**ATC 1-1**

**a. The information described in the table is primarily managerial accounting information, as much of it refers to nonfinancial measures. The disclosures are not restricted by GAAP or other regulation. The information about revenues, total assets, and earnings are financial in nature, although they are also useful for managerial accounting purposes.**

**b. Other examples** **of managerial information include operating data such as sales generated per country, number of different products sold, and the revenue generated from each of these. Financial information would include financial statements, footnotes to financial statements, and the auditor’s opinion.**

**c. Starbucks’ 2017 fiscal year appears better than 2016 because in 2017 it had higher revenues and net earnings.**

**d. Starbucks had more employees and had more sales in 2017 than in 2016, which suggest it was larger, and therefore, appears better.**

**e. Starbucks had more revenue and earnings in 2017 than in 2016, but it also had more employees, 277,000 versus 254,000. It also had more property, 6,322 thousand square feet in 2017 versus 6,277 thousand in 2016. If we calculate “revenue per employee” and “earnings per employee” for each year, we get:**

**2017 2016**

**Revenue per employee $80,819 $83,921**

**Earnings per employee 10,415 11,094**

**If we calculate “revenue per thousand square feet of property” and “earnings per thousand square feet of property” for each year, we get:**

**2017 2016**

**Revenue per thousand feet $3,541 $3,396**

**Earnings per thousand feet 456 449**

## **ATC 1-1 (continued)**

## **These numbers suggest the company used its employees less efficiently in 2017 than in 2016, but it is using its property more efficiently.**

## **ATC 1-2**

**a.**

**1. Cost of goods sold**

|  |  |
| --- | --- |
| **Raw materials** | **$ 720,000** |
| **Utilities1** | **96,000** |
| **Labor** | **880,000** |
| **Depreciation on manufacturing equipment2** | **1,000,000** |
| **Setup cost** | **80,000** |
| **Total product cost** | **$2,776,000** |

**Cost of goods sold = $2,776,000 ÷ 69,400 units = $40 per unit**

**Cost of goods sold = $40 per unit x 60,000 units = $2,400,000**

**2. Upstream Costs**

**Note: The $10,000 of accrued engineer’s salaries is an upstream cost. However, it would not be used in the computation of net income because it applies to the previous accounting period.**

|  |  |
| --- | --- |
| **Utilities1** | **$ 16,000** |
| **Salaries** | **390,000** |
| **Redesign cost** | **186,000** |
| **Insurance expense3** | **16,000** |
| **Total** | **$608,000** |

**3. Downstream Costs**

|  |  |
| --- | --- |
| **Advertising** | **$ 70,000** |
| **Utilities1** | **48,000** |
| **Salaries ($658,000 + $16,000)** | **674,000** |
| **Insurance expense3** | **32,000** |
| **Total** | **$824,000** |

ATC 1-2 (continued)

**1Allocation Rate for Utilities = $160,000 ÷ 100,000 = $1.60 per square foot.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Research and development | 10,000 | x | $1.60 | = | $ 16,000 |
| Manufacturing | 60,000 | x | $1.60 | = | 96,000 |
| Selling and administrative | 30,000 | x | $1.60 | = | 48,000 |
| Total | 100,000 | x | $1.60 | = | $160,000 |

**2Depreciation on manufacturing equipment = ($10,000,000 − $2,000,000) ÷ 8 = $1,000,000**

**3Amount of prepaid insurance to recognize as expense**

**= ($72,000 ÷ 12 months) x 8 months = $48,000**

**Rate for insurance expense = $48,000 ÷ 12 = $4,000 per employee.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Research and development | 4 | x | $4,000 | = | $16,000 |
| Selling and administrative | 8 | x | $4,000 | = | 32,000 |
| Total | 12 | x | $4,000 | = | $48,000 |

**b. Income Statement**

|  |  |
| --- | --- |
| **Revenue (60,000 x $70)** | **$4,200,000** |
| **Cost of goods sold** | **(2,400,000)** |
| **Gross margin** | **1,800,000** |
| **Upstream expense** | **(608,000)** |
| **Downstream expenses** | **(824,000)** |
| **Net income** | **$ 368,000** |

