Chapter 5

# Accounting for Merchandising Operations

**THE NAVIGATOR ✓**

- Understand **Concepts for Review** ❑
- Read **Feature Story** ❑
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- Read text and answer **Before You Go On** p. 200 ❑ p. 203 ❑ p. 208 ❑ p. 209 ❑
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## CONCEPTS FOR REVIEW

**Before studying this chapter, you should know or, if necessary, review:**

- How to close revenue, expense, and dividends accounts. (Ch. 4, pp. 148–151)
- The steps in the accounting cycle. (Ch. 4, pp. 154–155)

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**ACCOUNTING MATTERS!** **FEATURE STORY**

## Selling Dollars for 85 Cents

For most of the last decade **Wal-Mart** has set the rules of the retail game. Entrepreneur Scott Blum, founder and CEO of **Buy.com**, has a different game plan. He is selling consumer products at or below cost. Buy.com is trying to create an outlet synonymous with low prices—in the hope of becoming the leading e-commerce portal on the Internet. He plans to make up the losses from sales by selling advertising on the company's Web site and a magazine to be mailed to Buy.com customers.

As if the idea of selling below cost weren't unusual enough, Blum has added another twist to merchandising: Unlike **Amazon.com**, he doesn't want to handle inventory. So he has wholesalers and distributors ship the products directly to his Web site customers.

Buy.com's slogan, "The lowest prices on earth," may be the most eye-catching sales pitch ever. The company is ruthlessly committed to being the price leader—even if it means losing money on every sale. Its own computers search competitors' Web sites to make sure that Buy.com has the lowest prices on the Internet. When Amazon.com, in June 2002, reduced its minimum-purchase order for free shipping to $49 (from $99), Buy.com one-upped that move a day later by offering free shipping with no minimum purchase.

**eToys**, **Pets.com**, and **Cyberian Outpost** all went under during the dot-com wreck of 2000–2001, and Amazon.com, after seven years, had yet to turn a profit. Only **eBay**, an auction site, is consistently profitable. Still, Scott Blum stretches for a bigger portion of a $50 billion online sales market by being the low-cost e-tailer.

Consider the implications if Buy.com is successful: Buy.com's success could change the very way wholesalers and distributors view their businesses. Its success may have an impact on all kinds of retailers—starting with Buy.com itself. If Buy.com proves that the ad space on a product order form—its Web site—is almost as valuable as the product being ordered, another virtual reseller is sure to enter the market with even lower prices.

Of course, there is one big winner if Buy.com succeeds: you. It has never been a better time to be a customer.

www.buy.com

***Source:*** Quentin Hardy, "The Death and Life of Buy.com," *Forbes* (January 21, 2002), pp. 86–89.

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## STUDY OBJECTIVES

**After studying this chapter, you should be able to:**

1. Identify the differences between a service enterprise and a merchandiser.
2. Explain the entries for purchases under a perpetual inventory system.
3. Explain the entries for sales revenues under a perpetual inventory system.
4. Explain the steps in the accounting cycle for a merchandiser.
5. Distinguish between a multiple-step and a single-step income statement.
6. Explain the computation and importance of gross profit.
7. Determine cost of goods sold under a periodic system.

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## PREVIEW OF CHAPTER 5

As indicated in the Feature Story, **Wal-Mart** is a gigantic merchandiser with over a 60% share of the retail sales market. Like traditional merchandisers such as **Sears Roebuck**, it generates revenues by selling goods to customers rather than performing services. Merchandisers that purchase and sell directly to consumers—such as **Kmart**, **Safeway**, and **Toys "R" Us**—are called **retailers**. In contrast, merchandisers that sell to retailers are known as **wholesalers**. For example, retailer **Walgreens** might buy goods from wholesaler **McKesson**; **Office Depot** might buy office supplies from wholesaler **United Stationers**.

The steps in the accounting cycle for a merchandiser are the same as the steps for a service enterprise. But merchandisers use additional accounts and entries that are required in recording merchandising transactions.

The content and organization of Chapter 5 are as follows.

**ACCOUNTING FOR MERCHANDISING OPERATIONS**

| Merchandising Operations | Recording Purchases and Sales of Merchandise | Completing the Accounting Cycle | Forms of Financial Statements | Determining Cost of Goods Sold Under a Periodic System |
|---|---|---|---|---|
| • Operating cycles<br>• Inventory systems | • Purchases<br>• Freight costs<br>• Purchase returns and allowances<br>• Purchase discounts<br>• Sales<br>• Sales returns and allowances<br>• Sales discounts | • Adjusting entries<br>• Closing entries<br>• Summary of entries | • Multiple-step income statement<br>• Single-step income statement<br>• Classified balance sheet | |

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## Merchandising Operations

**STUDY OBJECTIVE 1**

Identify the differences between a service enterprise and a merchandiser.

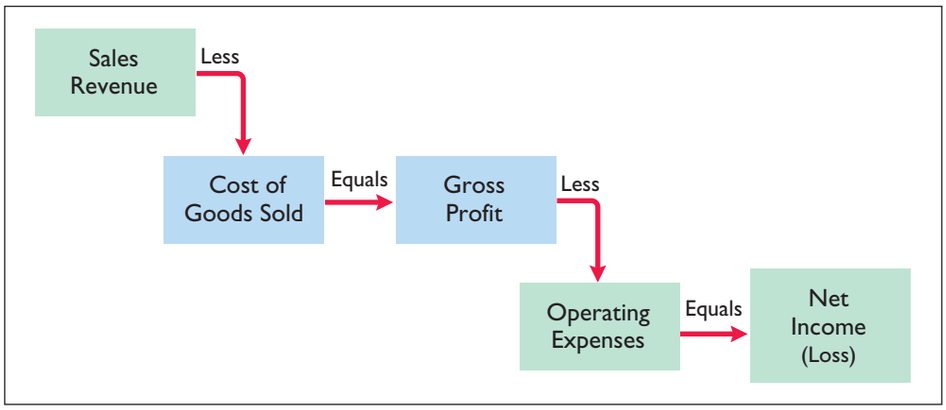
Measuring net income for a merchandiser is conceptually the same as for a service enterprise. That is, net income (or loss) results from the matching of expenses with revenues. For a merchandiser, the primary source of revenues is the sale of merchandise. This revenue source is often referred to as **sales revenue** or **sales**. Unlike expenses for a service company, expenses for a merchandiser are divided into two categories: (1) the cost of goods sold and (2) operating expenses.

The **cost of goods sold** is the total cost of merchandise sold during the period. This expense is directly related to the revenue recognized from the sale of the goods. Sales revenue less cost of goods sold is called **gross profit** on sales. For example, when a calculator costing $15 is sold for $25, the gross profit is $10. Merchandisers report gross profit on sales in the income statement.

After gross profit is calculated, operating expenses are deducted to determine net income (or net loss). **Operating expenses** are expenses incurred in the process of earning sales revenue. Examples of operating expenses are sales salaries, advertising expense, and insurance expense. The operating expenses of a merchandiser include many of the expenses found in a service company.

The income measurement process for a merchandiser is diagrammed in Illustration 5-1. The items in the three blue boxes are peculiar to a merchandiser. They are not used by a service company.

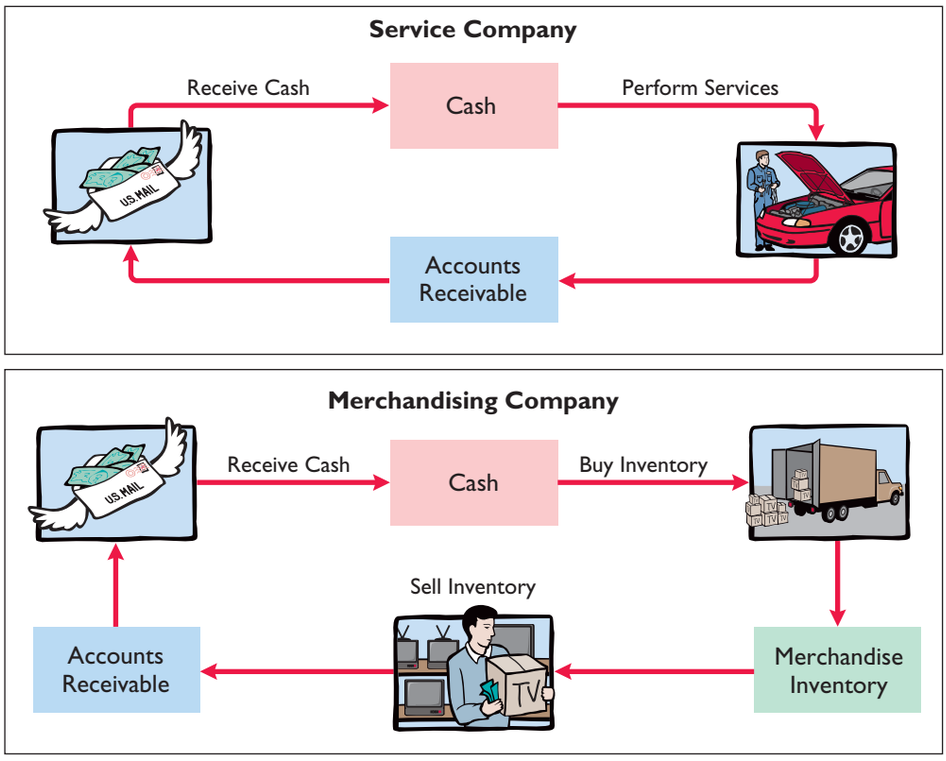
**Illustration 5-1**
Income measurement process for a merchandiser




## Operating Cycles

The operating cycle of a merchandiser differs from that of a service company, as shown in Illustration 5-2. The operating cycle of a merchandiser ordinarily is longer than that of a service company. The purchase of merchandise inventory and its

**Illustration 5-2**
Operating cycles for a service company and a merchandiser



eventual sale lengthen the cycle. Note that the added asset account for a merchandising company is an **inventory** account. It is usually entitled Merchandise Inventory. Merchandise inventory is reported as a current asset on the balance sheet.

## Inventory Systems

A merchandiser keeps track of its inventory to determine what is available for sale and what has been sold. One of two systems is used to account for inventory: a **perpetual inventory system** or a **periodic inventory system**.

### *Perpetual System*

In a **perpetual inventory system**, detailed records of the cost of each inventory purchase and sale are maintained. This system continuously—perpetually—shows the inventory that should be on hand for every item. For example, a **Ford** dealership has separate inventory records for each automobile, truck, and van on its lot. With the use of bar codes and optical scanners, a grocery store can keep a daily running record of every box of cereal and every jar of jelly that it buys and sells. Under a perpetual inventory system, the cost of goods sold is **determined each time a sale occurs**.

**HELPFUL HINT**

For control purposes a physical inventory count is taken under the perpetual system, even though it is not needed to determine cost of goods sold.

**ACCOUNTING MATTERS!** **Business Insight**

What's in a bar code? First, the bar code usually doesn't contain descriptive data (just as your Social Security number or car's license plate number doesn't have anything about your name or where you live). For example, the bar codes found on food items at grocery stores don't contain the price or description of the food item. Instead, the bar code has a 12-digit "product number" in it. When read by a bar code reader and transmitted to the computer, the computer finds the disk file item record(s) associated with that item number. In the disk file is the price, vendor name, quantity on-hand, description, and so on. The computer does a "price lookup" by reading the bar code, and then it creates a register of the items and adds the price to the subtotal of the groceries sold. It also subtracts the quantity from the "on-hand" total.

