statement**  **For Year Ended December 31, Year 3** | | |
|  |  |  |
| **Revenue ($690,000 x 115%)** |  | **$793,500** |
| **Operating Expenses ($552,000 x 115%)** |  | **(634,800)** |
| **Infrequent item – loss from storm** |  | **(40,000)** |
|  |  |  |
| **Net Income** |  | **$118,700** |
|  |  |  |

**ATC 1-4 d. (cont.)**

|  |  |  |
| --- | --- | --- |
| **Machine Import Company**  **Balance Sheet**  **As of December 31, Year 3** | | |
|  |  |  |
| **Assets** |  | **$998,700** |
|  |  |  |
| **Liabilities** |  | **$ -0-** |
|  |  |  |
| **Stockholders’ Equity** |  |  |
| **Common Stock** | **$380,000** |  |
| **Retained Earnings ($500,000 + $118,700)** | **618,700** |  |
| **Total Stockholders’ Equity** |  | **998,700** |
|  |  |  |
| **Total Liabilities and Stockholders’ Equity** |  | **$998,700** |
|  |  |  |

**ATC 1-5**

**This problem is designed to test written communication skills. The memo should describe the balance sheet and the income statement. It should explain that the balance sheet is a statement of assets, liabilities, and stockholders’ equity at the date of the financial statement. The income statement gives the amount of revenues and expenses for the designated period. The memo should also define each of the following terms:**

**Assets**

**Liabilities**

**Stockholders’ Equity**

**Revenue**

**Expense**

**Net Income**

**ATC 1-6 a.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Financial Statements** | | | |
|  |  |  |  |
| **Income Statement** | | | |
|  | **Revenue** | **$57,000** |  |
|  | **Expense** | **(40,000)** |  |
|  | **Net Income** | **$17,000** |  |
|  |  |  |  |
| **Statement of Changes in Stockholders’ Equity** | | | |
|  | **Beginning Common Stock** | **$20,000** |  |
|  | **Plus: Stock Issued** | **5,000** |  |
|  | **Ending Common Stock** | **25,000** |  |
|  |  |  |  |
|  | **Beginning Retained Earnings** | **50,000** |  |
|  | **Plus: Net Income** | **17,000** |  |
|  | **Less: Dividends** | **(2,000)** |  |
|  | **Ending Retained Earnings** | **65,000** |  |
|  |  |  |  |
|  | **Total Stockholders’ Equity** | **$90,000** |  |
|  |  |  |  |
| **Balance Sheet** | | | |
|  | **Assets** |  |  |
|  | **Cash** | **$90,000** |  |
|  | **Total Assets** | **$90,000** |  |
|  |  |  |  |
|  | **Stockholders’ Equity** |  |  |
|  | **Common Stock** | **$25,000** |  |
|  | **Retained Earnings** | **65,000** |  |
|  | **Total Stockholders’ Equity** | **$90,000** |  |
|  |  |  |  |
| **Statement of Cash Flows** | | | |
|  | **Net Cash Flow From Operating Activities:** |  |  |
|  | **Inflow from Customers** | **$57,000** |  |
|  | **Outflow for Expenses** | **(40,000)** |  |
|  | **Net Cash Flow from Operating Activities** | **17,000** |  |
|  |  |  |  |
|  | **Net Cash Flow From Investing Activities** | **-0-** |  |
|  |  |  |  |
|  | **Net Cash Flow From Financing Activities:** |  |  |
|  | **Inflow from Stock Issue** | **5,000** |  |
|  | **Outflow for Dividends** | **(2,000)** |  |
|  | **Net Cash Flow from Financing Activities** | **3,000** |  |
|  |  |  |  |
|  | **Net Change in Cash** | **$20,000** |  |
|  | **Plus: Beginning Cash Balance** | **70,000** |  |
|  | **Ending Cash Balance** | **$90,000** |  |
|  |  |  |  |

**ATC 1-6 (cont.)**

**b. In the short-run replacing Kevin would save $5,000 in cash expenses. Accordingly, net income, assets, stockholders’ equity, and cash flow from operating activities would increase. These effects can be confirmed by comparing the statements above (i.e., after effect of replacement) with those shown in the textbook (i.e., before effect of replacement). However, the long-run impact may be different depending on how other employees react to Kevin’s replacement. If the replacement creates resentment and low morale among the remaining employees, then productivity and profitability may decline. In this case, the company may experience a negative impact rather than the expected positive effect. The best solution to this dilemma is avoidance. Kevin’s salary should never have been permitted to rise above his value to the company. As future business managers, students should take heed of the perils of excessive generosity. Employees should be paid on a basis that is consistent with their contribution to the company’s profitability. The pain of corporate downsizing can be avoided if businesses do not oversize in the first place.**

**ATC 1-7**

**This solution is based on Sonic Drive-In’s August 31, 2016 annual report. Dollar amounts are in thousands.**

**a. Sonic’s net income for 2016, 2015, and 2014 were as follows:**

**2016: $ 64,067**

**2015: 64,485**

**2014: 47,916**

**b. The company had $659,995 of assets at the end of 2016.**

**c. The company had $894,442 of retained earnings at the end of 2016. {NOTE: Sonic’s retained earnings were greater than its assets due to the large balance in its Treasury Stock account at the end of 2016, $1,206,224.]**

**d. For 2016, the company’s:**

**net cash flow from *operating* activities were $ 116,209.**

**net cash flow from *investing* activities were ($ 34,060).**

**net cash flow from *financing* activities were ($ 37,248).**