**ATC 1-3**

**a. The company’s annual report provides little detail regarding the individual costs incurred to manufacture its products. This annual report, like those of all public companies, is designed primarily to meet the needs of external not internal users.**

**b. Snap-on includes shipping and handling costs in cost of goods sold. Therefore, these costs are being treated as a product cost.**

**c. Snap-on reports that advertising and promotion costs are “expensed when incurred.” Therefore, these costs are being treated as a period cost.**

**d. The company reports the balances in three separate inventory accounts: Finished goods, Work in process, and Raw materials.**

**e. As of December 31, 2017, the balance in the Land account was $24.5 million and the balance in machinery, equipment, and software was $889.2 million (gross). Accumulated depreciation was not broken down between buildings and improvements, versus machinery, equipment, and software.**

**ATC 1-4**

**Each letter prepared by the students will be unique. Accordingly, there is no single solution. However, student’s letters should include some discussion of at least a few of the following ideas: (1) competition, (2) benchmarking, (3) value-added assessment, (4) best practices, and (5) continuous improvement.**

## **ATC 1-5**

a. Ms. Emerson apparently believes that the number of units produced will be greater than the number of units sold. Under these circumstances, some of the start-up costs would be included in the inventory account on the balance sheet, rather than being recognized as an expense on the income statement. This would increase assets and net income; Ms. Emerson would receive a higher bonus.

b. As discussed in *part a*, misclassifying the start-up costs would present a more favorable representation of the company’s financial condition (i.e., assets and net income are overstated) than actually exists. Accordingly, investors or creditors may be lured into making an investment in or loan to the company that they otherwise would have avoided.

c. The overstatement of income would result in the overpayment of taxes. This would be detrimental to the owners of the business.

d. Ms. Emerson has a secret problem (i.e., financing her daughter’s education). She engaged in rationalization (i.e., her boss was being unfairly overpaid because of a family relationship with the owner). Finally, Ms. Emerson has the opportunity (i.e., no competent authority is available to disapprove her decision to misclassify the start-up costs).ATC 1-5 (continued)

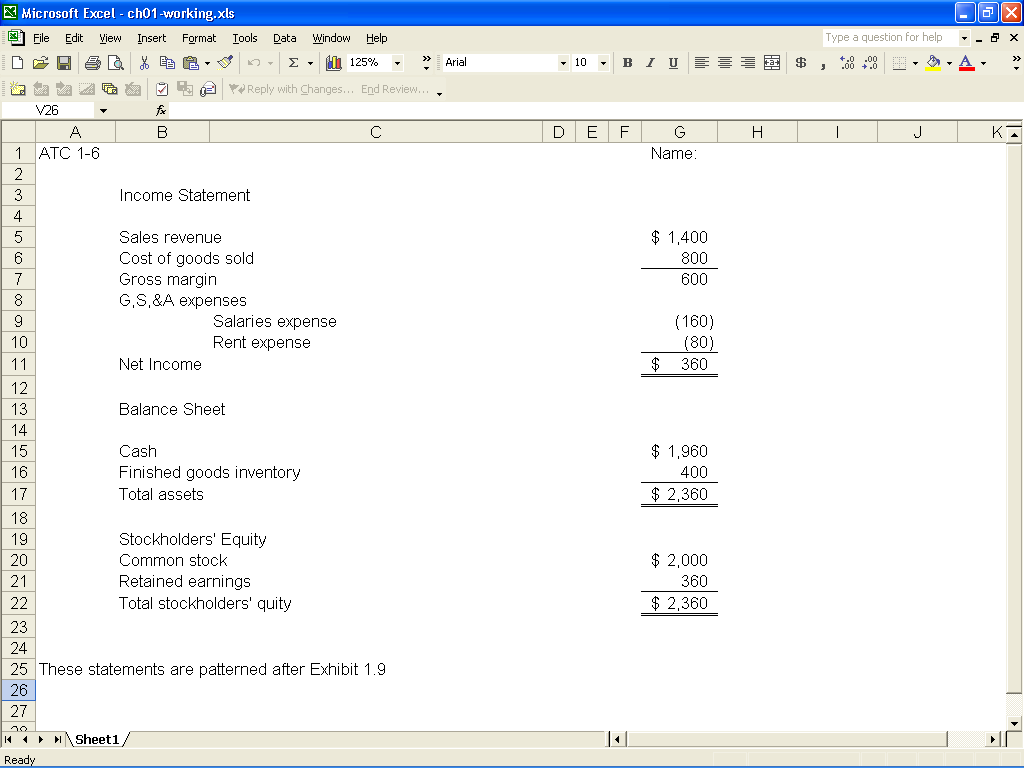
e. Ms. Emerson violated many of the ethical principles some of which included the failure to (1) perform professional duties in accordance with relevant laws, regulations, and technical standards, (2) prepare complete and clear reports and recommendations after appropriate analysis of relevant and reliable information, (3) avoid actual or apparent conflicts of interest and advise all appropriate parties of any potential conflict, (4) refrain from engaging in any activity that would prejudice their ability to carry out their duties ethically, (5) communicate information fairly and objectively, (6) disclose fully all relevant information that could reasonably be expected to influence an intended user’s understanding of the reports, comments, and recommendations presented. It is important to note that Ms. Emerson’s conduct is beyond the boundaries of mere ethics. Her actions constitute deliberate fraud that could lead to incarceration.

