E7-4

Inferring Merchandise Purchases

Abercrombie and Fitch is a leading retailer of casual apparel for men, women, and children. Assume that you are employed as a stock analyst and your boss has just completed a review of the new Abercrombie annual report. She provided you with her notes, but they are missing some information that you need. Her notes show that the ending inventory for Abercrombie in the current and previous years was \$424,393,000 and \$399,795,000, respectively. Net sales for the current year were \$3,492,690,000. Cost of goods sold was \$1,408,848,000. Income before taxes was \$55,161,000. For your analysis, you determine that you need to know the amount of purchases for the year.

Required:

Can you develop the information from her notes? Explain and show calculations. (Hint: Use the cost of goods sold equation or the inventory T-account to solve for the needed value.)

Simply rearrange the cost of goods sold equation:

$$BI + P - EI = CGS$$

 $P = CGS - BI + EI$

| | Cost of goods sold | \$ |
|---|---------------------|----|
| _ | Beginning inventory | () |
| + | Ending inventory | |
| | Purchases | \$ |

E7-10

Evaluating the Choice among Three Alternative Inventory Methods Based on Cash Flow Effects

Following is partial information for the income statement of Arturo Technologies Company under three different inventory costing methods, assuming the use of a periodic inventory system:

| | FIFO | LIFO | AC |
|--|----------|----------|----------|
| Cost of goods sold | | | |
| Beginning inventory (400 units @ \$30) | \$12,000 | \$12,000 | \$12,000 |
| Purchases (400 units @ \$20) | 8,000 | 8,000 | 8,000 |
| Goods available for sales | | | |
| Ending inventory (500 units) | | | |
| Cost of goods sold | \$ | \$ | \$ |
| Sales, 300 units; unit sales price, \$50 | | | |
| Expenses, \$2,500 | | | |

Required:

- 1. Compute cost of goods sold under the FIFO, LIFO, and average cost inventory costing methods.
- 2. Prepare an income statement through pretax income for each method.
- 3. Rank the three methods in order of preference based on income taxes paid (favorable cash flow) and explain the basis for your ranking.

| l. | | | |
|--|----------|----------|----------|
| | FIFO | LIFO | AC |
| Cost of goods sold | | | |
| Beginning inventory (400 units @ \$30) | \$12,000 | \$12,000 | \$12,000 |
| Purchases (400 units @ \$20) | 8,000 | 8,000 | 8,000 |
| Goods available for sales | | | |
| Ending inventory (500 units) | | | |
| Cost of goods sold | \$ | \$ | \$ |
| Sales, 300 units; unit sales price, \$50 | | | |
| Expenses, \$2,500 | | | |
| *Computation of ending inventory: | | | |
| FIFO: | | | |
| LIFO: | | | |
| Average: | | | |
| | | | |
| | | | |

| LIFO: | | | |
|--------------------|------|------|--------------|
| Average: | | | |
| | | | |
| | | | |
| | | | |
| D. C. | | | |
| Pretax income | | | |
| | FIFO | LIFO | Average Cost |
| Sales revenue | \$ | \$ | \$ |
| Cost of goods sold | | | |
| Gross profit | | | |
| Expenses | | | |
| Pretax income | | | |

E7-13 Reporting Inventory at Lower of Cost or Net Realizable Value

Sanchez Company was formed on January 1 of the current year and is preparing the annual financial statements dated December 31, current year. Ending inventory information about the four major items stocked for regular sale follows:

| | ENDING INVENTORY, CURRENT YEAR | | | | |
|------|--------------------------------|-------------------------|----------------------------------|--|--|
| Item | Quantity on Hand | Unit Cost When Acquired | Net Realizable Value (Market) at | | |
| | | (FIFO) | Year-End | | |
| A | 30 | \$ 20 | \$ 15 | | |
| В | 55 | 40 | 44 | | |
| C | 35 | 52 | 55 | | |
| D | 15 | 27 | 32 | | |

Required:

- 1. Compute the valuation that should be used for the current year ending inventory using lower of cost or net realizable value applied on an item-by-item basis. (**Hint:** Set up columns for Item, Quantity, Total Cost, Total Net Realizable Value, and Lower of Cost or NRV.)
- 2. What will be the effect of the write-down of inventory to lower of cost or net realizable value on cost of goods sold for the year ended December 31, current year?

1. Computation

| Item | Quantity | Total cost | Total Market | LCM Valuation |
|------|----------|---------------|---------------|---------------|
| A | | X = <u>\$</u> | X = <u>\$</u> | \$ |
| В | | X = | X = | |
| С | | X = | X = | |
| D | | X = | X = | |
| | Total | <u>\$</u> | <u>\$</u> | \$ |

| 2. | | | |
|----|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |

E7-19 Analyzing Notes to Adjust Inventory from LIFO to FIFO

BorgWarner Inc. is a leading global supplier of highly engineered automotive systems and components primarily for powertrain applications. The following note was contained in its recent annual report:

NOTE 3. INVENTORIES, NET As of December 31 (in millions)

| | Current Year | Prior Year |
|----------------------------|--------------|------------|
| Raw materials and supplies | \$319.5 | \$279.8 |
| Work in progress | 89.0 | 78.0 |
| Finished goods | 115.5 | 116.3 |
| FIFO inventories | 524.0 | 474.1 |
| LIFO reserve | (18.3) | (16.0) |
| Total inventories, net | \$505.7 | \$458.1 |

Source: BorgWarner Inc.

Required:

- 1. What amount of ending inventory would have been reported in the current year if BorgWarner had used only FIFO?
- 2. The cost of goods sold reported by BorgWarner for the current year was \$6,548.7 million. Determine the cost of goods sold that would have been reported if BorgWarner had used only FIFO for both years.
- 3. Explain why BorgWarner management chose to use LIFO for certain of its inventories.

| 2. Beginning LIFO reserve (excess of FIFO over LIFO) \$ | |
|--|---|
| Beginning LIFO reserve (excess of FIFO over LIFO) \$ | |
| 8 8 \ | |
| Less: Ending LIFO reserve (excess of FIFO over LIFO) | _ |
| Difference in cost of goods sold under FIFO | _ |
| Cost of goods sold under LIFO | _ |
| Cost of goods sold under FIFO \$ | |
| 3. Explain: | |
| | |
| | |
| | |