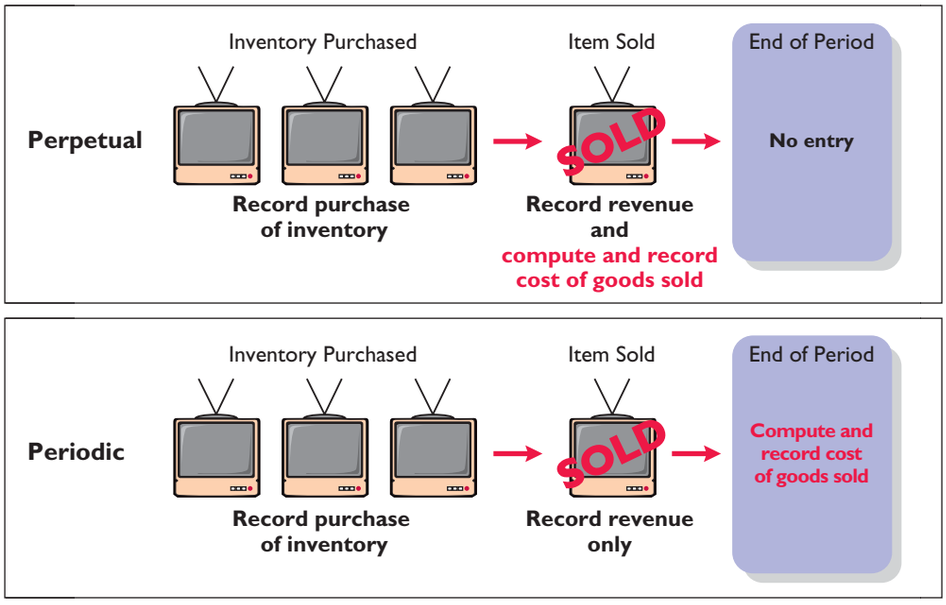
? How is a grocery store's accounting equation changed by the computer's bar-code actions?

### *Periodic System*

In a **periodic inventory system**, detailed inventory records of the goods on hand are not kept throughout the period. The cost of goods sold is **determined only at the end of the accounting period**—that is, periodically. At that time, a physical inventory count is taken to determine the cost of goods on hand (Merchandise Inventory). To determine the cost of goods sold under a periodic inventory system, you must (1) determine the cost of goods on hand at the beginning of the accounting period, (2) add to it the cost of goods purchased, and (3) subtract the cost of goods on hand at the end of the accounting period.

Illustration 5-3 graphically compares the sequence of activities and the timing of the cost of goods sold computation under the two inventory systems.

**Illustration 5-3**
Comparing perpetual and periodic inventory systems




### *Additional Considerations*

Perpetual systems have traditionally been used by companies that sell merchandise with high unit values. Examples are automobiles, furniture, and major home appliances. The widespread use of computers and electronic scanners now enables many more companies to install perpetual inventory systems. The perpetual inventory system is so named because the accounting records continuously—perpetually—show the quantity and cost of the inventory that should be on hand at any time.

A perpetual inventory system provides better control over inventories than a periodic system. The inventory records show the quantities that should be on hand. So, the goods can be counted at any time to see whether the amount of goods actually on hand agrees with the inventory records. Any shortages uncovered can be investigated immediately. A perpetual inventory system does require additional clerical work and additional cost to maintain the subsidiary records. But a computerized system can minimize this cost. Much of **Wal-Mart**'s success is attributed to its sophisticated perpetual inventory system. When snowboard maker **Morrow Snowboards Inc.** issued shares of stock to the public for the first time, some investors expressed reluctance to invest in Morrow. They were concerned about a number of accounting control problems. To reduce investor concerns, Morrow implemented a perpetual inventory system to improve its control over inventory.

Because the perpetual inventory system is growing in popularity and use, we illustrate it in this chapter. The periodic system, still widely used, is described in an appendix to this chapter.

## Recording Purchases and Sales of Merchandise

### Purchases

**STUDY OBJECTIVE 2**

Explain the entries for purchases under a perpetual inventory system.

Purchases of inventory may be made for cash or on account (credit). Purchases are normally recorded when the goods are received from the seller. Every purchase should be supported by business documents that provide written evidence of the transaction. Each cash purchase should be supported by a canceled check or a cash register receipt indicating the items purchased and amounts paid. Cash purchases are recorded by an increase in Merchandise Inventory and a decrease in Cash.

Each credit purchase should be supported by a **purchase invoice**. This document indicates the total purchase price and other relevant information. But the purchaser does not prepare a separate purchase invoice. Instead, the copy of the sales invoice sent by the seller is used by the buyer as a purchase invoice. In Illustration 5-4, for example, the sales invoice prepared by Sellers Electronix (the seller) is used as a purchase invoice by Beyer Video (the buyer).

INVOICE NO. 731

SELLERS ELECTRONIX
27 CIRCLE DRIVE
HARDING, MICHIGAN 48281

SOLD TO
Firm Name: Beyer Video
Attention of: James Hoover, Purchasing Agent
Address: 125 Main Street
Chelsea (City) Illinois (State) 60915 (Zip)

| Date 5/4/06 | Salesperson Malone | Terms 2/10, n/30 | Freight Paid by Buyer | |
|---|---|---|---|---|
| **Catalog No.** | **Description** | **Quantity** | **Price** | **Amount** |
| X572Y9820 | Printed Circuit Board-prototype | 1 | 2,300 | $2,300 |
| A2547Z45 | Production Model Circuits | 5 | 300 | 1,500 |
| **IMPORTANT:** ALL RETURNS MUST BE MADE WITHIN 10 DAYS | | | **TOTAL** | $3,800 |

**Illustration 5-4**
Sales invoice used as purchase invoice by Beyer Video

**HELPFUL HINT**

To better understand the contents of this invoice, identify these items:
1. Seller
2. Invoice date
3. Purchaser
4. Salesperson
5. Credit terms
6. Freight terms
7. Goods sold: catalog number, description, quantity, price per unit
8. Total invoice amount

The associated entry for Beyer Video for the invoice from Sellers Electronix is:

| | | | |
|---|---|---|---|
| May 4 | Merchandise Inventory<br>Accounts Payable<br>(To record goods purchased on account from Sellers Electronix) | 3,800 | 3,800 |

| A | = | L | + | SE |
|---|---|---|---|---|
| +3,800 | | +3,800 | | |

**Cash Flows**
no effect

Under the perpetual inventory system, purchases of merchandise for sale are recorded in the Merchandise Inventory account. Thus, a retailer of general merchandise such as **Wal-Mart** would debit Merchandise Inventory for clothing, sporting goods, and anything else purchased for resale to customers.

Not all purchases are debited to Merchandise Inventory, however. Purchases of assets acquired for use and not for resale (such as supplies, equipment, and similar items) are recorded as increases to specific asset accounts rather than to Merchandise Inventory. Wal-Mart would increase Supplies to record the purchase of materials used to make shelf signs or for cash register receipt paper.

## Freight Costs

The sales agreement should indicate whether the seller or the buyer is to pay the cost of transporting the goods to the buyer's place of business. When a common carrier such as a railroad, trucking company, or airline is used, the transportation company prepares a freight bill in accordance with the sales agreement. Freight terms are expressed as either **FOB shipping point** or **FOB destination**. The letters FOB mean **free on board**. Thus, **FOB shipping point** means that goods are placed free on board the carrier by the seller, and the buyer pays the freight costs. Conversely, **FOB destination** means that the goods are placed free on board to the buyer's place of business, and the seller pays the freight. For example, the sales invoice in Illustration 5-4 on page 195 indicates that the buyer (Beyer Video) pays the freight charges.

When the purchaser directly incurs the freight costs, the account Merchandise Inventory is debited. For example, if upon delivery of the goods on May 6, Beyer Video pays Acme Freight Company $150 for freight charges, the entry on Beyer Video's books is:

| A | = | L | + | SE |
|---|---|---|---|---|
| +150 | | | | |
| −150 | | | | |

**Cash Flows**
−150

| | | | |
|---|---|---|---|
| May 6 | Merchandise Inventory | 150 | |
| | Cash | | 150 |
| | (To record payment of freight on goods purchased) | | |

In contrast, **freight costs incurred by the seller on outgoing merchandise are an operating expense to the seller**. These costs increase an expense account titled Freight-out or Delivery Expense. If the freight terms on the invoice in Illustration 5-4 had required that Sellers Electronix pay the $150 freight charges, the entry by Sellers Electronix would have been:

| A | = | L | + | SE |
|---|---|---|---|---|
| −150 | | | | −150 Exp |

**Cash Flows**
−150

| | | | |
|---|---|---|---|
| May 4 | Freight-out (or Delivery Expense) | 150 | |
| | Cash | | 150 |
| | (To record payment of freight on goods sold) | | |

When the freight charges are paid by the seller, the seller will usually establish a higher invoice price for the goods to cover the expense of shipping.

## Purchase Returns and Allowances

A purchaser may be dissatisfied with the merchandise received. The goods may be damaged or defective, of inferior quality, or perhaps they do not meet the purchaser's specifications. In such cases, the purchaser may return the goods to the seller. The purchaser is granted credit if the sale was made on credit, or a cash refund if the purchase was for cash. This transaction is known as a **purchase return**. Or the purchaser may choose to keep the merchandise if the seller is willing to grant an allowance (deduction) from the purchase price. This transaction is known as a **purchase allowance**.

Assume that Beyer Video returned goods costing $300 to Sellers Electronix on May 8. The entry by Beyer Video for the returned merchandise is:

| A | = | L | + | SE |
|---|---|---|---|---|
| −300 | | −300 | | |

**Cash Flows**
no effect

| | | | |
|---|---|---|---|
| May 8 | Accounts Payable | 300 | |
| | Merchandise Inventory | | 300 |
| | (To record return of goods received from Sellers Electronix) | | |

Beyer Video increased Merchandise Inventory when the goods were received. So, Beyer Video decreases Merchandise Inventory when it returns the goods or when it is granted an allowance.

**ACCOUNTING MATTERS!** **Business Insight**

It can cost a lot to convert from traditional business to e-commerce. For example, when **Borders**, the second largest seller of books, went online, it had to build an entirely new $15 million distribution center. The reason? It previously shipped large orders of books to its stores. Instead, it now has to distribute tiny orders to individual customers. The distribution costs of online sales can be surprisingly high—as much as 15 percent of sales.


? The *distribution costs* of online sales can be greater than for traditional in-store sales. What costs may be less for online sales?

## Purchase Discounts

The credit terms of a purchase on account may permit the buyer to claim a cash discount for prompt payment. The buyer calls this cash discount a **purchase discount**. This incentive offers advantages to both parties: The purchaser saves money, and the seller is able to shorten the operating cycle by converting the accounts receivable into cash earlier.

The **credit terms** specify the amount of the cash discount and time period during which it is offered. They also indicate the length of time in which the purchaser is expected to pay the full invoice price. In the sales invoice in Illustration 5-4, credit terms are 2/10, n/30. This is read "two-ten, net thirty." It means that a 2 percent cash discount may be taken on the invoice price, less any returns or allowances, if payment is made within 10 days of the invoice date (the **discount period**). If payment is not made in that time, the invoice price, less any returns or allowances, is due 30 days from the invoice date. Or, the discount period may extend to a specified number of days after the month in which the sale occurs. For example, 1/10 EOM (end of month) means that a 1 percent discount is available if the invoice is paid within the first 10 days of the next month.

**HELPFUL HINT**

The term *net* in "net 30" means the remaining amount due after subtracting any sales returns and allowances and partial payments.

The seller may elect not to offer a cash discount for prompt payment. In that case, credit terms will specify only the maximum time period for paying the balance due. For example, the time period may be stated as n/30, n/60, or n/10 EOM. These mean, respectively, that the net amount must be paid in 30 days, 60 days, or within the first 10 days of the next month.