# f. According to the Sarbanes-Oxley Act, the maximum penalty for an intentional misrepresentation of financial statements includes a fine of up to $5 million and imprisonment of up to 20 years.

# g. This fraud could have been prevented by separating the duties associated with cost classification. Specifically, Ms. Emerson decision regarding the classification of the start-up cost should have required the approval of her boss. Had her boss been knowledgeable, the fraud would have required collusion between Ms. Emerson and her boss. Since collusion between these two parties would have been highly unlikely, the fraud would probably have been prevented. Unfortunately, Ms. Emerson’s boss was not properly trained thereby negating a proper separation of duties. Such lapses of proper internal control create an atmosphere that encourages fraud.

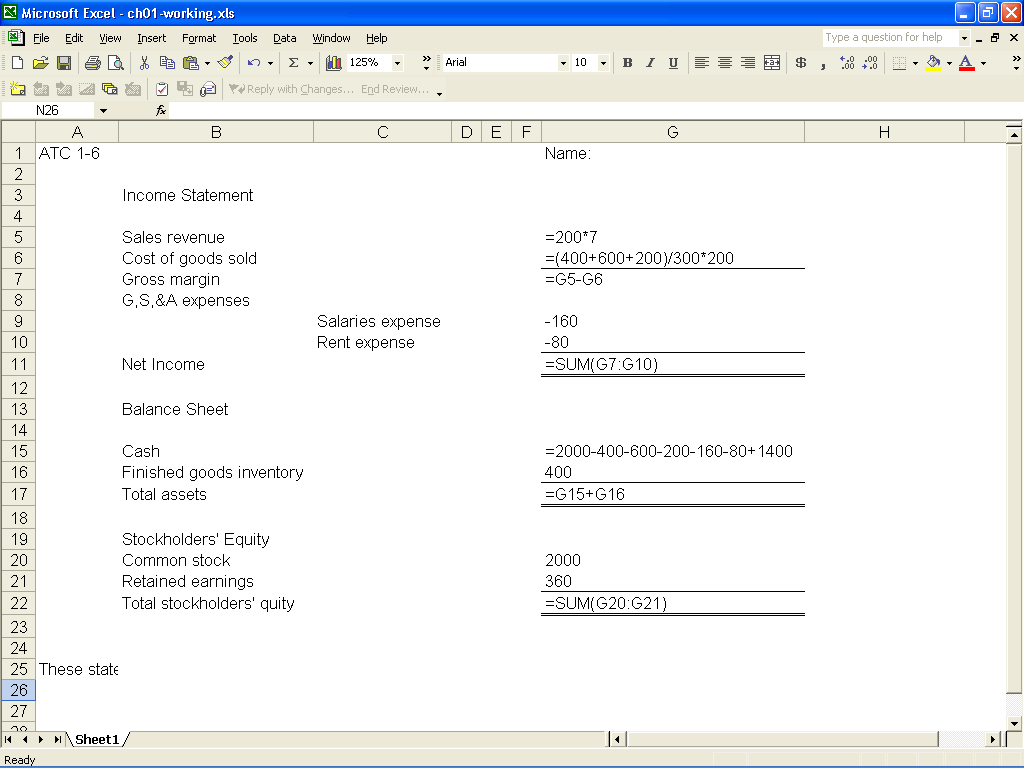
**ATC 1-6**

**Screen capture with cell values:**



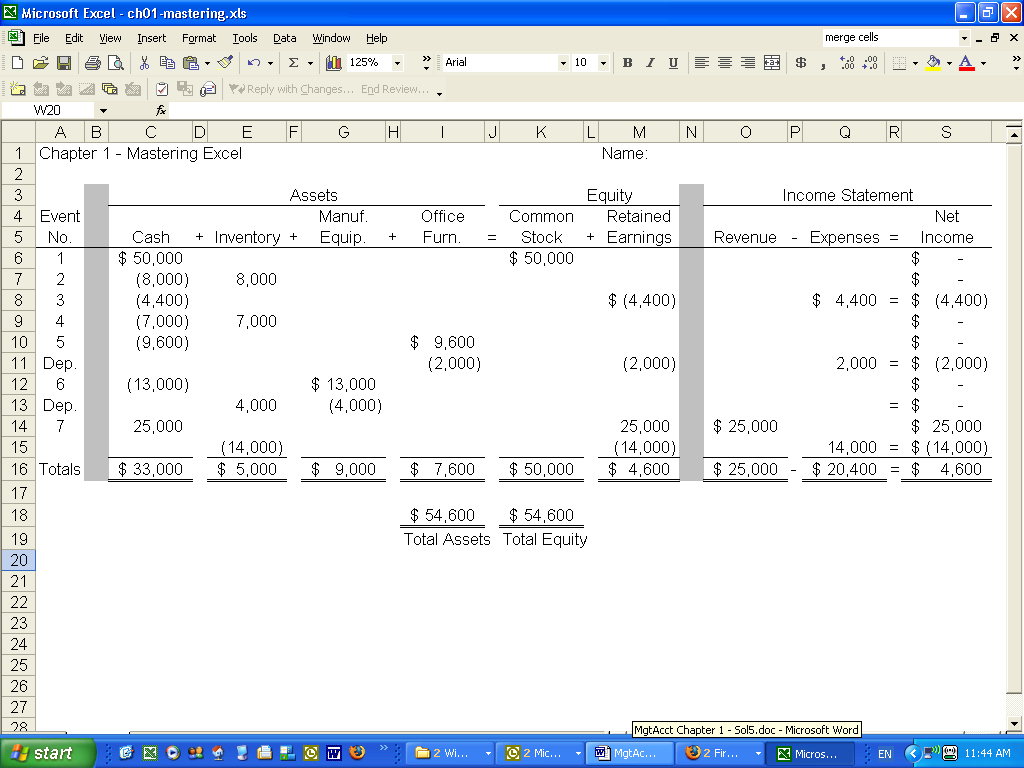
