

Inventory flow assumptions

Gamekeeper uses a perpetual inventory system. On January 10, 2001, the company had 90 units of a particular product on hand, with a total cost of \$2,430. The per-unit costs were:

| Date | Purchase Quantity | Unit Cost | Total Cost |
|------------------------------|----------------------|-----------|----------------|
| Ending inventory, 2000 | 30 | \$25 | \$ 750 |
| Jan. 1 | <u>60</u> | 28 | <u>1,680</u> |
| Total on hand | <u>90</u> | | <u>\$2,430</u> |

On January 10, 2001, Gamekeeper sold 60 units of this product.

Using the three flow assumptions listed below, compute (1) the cost of goods sold, and (2) the cost of the inventory of this product on hand *after* this sale. Show your computations.

a **Average cost:**

(1) Cost of goods sold \$ _____

(2) Inventory remaining after sale \$ _____

b **LIFO:**

(1) Cost of goods sold \$ _____

(2) Inventory remaining after sale \$ _____

c **FIFO:**

(1) Cost of goods sold \$ _____

(2) Inventory remaining after sale \$ _____

Calculations:

2 Lower-of-cost-or-market

Aqua Filter sells a single product. At December 31, the company's perpetual inventory records indicate 3,500 units on hand with a total cost (FIFO basis) of \$175,000. The replacement cost of this product at this date is \$45 per unit.

Prepare journal entries to record (a) the write-down of the inventory to the lower-of-cost-or-market value at December 31, and (b) the cash sale of 100 units on January 4 at a retail price of \$60 per unit.

| Date | General Journal | | |
|---------|-----------------|--|--|
| 19__ | | | |
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| Dec. 31 | | | |
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Calculations:

3

Periodic inventory systems

Fashion World uses a periodic inventory system. The beginning inventory of a particular product, and the purchases during the current year, were as follows:

| | | |
|---------|--|--|
| Jan. 1 | Beginning inventory | 400 units @ \$ 9.00 = \$ 3,600 |
| Feb. 15 | Purchase | 1,000 units @ \$ 9.50 = 9,500 |
| June 30 | Purchase | 1,400 units @ \$10.00 = 14,000 |
| Nov. 25 | Purchase | <u>1,200</u> units @ \$10.25 = <u>12,300</u> |
| | Total available for sale in year | <u>4,000</u> units <u>\$39,400</u> |

At December 31, the ending inventory of this product consisted of *1,500* units.

Determine the cost of the year-end inventory and the cost of goods sold for this product under each of the following methods of inventory valuation:

| | Inventory at Dec. 31 | Cost of Goods Sold |
|-----------------------|-------------------------|-----------------------|
| a Average cost | \$ _____ | \$ _____ |
| b First-in, first-out | \$ _____ | \$ _____ |
| c Last-in, first-out | \$ _____ | \$ _____ |

Calculations:

4

Gross profit method

The Blue Cactus is a furniture company that uses a periodic inventory system. On February 8, 2001, a fire destroyed all the furniture on display in the company's main showroom. Fortunately, \$130,000 of the company's inventory was located in a separate warehouse and was not damaged by the fire.

Blue Cactus now is attempting to determine the cost of the merchandise destroyed in the fire from the following information:

| | |
|---|-----------|
| Net sales during 2001, through February 8 | \$575,000 |
| Ending inventory, December 31, 2000 | 185,000 |
| Purchases in 2001 through February 8..... | 325,000 |
| Historical rate of gross profit..... | 40% |

Compute the following (show computations):

- a The cost of goods *available for sale* through February 8, 2001.
\$ _____

- b The *cost of goods sold* in 2001 through February 8.
\$ _____

- c The estimated *total inventory* on hand on February 8, prior to the fire.
\$ _____

- d The *cost of the inventory lost* in the fire.
\$ _____

5

Retail method

Creative Images uses the retail method to estimate ending inventory in its monthly financial statements. The following information is available for the month ended May 31:

| | Cost | Retail |
|-------------------------------|----------------|------------------|
| Sales..... | | <u>\$500,000</u> |
| Inventory, May 1 | \$380,500 | \$600,000 |
| Net purchases | <u>159,500</u> | <u>300,000</u> |
| Goods available for sale..... | \$540,000 | \$900,000 |

Using the retail method:

- a Determine the cost ratio that should be used in estimating the inventory at May31.
_____ %
- b Estimate the cost of the inventory at May 31. \$ _____
- c Estimate the cost of goods sold for **May** \$ _____

6. On 1 September 20X1, Lawrence Grange Company issued a note to Xandau Corporation for \$200,000 to settle an account. The note provides for a one year term with interest at the rate of (%) payable to Xandau at maturity. The interest rate is specifically stated in the note.

a. What is the amount that Xandau will receive at maturity on 1 September 20X2?

b. What is the interest income that Xandau must recognize in the year 20X1?

c. Show Xandau's adjusting entry at the end of year 20X1.

d. Show Xandau's entry to record receipt of the note proceeds when it comes due at maturity.

7. Why is control an important issue in accounting. Give three examples of specific accounting controls and the purpose of each.