When an invoice is paid within the discount period, the amount of the discount decreases Merchandise Inventory. Inventory is recorded at its cost and, by paying within the discount period, the merchandiser has reduced its cost. To illustrate, assume Beyer Video pays the balance due of $3,500 (gross invoice price of $3,800 less purchase returns and allowances of $300) on May 14, the last day of the discount period. The cash discount is $70 ($3,500 × 2%), and the amount of cash paid by Beyer Video is $3,430 ($3,500 − $70). The entry to record the May 14 payment by Beyer Video is:

| A | = | L | + | SE |
|---|---|---|---|---|
| −3,430 | | −3,500 | | |
| −70 | | | | |

Cash Flows −3,430

| | | | |
|---|---|---|---|
| May 14 | Accounts Payable | 3,500 | |
| | Cash | | 3,430 |
| | Merchandise Inventory | | 70 |
| | (To record payment within discount period) | | |

If Beyer Video failed to take the discount and instead made full payment on June 3, Beyer Video's entry would be:

| A | = | L | + | SE |
|---|---|---|---|---|
| −3,500 | | −3,500 | | |

Cash Flows −3,500

| | | | |
|---|---|---|---|
| June 3 | Accounts Payable | 3,500 | |
| | Cash | | 3,500 |
| | (To record payment with no discount taken) | | |

A merchandiser usually should take all available discounts. Passing up the discount may be viewed as **paying interest** for use of the money. For example, if Beyer Video passed up the discount, it would be like paying an interest rate of 2 percent for the use of $3,500 for 20 days (30 days minus 10 days). This is the equivalent of an annual interest rate of approximately 36.5 percent (2% × 365/20). Obviously, it would be better for Beyer Video to borrow at prevailing bank interest rates of 8 percent to 12 percent than to lose the discount.

## Sales

**STUDY OBJECTIVE 3**

Explain the entries for sales revenues under a perpetual inventory system.

Sales revenues, like service revenues, are recorded when earned. This is done in accord with the revenue recognition principle. Typically, sales revenues are earned when the goods are transferred from the seller to the buyer. At this point the sales transaction is completed, and the sales price has been established.

Sales may be made on credit or for cash. Every sales transaction should be supported by a **business document** that provides written evidence of the sale. **Cash register tapes** provide evidence of cash sales. A **sales invoice**, like the one that was shown in Illustration 5-4 (page 195), provides support for a credit sale. The original copy of the invoice goes to the customer. A copy is kept by the seller for use in recording the sale. The invoice shows the date of sale, customer name, total sales price, and other relevant information.

Two entries are made for each sale. The first entry records the sale: Cash (or Accounts Receivable, if a credit sale) is increased by a debit, and Sales is increased by a credit at the selling (invoice) price of the goods. The second entry records the cost of the merchandise sold: Cost of Goods Sold is increased by a debit, and Merchandise Inventory is decreased by a credit for the cost of those goods. As a result, the Merchandise Inventory account will show at all times the amount of inventory that should be on hand.

To illustrate a credit sales transaction, Sellers Electronix's sale of $3,800 on May 4 to Beyer Video (see Illustration 5-4, page 195) is recorded as follows. (Assume the merchandise cost Sellers Electronix $2,400.)

| A = L + SE | Cash Flows |
|---|---|
| +3,800 +3,800 Rev | no effect |

| | | | |
|---|---|---|---|
| May 4 | Accounts Receivable | 3,800 | |
| | Sales | | 3,800 |
| | (To record credit sale to Beyer Video per invoice #731) | | |

| A = L + SE | Cash Flows |
|---|---|
| −2,400 −2,400 Exp | no effect |

| | | | |
|---|---|---|---|
| 4 | Cost of Goods Sold | 2,400 | |
| | Merchandise Inventory | | 2,400 |
| | (To record cost of merchandise sold on invoice #731 to Beyer Video) | | |

For internal decision-making purposes, merchandisers may use more than one sales account. For example, Sellers Electronix may keep separate sales accounts for its TV sets, DVD players, and microwave ovens. By using separate sales accounts for major product lines, company management can monitor sales trends more closely and respond more strategically to changes in sales patterns. For example, if TV sales are increasing while microwave oven sales are decreasing, the company could reevaluate its advertising and pricing policies on each of these items.

**HELPFUL HINT**

The Sales account is credited only for sales of goods held for resale. Sales of assets not held for resale (such as equipment or land) are credited directly to the asset account.

However, on its income statement presented to outside investors, a merchandiser would normally provide only a single sales figure—the sum of all of its individual sales accounts. This is done for two reasons. First, providing detail on individual sales accounts would add length to the income statement. Second, companies do not want their competitors to know the details of their operating results.

## Sales Returns and Allowances

We now look at the "flipside" of purchase returns and allowances, which are **sales returns and allowances** recorded on the books of the seller. Sellers Electronix's entries to record credit for returned goods involve two entries: (1) The first is an increase in Sales Returns and Allowances and a decrease in Accounts Receivable at

the $300 selling price. (2) The second is an increase in Merchandise Inventory (assume a $140 cost) and a decrease in Cost of Goods Sold. The entries are as follows.

| | | | |
|---|---|---|---|
| May 8 | Sales Returns and Allowances | 300 | |
| | Accounts Receivable | | 300 |
| | (To record credit granted to Beyer Video for returned goods) | | |
| 8 | Merchandise Inventory | 140 | |
| | Cost of Goods Sold | | 140 |
| | (To record cost of goods returned) | | |

| A | = | L | + | SE |
|---|---|---|---|---|
| −300 | | | | −300 Rev |

**Cash Flows**
no effect

| A | = | L | + | SE |
|---|---|---|---|---|
| +140 | | | | +140 Exp |

**Cash Flows**
no effect

If goods are returned because they are damaged or defective, then the entry to Merchandise Inventory and Cost of Goods Sold should be for the estimated value of the returned goods, rather than their cost. For example, if the goods returned to Sellers Electronix were defective and had a scrap value of $50, Merchandise Inventory would be debited for $50, and Cost of Goods Sold would be credited for $50.

Sales Returns and Allowances is a **contra revenue account** to Sales. The normal balance of Sales Returns and Allowances is a debit. A contra account is used, instead of debiting Sales, to disclose in the accounts the amount of sales returns and allowances. This information is important to management. Excessive returns and allowances suggest inferior merchandise, inefficiencies in filling orders, errors in billing customers, and mistakes in delivery or shipment of goods. Also, a debit recorded directly to Sales could distort comparisons between total sales in different accounting periods.

**HELPFUL HINT**

Remember that the increases, decreases, and normal balances of contra accounts are the opposite of the accounts to which they correspond.

**ACCOUNTING MATTERS!** **Ethics Insight**

How high is too high? Returns can become so high that it is questionable whether sales revenue should have been recognized in the first place. An example of high returns is **Florafax International Inc.**, a floral supply company, which was alleged to have shipped its product without customer authorization on ten holiday occasions, including 8,562 shipments of flowers to customers for Mother's Day and 6,575 for Secretary's Day. The return rate on these shipments went as high as 69% of sales. As one employee noted: "Products went out the front door and came in the back door."

? How does management know the amount of sales returns? Would returns for a floral supply company have a greater negative impact on earnings than returns for a department store?

## Sales Discounts

As mentioned in our discussion of purchase transactions, the seller may offer the customer a cash discount for the prompt payment of the balance due. From the seller's point of view, this is called a **sales discount**. Like a purchase discount, a sales discount is based on the invoice price less returns and allowances, if any. The Sales Discounts account is debited for discounts that are taken. The entry by Sellers Electronix to record the cash receipt on May 14 from Beyer Video within the discount period is:

| | | | |
|---|---|---|---|
| May 14 | Cash | 3,430 | |
| | Sales Discounts | 70 | |
| | Accounts Receivable | | 3,500 |
| | (To record collection within 2/10, n/30 discount period from Beyer Video) | | |

| A | = | L | + | SE |
|---|---|---|---|---|
| +3,430 | | | | −70 Rev |
| −3,500 | | | | |

**Cash Flows**
+3,430

Like Sales Returns and Allowances, Sales Discounts is a **contra revenue account** to Sales. Its normal balance is a debit. This account is used, instead of debiting Sales, to disclose cash discounts taken by customers. If the discount is not taken, Sellers Electronix debits Cash for $3,500 and credits Accounts Receivable for the same amount at the date of collection.

## BEFORE YOU GO ON...

### Review It

1. How does the measurement of net income in a merchandising company differ from that in a service enterprise?
2. In what ways is a perpetual inventory system different from a periodic system?
3. Under the perpetual inventory system, what entries are made to record purchases, purchase returns and allowances, purchase discounts, and freight costs?
4. Under a perpetual inventory system, what are the two entries that must be recorded at the time of each sale?
5. Why is it important to use the Sales Returns and Allowances account, rather than simply reducing the Sales account, when goods are returned?

### Do It

On September 5, NewIdea Company buys merchandise on account from Janet Diaz Company. The selling price of the goods is $1,500, and the cost to Diaz Company was $800. On September 8 defective goods with a selling price of $200 and a scrap value of $80 are returned. Record the transactions on the books of both companies.

### ACTION PLAN

- Purchaser: Record purchases of inventory at its cost and directly reduce the Merchandise Inventory account for returned goods.
- Seller: Record both the sale and the cost of goods sold at the time of the sale. Record returns in a contra account, Sales Returns and Allowances.

### SOLUTION

**NewIdea Company**

| | | | |
|---|---|---|---|
| Sept. 5 | Merchandise Inventory | 1,500 | |
| | Accounts Payable | | 1,500 |
| | (To record goods purchased on account) | | |
| 8 | Accounts Payable | 200 | |
| | Merchandise Inventory | | 200 |
| | (To record return of defective goods) | | |

**Janet Diaz Company**

| | | | |
|---|---|---|---|
| Sept. 5 | Accounts Receivable | 1,500 | |
| | Sales | | 1,500 |
| | (To record credit sale) | | |
| 5 | Cost of Goods Sold | 800 | |
| | Merchandise Inventory | | 800 |
| | (To record cost of goods sold on account) | | |
| 8 | Sales Returns and Allowances | 200 | |
| | Accounts Receivable | | 200 |
| | (To record credit granted for receipt of returned goods) | | |
| 8 | Merchandise Inventory | 80 | |
| | Cost of Goods Sold | | 80 |
| | (To record scrap value of goods returned) | | |

Related exercise material: *BE5-1, BE5-2, BE5-3, BE5-4, E5-1, E5-2, E5-3, and E5-4.*

THE NAVIGATOR

## Completing the Accounting Cycle

Up to this point, we have illustrated the basic entries in recording transactions relating to purchases and sales in a perpetual inventory system. Now we consider the remaining steps in the accounting cycle for a merchandiser. Each of the required steps described in Chapter 4 for a service company applies to a merchandising company. Use of a worksheet by a merchandiser (an optional step) is shown in Appendix 5B at the end of this chapter.

**STUDY OBJECTIVE 4**

Explain the steps in the accounting cycle for a merchandiser.

### Adjusting Entries

A merchandiser generally has the same types of adjusting entries as a service company. But a merchandiser using a perpetual system will require one additional adjustment to make the records agree with the actual inventory on hand. Here's why: At the end of each period, a merchandiser using a perpetual system will take a physical count of its goods on hand for control purposes. A company's unadjusted balance in Merchandise Inventory will usually not agree with the actual amount of inventory on hand at year-end. The perpetual inventory records may be incorrect due to a variety of causes such as recording errors, theft, or waste. As a result, the perpetual records need adjustment to ensure that the recorded inventory amount agrees with the actual inventory on hand. **This involves adjusting Merchandise Inventory and Cost of Goods Sold.**

For example, suppose that the records of Sellers Electronix report an unadjusted balance in Merchandise Inventory of $40,500. Through a physical count, the company determines that its actual merchandise inventory on hand at year-end is $40,000. The adjusting entry would be to debit Cost of Goods Sold for $500 and to credit Merchandise Inventory for $500.

**HELPFUL HINT**

The steps required to determine the actual inventory on hand are discussed in Chapter 6.