**ATC 1-6 (continued)**

**Screen capture of cell formulas:**



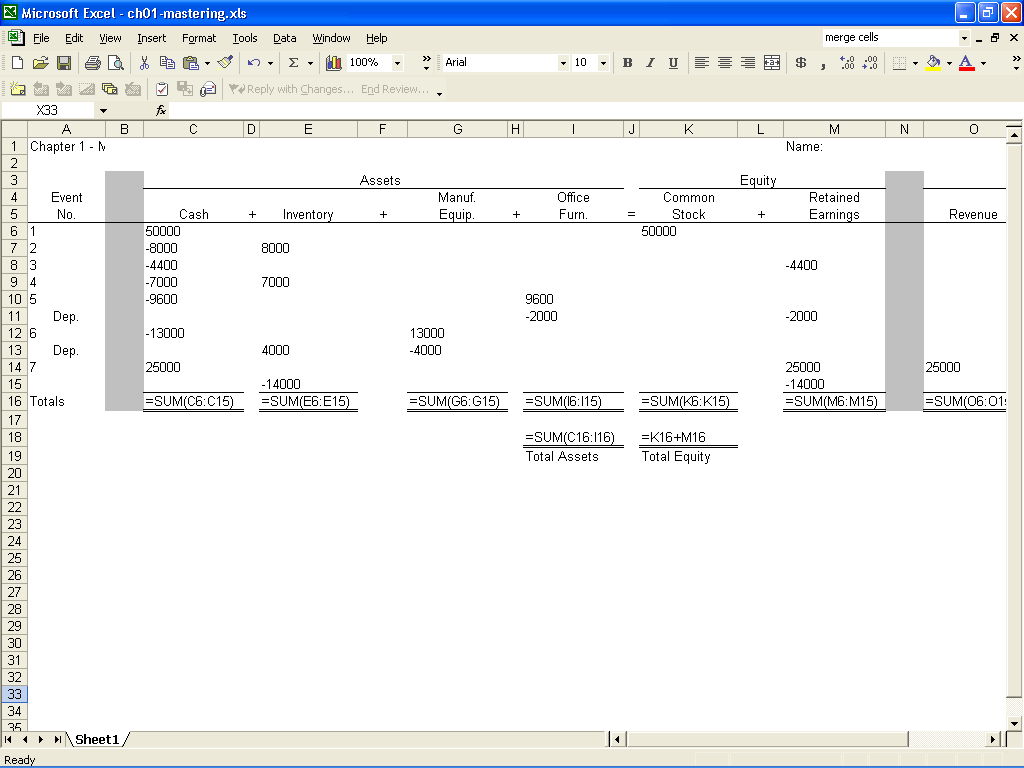
**ATC 1-7**

**Screen capture of cell values:**

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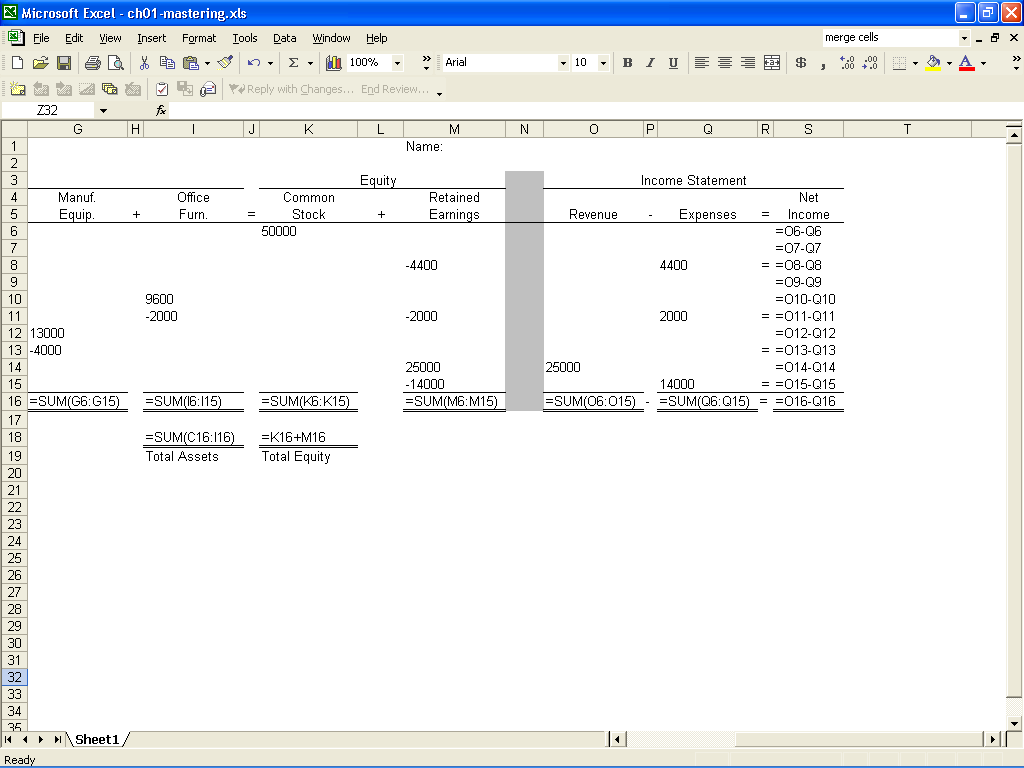
**ATC 1-7 (continued)**

**Screen capture of cell formulas:**

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**ATC 1-7 (continued)**

**Screen capture of cell formulas:**

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