### Closing Entries

For a merchandiser, like a service enterprise, all accounts that affect the determination of net income are closed to Income Summary. In journalizing, all temporary accounts with debit balances are credited, and all temporary accounts with credit balances are debited, as shown below for Sellers Electronix. Note that cost of goods sold must be closed to Income Summary.

| | | | |
|---|---|---|---|
| Dec. 31 | Sales | 480,000 | |
| | Income Summary | | 480,000 |
| | (To close income statement accounts with credit balances) | | |
| 31 | Income Summary | 450,000 | |
| | Sales Returns and Allowances | | 12,000 |
| | Sales Discounts | | 8,000 |
| | Cost of Goods Sold | | 316,000 |
| | Store Salaries Expense | | 45,000 |
| | Administrative Salaries Expense | | 19,000 |
| | Freight-out | | 7,000 |
| | Advertising Expense | | 16,000 |
| | Utilities Expense | | 17,000 |
| | Depreciation Expense | | 8,000 |
| | Insurance Expense | | 2,000 |
| | (To close income statement accounts with debit balances) | | |
| 31 | Income Summary | 30,000 | |
| | Retained Earnings | | 30,000 |
| | (To close net income to retained earnings) | | |

**HELPFUL HINT**

The easiest way to prepare the first two closing entries is to identify the temporary accounts by their balances and then prepare one entry for the credits and one for the debits.

(*continued from p. 201*)

| | | | |
|---|---|---|---|
| 31 | Retained Earnings | 15,000 | |
| | Dividends | | 15,000 |
| | (To close dividends to retained earnings) | | |

After the closing entries are posted, all temporary accounts have zero balances. In addition, Retained Earnings has a credit balance of $48,000: beginning balance + net income − dividends ($33,000 + $30,000 − $15,000).

## Summary of Merchandising Entries

The entries for the merchandising accounts using a perpetual inventory system are summarized in Illustration 5-5.

**Illustration 5-5**
Daily recurring and adjusting and closing entries

| | Transactions | Daily Recurring Entries | Dr. | Cr. |
|---|---|---|---|---|
| Sales Transactions | Selling merchandise to customers. | Cash or Accounts Receivable | XX | |
| | | Sales | | XX |
| | | Cost of Goods Sold | XX | |
| | | Merchandise Inventory | | XX |
| | Granting sales returns or allowances to customers. | Sales Returns and Allowances | XX | |
| | | Cash or Accounts Receivable | | XX |
| | | Merchandise Inventory | XX | |
| | | Cost of Goods Sold | | XX |
| | Paying freight costs on sales; FOB destination. | Freight-out | XX | |
| | | Cash | | XX |
| | Receiving payment from customers within discount period. | Cash | XX | |
| | | Sales Discounts | XX | |
| | | Accounts Receivable | | XX |
| Purchase Transactions | Purchasing merchandise for resale. | Merchandise Inventory | XX | |
| | | Cash or Accounts Payable | | XX |
| | Paying freight costs on merchandise purchased; FOB shipping point. | Merchandise Inventory | XX | |
| | | Cash | | XX |
| | Receiving purchase returns or allowances from suppliers. | Cash or Accounts Payable | XX | |
| | | Merchandise Inventory | | XX |
| | Paying suppliers within discount period. | Accounts Payable | XX | |
| | | Merchandise Inventory | | XX |
| | | Cash | | XX |
| | **Events** | **Adjusting and Closing Entries** | | |
| | Adjust because book amount is higher than the inventory amount determined to be on hand. | Cost of Goods Sold | XX | |
| | | Merchandise Inventory | | XX |
| | Closing temporary accounts with credit balances. | Sales | XX | |
| | | Income Summary | | XX |
| | Closing temporary accounts with debit balances. | Income Summary | XX | |
| | | Sales Returns and Allowances | | XX |
| | | Sales Discounts | | XX |
| | | Cost of Goods Sold | | XX |
| | | Freight-out | | XX |
| | | Expenses | | XX |

**BEFORE YOU GO ON...**

### Review It

1. Why is an adjustment to the Merchandise Inventory account usually needed?
2. What merchandising account(s) will appear in the post-closing trial balance?

### Do It

The trial balance of Celine's Sports Wear Shop at December 31 shows Merchandise Inventory $25,000, Sales $162,400, Sales Returns and Allowances $4,800, Sales Discounts $3,600, Cost of Goods Sold $110,000, Rental Revenue $6,000, Freight-out $1,800, Rent Expense $8,800, and Salaries and Wages Expense $22,000. Prepare the closing entries for the above accounts.

**ACTION PLAN**

- Close all temporary accounts with credit balances to Income Summary by debiting these accounts.
- Close all temporary accounts with debit balances to Income Summary by crediting these accounts.

**SOLUTION** The two closing entries are:

| | | | |
|---|---|---|---|
| Dec. 31 | Sales | 162,400 | |
| | Rental Revenue | 6,000 | |
| | Income Summary | | 168,400 |
| | (To close accounts with credit balances) | | |
| Dec. 31 | Income Summary | 151,000 | |
| | Cost of Goods Sold | | 110,000 |
| | Sales Returns and Allowances | | 4,800 |
| | Sales Discounts | | 3,600 |
| | Freight-out | | 1,800 |
| | Rent Expense | | 8,800 |
| | Salaries and Wages Expense | | 22,000 |
| | (To close accounts with debit balances) | | |

Related exercise material: *BE5-7, E5-5, and E5-6.*

THE NAVIGATOR

## Forms of Financial Statements

Two forms of the income statement are widely used by merchandisers. Also, merchandisers use the classified balance sheet, introduced in Chapter 4. The use of these financial statements by merchandisers is explained below.

**STUDY OBJECTIVE 5**

Distinguish between a multiple-step and a single-step income statement.

### Multiple-Step Income Statement

The **multiple-step income statement** is so named because it shows the steps in determining net income (or net loss). It shows two main steps: (1) Cost of goods sold is subtracted from net sales, to determine gross profit. (2) Operating expenses are deducted from gross profit, to determine net income. These steps relate to the company's principal operating activities. A multiple-step statement also distinguishes between **operating** and **non-operating activities**. This distinction provides users with more information about a company's income performance. The statement also highlights intermediate components of income and shows subgroupings of expenses.

## Income Statement Presentation of Sales

The multiple-step income statement begins by presenting sales revenue. As contra revenue accounts, sales returns and allowances, and sales discounts are deducted from sales to arrive at **net sales**. The sales revenues section for Sellers Electronix, using assumed data, is as follows.

**Illustration 5-6**
Computation of net sales

| SELLERS ELECTRONIX<br>Income Statement (partial) | | |
|---|---|---|
| **Sales revenues** | | |
| Sales | | $480,000 |
| Less: Sales returns and allowances | $12,000 | |
| Sales discounts | 8,000 | 20,000 |
| **Net sales** | | **$460,000** |

This presentation discloses the key aspects of the company's principal revenue-producing activities.

## Gross Profit

**STUDY OBJECTIVE 6**

Explain the computation and importance of gross profit.

From Illustration 5-1, you learned that cost of goods sold is deducted from sales revenue to determine **gross profit**. Sales revenue used for this computation is **net sales**. On the basis of the sales data presented in Illustration 5-6 (net sales of $460,000) and the cost of goods sold under the perpetual inventory system (assume $316,000), the gross profit for Sellers Electronix is $144,000, computed as follows.

**Illustration 5-7**
Computation of gross profit

| | |
|---|---|
| Net sales | $460,000 |
| Cost of goods sold | 316,000 |
| **Gross profit** | **$144,000** |

A company's gross profit may also be expressed as a percentage. This is done by dividing the amount of gross profit by net sales. For Sellers Electronix the **gross profit rate** is 31.3 percent, computed as follows.

**Illustration 5-8**
Gross profit rate formula and computation

| Gross Profit | ÷ | Net Sales | = | Gross Profit Rate |
|---|---|---|---|---|
| $144,000 | ÷ | $460,000 | = | **31.3%** |

The gross profit rate is generally considered to be more useful than the gross profit amount. The rate expresses a more meaningful (qualitative) relationship between net sales and gross profit. For example, a gross profit of $1,000,000 may be impressive. But, if it is the result of a gross profit rate of only 7 percent, it is not so impressive. The gross profit rate tells how many cents of each sales dollar go to gross profit.

Gross profit represents the **merchandising profit** of a company. It is not a measure of the overall profitability, because operating expenses have not been deducted. But the amount and trend of gross profit is closely watched by management and other interested parties. They compare current gross profit with amounts reported in past periods. They also compare the company's gross profit rate with rates of competitors and with industry averages. Such comparisons provide information about the effectiveness of a company's purchasing function and the soundness of its pricing policies.

## Operating Expenses and Net Income

Operating expenses are the third component in measuring net income for a merchandiser. As indicated earlier, these expenses are similar in merchandising and

service enterprises. At Sellers Electronix, operating expenses were $114,000. The firm's net income is determined by subtracting operating expenses from gross profit. Thus, net income is $30,000, as shown below.

| | |
|---|---|
| Gross profit | $144,000 |
| **Operating expenses** | **114,000** |
| Net income | $ 30,000 |

**Illustration 5-9**
Operating expenses in computing net income

The net income amount is the "bottom line" of a company's income statement.

## *Nonoperating Activities*

**Nonoperating activities** consist of (1) revenues and expenses from auxiliary operations and (2) gains and losses that are unrelated to the company's operations. The results of nonoperating activities are shown in two sections: "**Other revenues and gains**" and "**Other expenses and losses**." For a merchandiser, these sections will typically include the following items.

**Illustration 5-10**
Items reported in nonoperating sections

| Nonoperating Activities | |
|---|---|
| **Other revenues and gains** | **Other expenses and losses** |
| Interest revenue from notes receivable and marketable securities | Interest expense on notes and loans payable |
| Dividend revenue from investments in capital stock | Casualty losses from recurring causes such as vandalism and accidents |
| Rent revenue from subleasing a portion of the store | Loss from the sale or abandonment of property, plant, and equipment |
| Gain from the sale of property, plant, and equipment | Loss from strikes by employees and suppliers |

**ACCOUNTING MATTERS!** **Ethics Insight**

After **Enron**, many companies were forced by increased investor criticism and regulator scrutiny to improve the clarity of their financial disclosures. For example, **IBM** announced that it would begin providing more detail regarding its "Other gains and losses." It had previously included these items in its selling, general, and administrative expenses, with little disclosure.

Disclosing other gains and losses in a separate line item on the income statement won't have any effect on bottom-line income. However, analysts complained that burying these details in the selling, general, and administrative expense line reduced their ability to fully understand how well IBM was performing. For example, previously if IBM sold off one of its buildings at a gain, it would include this gain in the selling, general, and administrative expense line item, thus reducing that expense. This made it appear that the company had done a better job of controlling operating expenses than it actually had. Other companies recently announcing changes to increase the informativeness of their income statements included **PepsiCo**, **Krispy Kreme Doughnuts**, and **General Electric**.

? Why have investors and analysts demanded more accuracy in isolating "Other gains and losses" from operating items?

The nonoperating activities are reported in the income statement immediately after the company's primary operating activities. These sections are shown in Illustration 5-11, using assumed data for Sellers Electronix.

**Illustration 5-11**
Multiple-step income statement—nonoperating sections and subgroupings of operating expenses

**SELLERS ELECTRONIX**
Income Statement
For the Year Ended December 31, 2006

| | | | |
|---|---|---|---|
| Calculation of gross profit | **Sales revenues** | | |
| | Sales | | $480,000 |
| | Less: Sales returns and allowances | $12,000 | |
| | Sales discounts | 8,000 | 20,000 |
| | Net sales | | 460,000 |
| | **Cost of goods sold** | | 316,000 |
| | **Gross profit** | | 144,000 |
| Calculation of income from operations | **Operating expenses** | | |
| | **Selling expenses** | | |
| | Store salaries expense | 45,000 | |
| | Advertising expense | 16,000 | |
| | Depreciation expense—store equipment | 8,000 | |
| | Freight-out | 7,000 | |
| | Total selling expenses | 76,000 | |
| | **Administrative expenses** | | |
| | Salaries expense | 19,000 | |
| | Utilities expense | 17,000 | |
| | Insurance expense | 2,000 | |
| | Total administrative expenses | 38,000 | |
| | Total operating expenses | | 114,000 |
| | **Income from operations** | | 30,000 |
| Results of nonoperating activities | **Other revenues and gains** | | |
| | Interest revenue | 3,000 | |
| | Gain on sale of equipment | 600 | |
| | | 3,600 | |
| | **Other expenses and losses** | | |
| | Interest expense | 1,800 | |
| | Casualty loss from vandalism | 200 | |
| | | 2,000 | |
| | | | 1,600 |
| | **Net income** | | $ 31,600 |

When the two nonoperating sections are included, the label "**Income from operations**" (or Operating income) precedes them. It clearly identifies the results of the company's normal operations. Income from operations is determined by subtracting cost of goods sold and operating expenses from net sales.

In the nonoperating activities sections, items are generally reported at the net amount. Thus, if a company received a $2,500 insurance settlement on vandalism losses of $2,700, the loss is reported at $200. Note, too, that the results of the two nonoperating sections are netted. The difference is added to or subtracted from income from operations to determine net income. It is not uncommon for companies to combine these two nonoperating sections into a single "Other revenues and expenses" section.

### *Subgrouping of Operating Expenses*

In larger companies, operating expenses are often subdivided into selling expenses and administrative expenses, as illustrated in Illustration 5-11. **Selling expenses** are those associated with making sales. They include expenses for sales promotion as well as expenses of completing the sale, such as delivery and shipping. **Administrative expenses** (sometimes called general expenses) relate to general operating activities such as personnel management, accounting, and store security.

When subgroupings are made, some expenses may have to be prorated (e.g., 70% to selling and 30% to administrative expenses). For example, if a store building is used for both selling and general functions, building expenses such as depreciation, utilities, and property taxes will need to be allocated.

Any reasonable classification of expenses that serves to inform those who use the statement is satisfactory. The present tendency in statements prepared for management's internal use is to present in considerable detail expense data grouped along lines of responsibility.

## Single-Step Income Statement

Another income statement format is the **single-step income statement**. The statement is so named because only one step, subtracting total expenses from total revenues, is required in determining net income (or net loss).

In a single-step statement, all data are classified under two categories: (1) revenues and (2) expenses. The **revenues** category includes both operating revenues and other revenues and gains. The **expenses** category includes cost of goods sold, operating expenses, and other expenses and losses. A condensed single-step statement for Sellers Electronix is shown in Illustration 5-12.

**Illustration 5-12**
Single-step income statement

**SELLERS ELECTRONIX**
Income Statement
For the Year Ended December 31, 2006

| | | |
|---|---|---|
| **Revenues** | | |
| Net sales | | $460,000 |
| Interest revenue | | 3,000 |
| Gain on sale of equipment | | 600 |
| Total revenues | | 463,600 |
| **Expenses** | | |
| Cost of goods sold | $316,000 | |
| Selling expenses | 76,000 | |
| Administrative expenses | 38,000 | |
| Interest expense | 1,800 | |
| Casualty loss from vandalism | 200 | |
| Total expenses | | 432,000 |
| Net income | | $ 31,600 |

There are two primary reasons for using the single-step format: (1) A company does not realize any type of profit or income until total revenues exceed total expenses, so it makes sense to divide the statement into these two categories. (2) The format is simpler and easier to read than the multiple-step format. But for homework problems, the single-step format should be used only when it is specifically requested.

## Classified Balance Sheet

In the balance sheet, merchandise inventory is reported as a current asset immediately below accounts receivable. Recall from Chapter 4 that items are listed under current assets in their order of liquidity. Merchandise inventory is less liquid than accounts receivable because the goods must first be sold and then collection must be made from the customer. Illustration 5-13 presents the assets section of a classified balance sheet for Sellers Electronix.

**Illustration 5-13**
Assets section of a classified balance sheet (partial)

**SELLERS ELECTRONIX**
Balance Sheet (Partial)
December 31, 2006

**Assets**

| | | |
|---|---|---|
| Current assets | | |
| Cash | | $ 9,500 |
| Accounts receivable | | 16,100 |
| **Merchandise inventory** | | **40,000** |
| Prepaid insurance | | 1,800 |
| Total current assets | | 67,400 |
| Property, plant, and equipment | | |
| Store equipment | $80,000 | |
| Less: Accumulated depreciation—store equipment | 24,000 | 56,000 |
| Total assets | | $123,400 |

**HELPFUL HINT**

The $40,000 is the cost of the inventory on hand, not its expected selling price.

**BEFORE YOU GO ON...**

### Review It

1. Determine **PepsiCo**'s gross profit rate for 2003 and 2002. Indicate whether it increased or decreased from 2002 to 2003. The answer to this question is provided on page 237.
2. What are nonoperating activities, and how are they reported in the income statement?
3. How does a single-step income statement differ from a multiple-step income statement?

THE NAVIGATOR

## Determining Cost of Goods Sold Under a Periodic System

**STUDY OBJECTIVE 7**

Determine cost of goods sold under a periodic system.

The determination of cost of goods sold is different under the periodic system than under the perpetual system. When a company uses a perpetual inventory system, all transactions affecting inventory (such as freight costs, returns, and discounts) are recorded directly to the Merchandise Inventory account. In addition, at the time of each sale the perpetual system requires a reduction in Merchandise Inventory and an increase in Cost of Goods Sold. But under a periodic system separate accounts are used to record freight costs, returns, and discounts. In addition, a running account of changes in inventory is not maintained. Instead, the balance in ending in-

ventory, as well as the cost of goods sold for the period, is calculated at the end of the period. The determination of cost of goods sold for Sellers Electronix, using a periodic inventory system, is shown in Illustration 5-14.

**SELLERS ELECTRONIX**
Cost of Goods Sold
For the Year Ended December 31, 2006

| | | | | |
|---|---|---|---|---|
| Cost of goods sold | | | | |
| **Inventory, January 1** | | | **$36,000** | |
| Purchases | | $325,000 | | |
| Less: Purchase returns and allowances | $10,400 | | | |
| Purchase discounts | 6,800 | 17,200 | | |
| Net purchases | | 307,800 | | |
| Add: Freight-in | | 12,200 | | |
| **Cost of goods purchased** | | | **320,000** | |
| Cost of goods available for sale | | | 356,000 | |
| **Inventory, December 31** | | | **40,000** | |
| **Cost of goods sold** | | | | **316,000** |

**Illustration 5-14**
Cost of goods sold for a merchandiser using a periodic inventory system

**HELPFUL HINT**

The second column from the right identifies the primary items that make up cost of goods sold of $316,000. The third column explains cost of goods purchased of $320,000. The fourth column reports contra purchase items of $17,200.

The use of the periodic inventory system does not affect the content of the balance sheet. As under the perpetual system, merchandise inventory is reported at the same amount in the current assets section.

Further detail on the use of the periodic system is provided in the appendix to this chapter.

## BEFORE YOU GO ON...

### Review It

1. Name two basic systems of accounting for inventory.
2. What accounts are used in determining the cost of goods purchased?
3. What is included in cost of goods available for sale?

### Do It

Aerosmith Company's accounting records show the following at year-end: Purchase Discounts $3,400; Freight-in $6,100; Sales $240,000; Purchases $162,500; Beginning Inventory $18,000; Ending Inventory $20,000; Sales Discounts $10,000; Purchase Returns $5,200; and Operating Expenses $57,000. Compute the following amounts for Aerosmith Company: net sales, cost of goods purchased, cost of goods sold, gross profit, and net income.

### ACTION PLAN

- Understand the relationships of the cost components in measuring net income for a merchandising company.
- Compute net sales.
- Compute cost of goods purchased.
- Compute cost of goods sold.
- Compute gross profit.
- Compute net income.

**SOLUTION**

Net sales:
Sales − Sales discounts = Net sales
$240,000 − $10,000 = $230,000

Cost of goods purchased:
Purchases − Purchase returns − Purchase discounts + Freight-in = Cost of goods purchased
$162,500 − $5,200 − $3,400 + $6,100 = $160,000

Cost of goods sold:
Beginning inventory + Cost of goods purchased − Ending inventory = Cost of goods sold
$18,000 + $160,000 − $20,000 = $158,000

Gross profit:
Net sales − Cost of goods sold = Gross profit
$230,000 − $158,000 = $72,000

Net income:
Gross profit − Operating expenses = Net income
$72,000 − $57,000 = $15,000

Related exercise material: *BE5-10, BE5-11, E5-10, and E5-11.*

THE NAVIGATOR

## DEMONSTRATION PROBLEM

The adjusted trial balance columns of the work sheet for the year ended December 31, 2006, for Falcetto Company are as follows.

| Debit | | Credit | |
|---|---|---|---|
| Cash | 14,500 | Accumulated Depreciation | 18,000 |
| Accounts Receivable | 11,100 | Notes Payable | 25,000 |
| Merchandise Inventory | 29,000 | Accounts Payable | 10,600 |
| Prepaid Insurance | 2,500 | Common Stock | 50,000 |
| Store Equipment | 95,000 | Retained Earnings | 31,000 |
| Dividends | 12,000 | Sales | 536,800 |
| Sales Returns and Allowances | 6,700 | Interest Revenue | 2,500 |
| Sales Discounts | 5,000 | | 673,900 |
| Cost of Goods Sold | 363,400 | | |
| Freight-out | 7,600 | | |
| Advertising Expense | 12,000 | | |
| Store Salaries Expense | 56,000 | | |
| Utilities Expense | 18,000 | | |
| Rent Expense | 24,000 | | |
| Depreciation Expense | 9,000 | | |
| Insurance Expense | 4,500 | | |
| Interest Expense | 3,600 | | |
| | 673,900 | | |

### Instructions

Prepare an income statement assuming Falcetto Company does not use subgroupings for operating expenses.

## SOLUTION TO DEMONSTRATION PROBLEM

**FALCETTO COMPANY**
Income Statement
For the Year Ended December 31, 2006

| | | |
|---|---|---|
| Sales revenues | | |
| Sales | | $536,800 |
| Less: Sales returns and allowances | $6,700 | |
| Sales discounts | 5,000 | 11,700 |
| Net sales | | 525,100 |
| Cost of goods sold | | 363,400 |
| Gross profit | | 161,700 |
| Operating expenses | | |
| Store salaries expense | 56,000 | |
| Rent expense | 24,000 | |
| Utilities expense | 18,000 | |
| Advertising expense | 12,000 | |
| Depreciation expense | 9,000 | |
| Freight-out | 7,600 | |
| Insurance expense | 4,500 | |
| Total operating expenses | | 131,100 |
| Income from operations | | 30,600 |
| Other revenues and gains | | |
| Interest revenue | 2,500 | |
| Other expenses and losses | | |
| Interest expense | 3,600 | 1,100 |
| Net income | | $ 29,500 |

THE NAVIGATOR

### ACTION PLAN

- Remember that the key components of the income statement are net sales, cost of goods sold, gross profit, total operating expenses, and net income (loss). Report these components in the right-hand column of the income statement.
- Put nonoperating items after income from operations.

1. **Identify the differences between a service enterprise and a merchandiser.** Because of inventory, a merchandiser has sales revenue, cost of goods sold, and gross profit. To account for inventory, a merchandiser must choose between a perpetual inventory system and a periodic inventory system.
2. **Explain the entries for purchases under a perpetual inventory system.** The Merchandise Inventory account is debited for all purchases of merchandise, freight-in, and other costs, and it is credited for purchase discounts and purchase returns and allowances.
3. **Explain the entries for sales revenues under a perpetual inventory system.** When inventory is sold, Accounts Receivable (or Cash) is debited, and Sales is credited for the **selling price** of the merchandise. At the same time, Cost of Goods Sold is debited, and Merchandise Inventory is credited for the **cost** of the inventory items sold.
4. **Explain the steps in the accounting cycle for a merchandiser.** Each of the required steps in the accounting cycle for a service enterprise applies to a merchandiser. A work sheet is again an optional step. Under a perpetual inventory system, the Merchandise Inventory account must be adjusted to agree with the physical count.
5. **Distinguish between a multiple-step and a single-step income statement.** A multiple-step income statement shows numerous steps in determining net income, including nonoperating activities sections. In a single-step income statement all data are classified under two categories, revenues or expenses, and net income is determined by one step.
6. **Explain the computation and importance of gross profit.** Gross profit is computed by subtracting cost of goods sold from net sales. Gross profit represents the merchandising profit of a company. The amount and trend of gross profit are closely watched by management and other interested parties.
7. **Determine cost of goods sold under a periodic inventory system.** The steps in determining cost of goods sold are (a) record the purchases of merchandise, (b) determine the cost of goods purchased, and (c) determine the cost of goods on hand at the beginning and end of the accounting period.

THE NAVIGATOR

## GLOSSARY

**Administrative expenses** Expenses relating to general operating activities such as personnel management, accounting, and store security. (p. 207).

**Contra revenue account** An account that is offset against a revenue account on the income statement. (p. 199).

**Cost of goods sold** The total cost of merchandise sold during the period. (p. 191).

**FOB destination** Freight terms indicating that the goods will be placed free on board at the buyer's place of business, and the seller pays the freight costs. (p. 196).

**FOB shipping point** Freight terms indicating that goods are placed free on board the carrier by the seller, and the buyer pays the freight costs. (p. 196).

**Gross profit** The excess of net sales over the cost of goods sold. (p. 191).

**Income from operations** Income from a company's principal operating activity; determined by subtracting cost of goods sold and operating expenses from net sales. (p. 206).

**Multiple-step income statement** An income statement that shows numerous steps in determining net income (or net loss). (p. 203).

**Net sales** Sales less sales returns and allowances and sales discounts. (p. 204).

**Operating expenses** Expenses incurred in the process of earning sales revenues that are deducted from gross profit in the income statement. (p. 192).

**Other expenses and losses** A nonoperating activities section of the income statement that shows expenses from auxiliary operations and losses unrelated to the company's operations. (p. 205).

**Other revenues and gains** A nonoperating activities section of the income statement that shows revenues from auxiliary operations and gains unrelated to the company's operations. (p. 205).

**Periodic inventory system** An inventory system in which detailed records are not maintained throughout the accounting period and the cost of goods sold is determined only at the end of an accounting period. (p. 193).

**Perpetual inventory system** An inventory system in which the cost of each inventory item is maintained throughout the accounting period and detailed records continuously show the inventory that should be on hand. (p. 193).

**Purchase discount** A cash discount claimed by a buyer for prompt payment of a balance due. (p. 197).

**Purchase invoice** A document that supports each credit purchase. (p. 195).

**Sales discount** A reduction given by a seller for prompt payment of a credit sale. (p. 199).

**Sales invoice** A document that supports each credit sale. (p. 198).

**Sales revenue (sales)** Primary source of revenue in a merchandising company. (p. 191).

**Selling expenses** Expenses associated with making sales. (p. 207).

**Single-step income statement** An income statement that shows only one step in determining net income (or net loss). (p. 207).

# APPENDIX 5A PERIODIC INVENTORY SYSTEM

**STUDY OBJECTIVE 8**

Prepare the entries for purchases and sales of inventory under a periodic inventory system.

In a **periodic inventory system**, revenues from the sale of merchandise are recorded when sales are made, in the same way as in a perpetual system. But, no attempt is made on the date of sale to record the cost of the merchandise sold. Instead, a physical inventory count is taken at the end of the period. This count determines (1) the cost of the merchandise on hand and (2) the cost of the goods sold during the period. There is another key difference: Under a periodic system, purchases of merchandise are recorded in a Purchases account rather than a Merchandise Inventory account. Also, under a periodic system, it is customary to record the following in separate accounts: purchase returns and allowances, purchase discounts, and freight-in on purchases. That way, accumulated amounts for each are known.

## Recording Transactions Under a Periodic Inventory System

To illustrate the recording of merchandise transactions under a periodic inventory system, we will use the purchase/sale transactions between Sellers Electronix and Beyer Video discussed in this chapter.

## Recording Purchases of Merchandise

On the basis of the sales invoice (Illustration 5-4 shown on page 195) and receipt of the merchandise ordered from Sellers Electronix, Beyer Video records the $3,800 purchase as follows.

| | | | |
|---|---|---|---|
| May 4 | Purchases | 3,800 | |
| | Accounts Payable | | 3,800 |
| | (To record goods purchased on account, terms 2/10, n/30) | | |

**HELPFUL HINT**

Be careful not to fall into the trap of debiting purchases of equipment or supplies to Purchases.

| A | = | L | + | SE |
|---|---|---|---|---|
| | | +3,800 | | −3,800 Exp |

**Cash Flows**
no effect

Purchases is a temporary account whose normal balance is a debit.

### *Freight Costs*

When the purchaser directly incurs the freight costs, the account Freight-in is debited. For example, upon delivery of the goods on May 6, Beyer pays Acme Freight Company $150 for freight charges on its purchase from Sellers Electronix. The entry on Beyer's books is:

| | | | |
|---|---|---|---|
| May 6 | Freight-in | 150 | |
| | Cash | | 150 |
| | (To record payment of freight, terms FOB shipping point) | | |

| A | = | L | + | SE |
|---|---|---|---|---|
| −150 | | | | −150 Exp |

**Cash Flows**
−150

Like Purchases, Freight-in is a temporary account whose normal balance is a debit. **Freight-in is part of cost of goods purchased**. In accordance with the cost principle, cost of goods purchased should include any freight charges necessary to bring the goods to the purchaser. Freight costs are not subject to a purchase discount. Purchase discounts apply only on the invoice cost of the merchandise.

**ALTERNATIVE TERMINOLOGY**

Freight-in is frequently called *transportation-in*.

### *Purchase Returns and Allowances*

Some of the merchandise received from Sellers Electronix is defective. Beyer Video returns $300 worth of the goods and prepares the following entry to recognize the purchase return.

| | | | |
|---|---|---|---|
| May 8 | Accounts Payable | 300 | |
| | Purchase Returns and Allowances | | 300 |
| | (To record return of defective goods purchased from Sellers Electronix) | | |

| A | = | L | + | SE |
|---|---|---|---|---|
| | | −300 | | +300 Exp |

**Cash Flows**
no effect

Purchase Returns and Allowances is a temporary account whose normal balance is a credit.

### *Purchase Discounts*

On May 14 Beyer Video pays the balance due on account to Sellers Electronix. Beyer takes the 2% cash discount allowed by Sellers for payment within 10 days. The payment and discount are recorded by Beyer Video as follows.

| | | | |
|---|---|---|---|
| May 14 | Accounts Payable | 3,500 | |
| | Purchase Discounts | | 70 |
| | Cash | | 3,430 |
| | (To record payment to Sellers Electronix within the discount period) | | |

| A | = | L | + | SE |
|---|---|---|---|---|
| −3,430 | | −3,500 | | +70 Exp |

**Cash Flows**
−3,430

Purchase Discounts is a temporary account whose normal balance is a credit.

## Recording Sales of Merchandise

The sale of $3,800 of merchandise to Beyer Video on May 4 (sales invoice No. 731, Illustration 5-4 on page 195) is recorded by Sellers Electronix as follows.

| A | = | L | + | SE |
|---|---|---|---|---|
| +3,800 | | | | +3,800 Rev |

**Cash Flows**
no effect

| | | | |
|---|---|---|---|
| May 4 | Accounts Receivable | 3,800 | |
| | Sales | | 3,800 |
| | (To record credit sales per invoice #731 to Beyer Video) | | |

### *Sales Returns and Allowances*

Based on the receipt of returned goods from Beyer Video on May 8, Sellers Electronix records the $300 sales return as follows.

| A | = | L | + | SE |
|---|---|---|---|---|
| −300 | | | | −300 Rev |

**Cash Flows**
no effect

| | | | |
|---|---|---|---|
| May 8 | Sales Returns and Allowances | 300 | |
| | Accounts Receivable | | 300 |
| | (To record return of goods from Beyer Video) | | |

### *Sales Discounts*

On May 15, Sellers Electronix receives payment of $3,430 on account from Beyer Video. Sellers honors the 2% cash discount and records the payment of Beyer's account receivable in full as follows.

| A | = | L | + | SE |
|---|---|---|---|---|
| +3,430 | | | | −70 Rev |
| −3,500 | | | | |

**Cash Flows**
+3,430

| | | | |
|---|---|---|---|
| May 15 | Cash | 3,430 | |
| | Sales Discounts | 70 | |
| | Accounts Receivable | | 3,500 |
| | (To record collection from Beyer Video within 2/10, n/30 discount period) | | |

## Comparison of Entries—Perpetual vs. Periodic

The periodic inventory system entries shown in this appendix are reproduced in the righthand column of Illustration 5A-1. (They are printed in red.) In the middle column (printed in blue) are the entries from Chapter 5 (pages 195–197) for the perpetual inventory system for both Sellers Electronix and Beyer Video. Having these entries side-by-side should help you compare the differences. The entries that are different in the two inventory systems are highlighted.

**Illustration 5A-1**
Comparison of journal entries under perpetual and periodic inventory systems

**Entries on Beyer Video's Books**

| Transaction | | Perpetual Inventory System | | | Periodic Inventory System | | |
|---|---|---|---|---|---|---|---|
| May 4 | Purchase of merchandise on credit. | **Merchandise Inventory** | 3,800 | | **Purchases** | 3,800 | |
| | | Accounts Payable | | 3,800 | Accounts Payable | | 3,800 |
| May 6 | Freight costs on purchase. | **Merchandise Inventory** | 150 | | **Freight-in** | 150 | |
| | | Cash | | 150 | Cash | | 150 |
| May 8 | Purchase returns and allowances. | **Merchandise Inventory** | 300 | | Accounts Payable | 300 | |
| | | Accounts Payable | | 300 | **Purchase Returns and Allowances** | | 300 |
| May 14 | Payment on account with a discount. | Accounts Payable | 3,500 | | Accounts Payable | 3,500 | |
| | | Cash | | 3,430 | Cash | | 3,430 |
| | | **Merchandise Inventory** | | 70 | **Purchase Discounts** | | 70 |

**Illustration 5A-1**
(*continued from p. 214*)

**ENTRIES ON SELLERS ELECTRONIX'S BOOKS**

| Transaction | | Perpetual Inventory System | | | Periodic Inventory System | | |
|---|---|---|---|---|---|---|---|
| May 4 | Sale of merchandise on credit. | Accounts Receivable | 3,800 | | Accounts Receivable | 3,800 | |
| | | Sales | | 3,800 | Sales | | 3,800 |
| | | Cost of Goods Sold | 2,400 | | No entry for cost of goods sold | | |
| | | Merchandise Inventory | | 2,400 | | | |
| May 8 | Return of merchandise sold. | Sales Returns and Allowances | 300 | | Sales Returns and Allowances | 300 | |
| | | Accounts Receivable | | 300 | Accounts Receivable | | 300 |
| | | Merchandise Inventory | 140 | | No entry | | |
| | | Cost of Goods Sold | | 140 | | | |
| May 15 | Cash received on account with a discount. | Cash | 3,430 | | Cash | 3,430 | |
| | | Sales Discounts | 70 | | Sales Discounts | 70 | |
| | | Accounts Receivable | | 3,500 | Accounts Receivable | | 3,500 |

## SUMMARY OF STUDY OBJECTIVE FOR APPENDIX 5A

8. **Prepare the entries for purchases and sales of inventory under a periodic inventory system.** In recording purchases, entries are required for (a) cash and credit purchases, (b) purchase returns and allowances, (c) purchase discounts, and (d) freight costs. In recording sales, entries are required for (a) cash and credit sales, (b) sales returns and allowances, and (c) sales discounts.

# APPENDIX 5B WORK SHEET FOR A MERCHANDISER

## Using a Work Sheet

**STUDY OBJECTIVE 9**

Prepare a work sheet for a merchandiser.

As indicated in Chapter 4, a work sheet enables financial statements to be prepared before the adjusting entries are journalized and posted. The steps in preparing a work sheet for a merchandiser are the same as they are for a service enterprise (see page 142). The work sheet for Sellers Electronix is shown in Illustration 5B-1 (on page 216). The unique accounts for a merchandiser using a perpetual inventory system are shown in capital letters in red.

### Trial Balance Columns

Data for the trial balance are obtained from the ledger balances of Sellers Electronix at December 31. The amount shown for Merchandise Inventory, $40,500, is the year-end inventory amount from the perpetual inventory system.

**Illustration 5B-1**
Work sheet for merchandiser

**SELLERS ELECTRONIX**
Work Sheet
For the Year Ended December 31, 2006

| | Trial Balance | | Adjustments | | Adjusted Trial Balance | | Income Statement | | Balance Sheet | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Cash | 9,500 | | | | 9,500 | | | | 9,500 | |
| Accounts Receivable | 16,100 | | | | 16,100 | | | | 16,100 | |
| **MERCHANDISE INVENTORY** | **40,500** | | | (a) 500 | **40,000** | | | | **40,000** | |
| Prepaid Insurance | 3,800 | | | (b) 2,000 | 1,800 | | | | 1,800 | |
| Store Equipment | 80,000 | | | | 80,000 | | | | 80,000 | |
| Accumulated Depreciation | | 16,000 | | (c) 8,000 | | 24,000 | | | | 24,000 |
| Accounts Payable | | 20,400 | | | | 20,400 | | | | 20,400 |
| Common Stock | | 50,000 | | | | 50,000 | | | | 50,000 |
| Retained Earnings | | 33,000 | | | | 33,000 | | | | 33,000 |
| Dividends | 15,000 | | | | 15,000 | | | | 15,000 | |
| **SALES** | | **480,000** | | | | **480,000** | | **480,000** | | |
| **SALES RETURNS AND ALLOWANCES** | **12,000** | | | | **12,000** | | **12,000** | | | |
| **SALES DISCOUNTS** | **8,000** | | | | **8,000** | | **8,000** | | | |
| **COST OF GOODS SOLD** | **315,500** | | (a) 500 | | **316,000** | | **316,000** | | | |
| Freight-out | 7,000 | | | | 7,000 | | 7,000 | | | |
| Advertising Expense | 16,000 | | | | 16,000 | | 16,000 | | | |
| Admin. Sal. Exp. | 19,000 | | | | 19,000 | | 19,000 | | | |
| Store Salaries Expense | 40,000 | | (d) 5,000 | | 45,000 | | 45,000 | | | |
| Utilities Expense | 17,000 | | | | 17,000 | | 17,000 | | | |
| Totals | 599,400 | 599,400 | | | | | | | | |
| Insurance Expense | | | (b) 2,000 | | 2,000 | | 2,000 | | | |
| Depreciation Expense | | | (c) 8,000 | | 8,000 | | 8,000 | | | |
| Salaries Payable | | | | (d) 5,000 | | 5,000 | | | | 5,000 |
| Totals | | | 15,500 | 15,500 | 612,400 | 612,400 | 450,000 | 480,000 | 162,400 | 132,400 |
| Net Income | | | | | | | 30,000 | | | 30,000 |
| Totals | | | | | | | 480,000 | 480,000 | 162,400 | 162,400 |

Key: (a) Adjustment to inventory on hand, (b) Insurance expired, (c) Depreciation expense, (d) Salaries accrued.

## Adjustments Columns

A merchandiser generally has the same types of adjustments as a service company. As you see in the work sheet, adjustments (b), (c), and (d) are for insurance, depreciation, and salaries. These adjustments were also required for Pioneer Advertising Agency Inc., as illustrated in Chapters 3 and 4. Adjustment (a) was required to adjust the perpetual inventory carrying amount to the actual count.

After all adjustments data are entered on the work sheet, the equality of the adjustments column totals is established. The balances in all accounts are then extended to the adjusted trial balance columns.

## Adjusted Trial Balance

The adjusted trial balance shows the balance of all accounts after adjustment at the end of the accounting period.

## Income Statement Columns

The accounts and balances that affect the income statement are transferred from the adjusted trial balance columns to the income statement columns. For Sellers Electronix, Sales of $480,000 is shown in the credit column. The contra revenue accounts Sales Returns and Allowances $12,000 and Sales Discounts $8,000 are shown in the debit column. The difference of $460,000 is the net sales shown on the income statement (Illustration 5-11).

Finally, all the credits in the income statement column should be totaled and compared to the total of the debits in the income statement column. If the credits exceed the debits, the company has net income. In Sellers Electronix's case there was net income of $30,000. If the debits exceed the credits, the company would report a net loss.

## Balance Sheet Columns

The major difference between the balance sheets of a service company and a merchandiser is inventory. For Sellers Electronix, the ending inventory amount of $40,000 is shown in the balance sheet debit column. The information to prepare the retained earnings statement is also found in these columns. That is, the retained earnings account beginning balance is $33,000. The dividends are $15,000. Net income results when the total of the debit column exceeds the total of the credit column in the balance sheet columns. A net loss results when the total of the credits exceeds the total of the debit balances.

## SUMMARY OF STUDY OBJECTIVE FOR APPENDIX 5B

9. **Prepare a work sheet for a merchandiser.** The steps in preparing a work sheet for a merchandiser are the same as they are for a service company. The unique accounts for a merchandiser are Merchandise Inventory, Sales, Sales Returns and Allowances, Sales Discounts, and Cost of Goods Sold.

*__Note__: All **asterisked** Questions, Exercises, and Problems relate to material in the appendixes to the chapter.

Self-Study/Self-Test

Answers are at the end of the chapter.

(SO 1) **1.** Gross profit will result if:
- **a.** operating expenses are less than net income.
- **b.** sales revenues are greater than operating expenses.
- **c.** sales revenues are greater than cost of goods sold.
- **d.** operating expenses are greater than cost of goods sold.

(SO 2) **2.** Under a perpetual inventory system, when goods are purchased for resale by a company:
- **a.** purchases on account are debited to Merchandise Inventory.
- **b.** purchases on account are debited to Purchases.
- **c.** purchase returns are debited to Purchase Returns and Allowances.
- **d.** freight costs are debited to Freight-out.

(SO 3) **3.** The sales accounts that normally have a debit balance are:
- **a.** Sales Discounts.
- **b.** Sales Returns and Allowances.
- **c.** both (a) and (b).
- **d.** neither (a) nor (b).

(SO 3) **4.** A credit sale of $750 is made on June 13, terms 2/10, net/30. A return of $50 is granted on June 16. The amount received as payment in full on June 23 is:
- **a.** $700.
- **b.** $686.
- **c.** $685.
- **d.** $650.

(SO 2) **5.** Which of the following accounts will normally appear in the ledger of a merchandising company that uses a perpetual inventory system?
- **a.** Purchases.
- **b.** Freight-in.
- **c.** Cost of Goods Sold.
- **d.** Purchase Discounts.

(SO 5) **6.** The multiple-step income statement for a merchandiser shows each of the following features *except*:
**a.** gross profit.
**b.** cost of goods sold.
**c.** a sales revenue section.
**d.** investing activities section.

(SO 6) **7.** If sales revenues are $400,000, cost of goods sold is $310,000, and operating expenses are $60,000, the gross profit is:
**a.** $30,000.
**b.** $90,000.
**c.** $340,000.
**d.** $400,000.

(SO 5) **8.** In a single-step income statement:
**a.** gross profit is reported.
**b.** cost of goods sold is not reported.
**c.** sales revenues and "other revenues and gains" are reported in the revenues section of the income statement.
**d.** operating income is separately reported.

(SO 5) **9.** Which of the following appears on both a single-step and a multiple-step income statement?
**a.** merchandise inventory.
**b.** gross profit.
**c.** income from operations.
**d.** cost of goods sold.

(SO 7) **10.** In determining cost of goods sold:
**a.** purchase discounts are deducted from net purchases.
**b.** freight-out is added to net purchases.
**c.** purchase returns and allowances are deducted from net purchases.
**d.** freight-in is added to net purchases.

**11.** If beginning inventory is $60,000, cost of goods purchased is $380,000, and ending inventory is $50,000, cost of goods sold is: (SO 7)
**a.** $390,000.
**b.** $370,000.
**c.** $330,000.
**d.** $420,000.

***12.** When goods are purchased for resale by a company using a periodic inventory system: (SO 8)
**a.** purchases on account are debited to Merchandise Inventory.
**b.** purchases on account are debited to Purchases.
**c.** purchase returns are debited to Purchase Returns and Allowances.
**d.** freight costs are debited to Purchases.

***13.** In a work sheet, Merchandise Inventory is shown in the following columns: (SO 9)
**a.** Adjusted trial balance debit and balance sheet debit.
**b.** Income statement debit and balance sheet debit.
**c.** Income statement credit and balance sheet debit.
**d.** Income statement credit and adjusted trial balance debit.

THE NAVIGATOR

## QUESTIONS

**1.** (a)"The steps in the accounting cycle for a merchandising company are different from the accounting cycle for a service enterprise." Do you agree or disagree? (b) Is the measurement of net income for a merchandiser conceptually the same as for a service enterprise? Explain.

**2.** Why is the normal operating cycle for a merchandiser likely to be longer than for a service company?

**3.** (a) How do the components of revenues and expenses differ between a merchandiser and a service enterprise? (b) Explain the income measurement process in a merchandising company.

**4.** How does income measurement differ between a merchandiser and a service company?

**5.** When is cost of goods sold determined in a perpetual inventory system?

**6.** Distinguish between FOB shipping point and FOB destination. Identify the freight terms that will result in a debit to Merchandise Inventory by the purchaser and a debit to Freight-out by the seller.

**7.** Explain the meaning of the credit terms 2/10, n/30.

**8.** Goods costing $2,500 are purchased on account on July 15 with credit terms of 2/10, n/30. On July 18 a $200 credit memo is received from the supplier for damaged goods. Give the journal entry on July 24 to record payment of the balance due within the discount period using a perpetual inventory system.

**9.** Karen Lloyd believes revenues from credit sales may be earned before they are collected in cash. Do you agree? Explain.

**10.** (a) What is the primary source document for recording (1) cash sales, (2) credit sales, and (3) sales returns and allowances? (b) Using XXs for amounts, give the journal entry for each of the transactions in part (a).

**11.** A credit sale is made on July 10 for $700, terms 2/10, n/30. On July 12, $100 of goods are returned for credit. Give the journal entry on July 19 to record the receipt of the balance due within the discount period.

**12.** Explain why the Merchandise Inventory account will usually require adjustment at year-end.

**13.** Prepare the closing entries for the Sales account, assuming a balance of $200,000 and the Cost of Goods Sold account with a $145,000 balance.

**14.** What merchandising account(s) will appear in the post-closing trial balance?

**15.** Regis Co. has sales revenue of $109,000, cost of goods sold of $70,000, and operating expenses of $20,000. What is its gross profit?

16. Kathy Ho Company reports net sales of $800,000, gross profit of $570,000, and net income of $240,000. What are its operating expenses?

17. Identify the distinguishing features of an income statement for a merchandiser.

18. Identify the sections of a multiple-step income statement that relate to (a) operating activities, and (b) nonoperating activities.

19. Distinguish between the types of functional groupings of operating expenses. What problem is created by these groupings?

20. How does the single-step form of income statement differ from the multiple-step form?

21. Identify the accounts that are added to or deducted from Purchases to determine the cost of goods purchased. For each account, indicate whether it is added or deducted.

*22. Goods costing $2,000 are purchased on account on July 15 with credit terms of 2/10, n/30. On July 18 a $200 credit memo is received from the supplier for damaged goods. Give the journal entry on July 24 to record payment of the balance due within the discount period, assuming a periodic inventory system.

*23. Indicate the columns of the work sheet in which (a) merchandise inventory and (b) cost of goods sold will be shown.

## BRIEF EXERCISES

**BE5-1** Presented below are the components in Clearwater Company's income statement. Determine the missing amounts.

*Compute missing amounts in determining net income.* (SO 1)

| | Sales | Cost of Goods Sold | Gross Profit | Operating Expenses | Net Income |
|---|---|---|---|---|---|
| **(a)** | $75,000 | ? | $28,600 | ? | $10,800 |
| **(b)** | $108,000 | $70,000 | ? | ? | $29,500 |
| **(c)** | ? | $71,900 | $99,600 | $39,500 | ? |

**BE5-2** Giovanni Company buys merchandise on account from Gordon Company. The selling price of the goods is $780, and the cost of the goods is $560. Both companies use perpetual inventory systems. Journalize the transaction on the books of both companies.

*Journalize perpetual inventory entries.* (SO 2, 3)

**BE5-3** Prepare the journal entries to record the following transactions on Benson Company's books using a perpetual inventory system.

*Journalize sales transactions.* (SO 3)

**(a)** On March 2, Benson Company sold $800,000 of merchandise to Edgebrook Company, terms 2/10, n/30. The cost of the merchandise sold was $620,000.
**(b)** On March 6, Edgebrook Company returned $120,000 of the merchandise purchased on March 2 because it was defective. The cost of the returned merchandise was $90,000.
**(c)** On March 12, Benson Company received the balance due from Edgebrook Company.

**BE5-4** From the information in BE5-3, prepare the journal entries to record these transactions on Edgebrook Company's books under a perpetual inventory system.

*Journalize purchase transactions.* (SO 2)

**BE5-5** Piccola Company provides the following information for the month ended October 31, 2006: Sales on credit $280,000, cash sales $100,000 sales discounts $13,000, sales returns and allowances $21,000. Prepare the sales revenues section of the income statement based on this information.

*Prepare sales revenues section of income statement.* (SO 3)

**BE5-6** At year-end the perpetual inventory records of Salsa Company showed merchandise inventory of $98,000. The company determined, however, that its actual inventory on hand was $96,800. Record the necessary adjusting entry.

*Prepare adjusting entry for merchandise inventory.* (SO 4)

**BE5-7** Orlaida Company has the following merchandise account balances: Sales $192,000, Sales Discounts $2,000, Cost of Goods Sold $105,000, and Merchandise Inventory $40,000. Prepare the entries to record the closing of these items to Income Summary.

*Prepare closing entries for merchandise accounts.* (SO 4)

**BE5-8** Explain where each of the following items would appear on (1) a multiple-step income statement, and on (2) a single-step income statement: **(a)** gain on sale of equipment, **(b)** casualty loss from vandalism, and **(c)** cost of goods sold.

*Contrast presentation in multiple-step and single-step income statements.* (SO 5)

**BE5-9** Assume Jose Company has the following account balances: Sales $506,000, Sales Returns and Allowances $15,000, Cost of Goods Sold $350,000, Selling Expenses $70,000, and Administrative Expenses $40,000. Compute the following: **(a)** net sales, **(b)** gross profit, and **(c)** income from operations.

*Compute net sales, gross profit, and income from operations.* (SO 3, 5, 6)

*Compute net purchases and cost of goods purchased.*
(SO 7)

**BE5-10** Assume that E. Guard Company uses a periodic inventory system and has these account balances: Purchases $400,000; Purchase Returns and Allowances $11,000; Purchase Discounts $8,000; and Freight-in $16,000. Determine net purchases and cost of goods purchased.

*Compute cost of goods sold and gross profit.*
(SO 7)

**BE5-11** Assume the same information as in BE5-10 and also that E. Guard Company has beginning inventory of $60,000, ending inventory of $90,000, and net sales of $630,000. Determine the amounts to be reported for cost of goods sold and gross profit.

*Journalize purchase transactions.*
(SO, 8)

***BE5-12** Prepare the journal entries to record these transactions on H. Hunt Company's books using a periodic inventory system.

**(a)** On March 2, H. Hunt Company purchased $900,000 of merchandise from B. Streisand Company, terms 2/10, n/30.
**(b)** On March 6, H. Hunt Company returned $130,000 of the merchandise purchased on March 2 because it was defective.
**(c)** On March 12, H. Hunt Company paid the balance due to B. Streisand Company.

*Identify work sheet columns for selected accounts.*
(SO 7)

***BE5-13** Presented below is the format of the work sheet presented in the chapter.

| Trial Balance | | Adjustments | | Adjusted Trial Balance | | Income Statement | | Balance Sheet | |
|---|---|---|---|---|---|---|---|---|---|
| Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |

Indicate where the following items will appear on the work sheet: **(a)** Cash, **(b)** Merchandise Inventory, **(c)** Sales, **(d)** Cost of goods sold.

*Example:*
Cash: Trial balance debit column; Adjusted trial balance debit column; and Balance sheet debit column.

## EXERCISES

*Journalize purchases transactions.*
(SO 2)

**E5-1** Information related to Gilberto Co. is presented below.

1. On April 5, purchased merchandise from Allman Company for $20,000 terms 2/10, net/30, FOB shipping point.
2. On April 6, paid freight costs of $900 on merchandise purchased from Allman.
3. On April 7, purchased equipment on account for $26,000.
4. On April 8, returned damaged merchandise to Allman Company and was granted a $4,000 allowance for returned merchandise.
5. On April 15, paid the amount due to Allman Company in full.

**Instructions**

**(a)** Prepare the journal entries to record these transactions on the books of Gilberto Co. under a perpetual inventory system.
**(b)** Assume that Gilberto Co. paid the balance due to Allman Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

*Journalize perpetual inventory entries.*
(SO 2, 3)

**E5-2** On September 1, Eden Office Supply had an inventory of 30 pocket calculators at a cost of $18 each. The company uses a perpetual inventory system. During September, the following transactions occurred.

Sept. 6 Purchased 80 calculators at $17 each from Mozart Co. for cash.
9 Paid freight of $80 on calculators purchased from Mozart Co.
10 Returned 2 calculators to Mozart Co. for $36 credit (including freight) because they did not meet specifications.
12 Sold 26 calculators costing $18 (including freight) for $31 each to Mega Book Store, terms n/30.
14 Granted credit of $31 to Mega Book Store for the return of one calculator that was not ordered.
20 Sold 30 calculators costing $18 for $31 each to Barbara's Card Shop, terms n/30.

**Instructions**

Journalize the September transactions.

**E5-3** On June 10, Lippizan Company purchased $6,000 of merchandise from Bristol Company FOB shipping point, terms 2/10, n/30. Lippizan pays the freight costs of $400 on June 11. Damaged goods totaling $300 are returned to Bristol for credit on June 12. The scrap value of these goods is $150. On June 19, Lippizan pays Bristol Company in full, less the purchase discount. Both companies use a perpetual inventory system.

*Prepare purchase and sale entries.*

(SO 2, 3)

**Instructions**

**(a)** Prepare separate entries for each transaction on the books of Lippizan Company.

**(b)** Prepare separate entries for each transaction for Bristol Company. The merchandise purchased by Lippizan on June 10 had cost Bristol $3,000.

**E5-4** Presented below are transactions related to Rebecca Company.

*Journalize sales transactions.*

(SO 3)

1. On December 3, Rebecca Company sold $480,000 of merchandise to Simonis Co., terms 2/10, n/30, FOB shipping point. The cost of the merchandise sold was $350,000.
2. On December 8, Simonis Co. was granted an allowance of $27,000 for merchandise purchased on December 3.
3. On December 13, Rebecca Company received the balance due from Simonis Co.

**Instructions**

**(a)** Prepare the journal entries to record these transactions on the books of Rebecca Company using a perpetual inventory system.

**(b)** Assume that Rebecca Company received the balance due from Simonis Co. on January 2 of the following year instead of December 13. Prepare the journal entry to record the receipt of payment on January 2.

**E5-5** The adjusted trial balance of Schinzer Company shows the following data pertaining to sales at the end of its fiscal year October 31, 2006: Sales $800,000, Freight-out $16,000, Sales Returns and Allowances $20,000, and Sales Discounts $15,000.

*Prepare sales revenues section and closing entries.*

(SO 3, 4)

**Instructions**

**(a)** Prepare the sales revenues section of the income statement.

**(b)** Prepare separate closing entries for (1) sales, and (2) the contra accounts to sales.

**E5-6** Presented is information related to Taylor Co. for the month of January 2006.

*Prepare adjusting and closing entries.*

(SO 4)

| | | | |
|---|---|---|---|
| Ending inventory per perpetual records | $ 21,600 | Salary expense | $ 61,000 |
| Ending inventory actually on hand | 21,000 | Sales discounts | 10,000 |
| Cost of goods sold | 208,000 | Sales returns and allowances | 13,000 |
| Freight-out | 7,000 | Sales | 350,000 |
| Insurance expense | 12,000 | | |
| Rent expense | 20,000 | | |

**Instructions**

**(a)** Prepare the necessary adjusting entry for inventory.

**(b)** Prepare the necessary closing entries.

**E5-7** In its income statement for the year ended December 31, 2006, Bach Company reported the following condensed data.

*Prepare multiple-step and single-step income statements.*

(SO 5)

| | | | |
|---|---|---|---|
| Administrative expenses | $ 435,000 | Selling expenses | $ 490,000 |
| Cost of goods sold | 1,289,000 | Loss on sale of equipment | 10,000 |
| Interest expense | 70,000 | Net sales | 2,342,000 |
| Interest revenue | 28,000 | | |

**Instructions**

**(a)** Prepare a multiple-step income statement.

**(b)** Prepare a single-step income statement.

**E5-8** An inexperienced accountant for Gulliver Company made the following errors in recording merchandising transactions.

*Prepare correcting entries for sales and purchases.*

(SO 2, 3)

1. A $175 refund to a customer for faulty merchandise was debited to Sales $175 and credited to Cash $175.
2. A $160 credit purchase of supplies was debited to Merchandise Inventory $160 and credited to Cash $160.

3. A $110 sales discount was debited to Sales.
4. A cash payment of $30 for freight on merchandise purchases was debited to Freight-out $300 and credited to Cash $300.

**Instructions**
Prepare separate correcting entries for each error, assuming that the incorrect entry is not reversed. (Omit explanations.)

*Compute missing amounts.*
(SO 5, 6)

**E5-9** Presented below is financial information for two different companies.

| | Lee Company | Chan Company |
|---|---|---|
| Sales | $90,000 | (d) |
| Sales returns | (a) | $ 5,000 |
| Net sales | 81,000 | 95,000 |
| Cost of goods sold | 56,000 | (e) |
| Gross profit | (b) | 41,500 |
| Operating expenses | 15,000 | (f) |
| Net income | (c) | 15,000 |

**Instructions**
Determine the missing amounts.

*Prepare cost of goods sold section.*
(SO 7)

**E5-10** The trial balance of J. Harlow Company at the end of its fiscal year, August 31, 2006, includes these accounts: Merchandise Inventory $17,200; Purchases $144,000; Sales $190,000; Freight-in $4,000; Sales Returns and Allowances $3,000; Freight-out $1,000; and Purchase Returns and Allowances $2,000. The ending merchandise inventory is $25,000.

**Instructions**
Prepare a cost of goods sold section for the year ending August 31 (periodic inventory).

*Complete the cost of goods sold sections.*
(SO 7)

**E5-11** Below is a series of cost of goods sold sections for companies X, F, L, and S.

| | X | F | L | S |
|---|---|---|---|---|
| Beginning inventory | $ 250 | $ 120 | $1,000 | $ (j) |
| Purchases | 1,500 | 1,080 | (g) | 43,590 |
| Purchase returns and allowances | 40 | (d) | 290 | (k) |
| Net purchases | (a) | 1,030 | 7,210 | 42,090 |
| Freight-in | 110 | (e) | (h) | 2,240 |
| Cost of goods purchased | (b) | 1,230 | 7,940 | (l) |
| Cost of goods available for sale | 1,820 | 1,350 | (i) | 49,530 |
| Ending inventory | 310 | (f) | 1,450 | 6,230 |
| Cost of goods sold | (c) | 1,230 | 7,490 | 43,300 |

**Instructions**
Fill in the lettered blanks to complete the cost of goods sold sections.

*Journalize purchase transactions.*
(SO 8)

***E5-12** This information relates to Hans Olaf Co.

1. On April 5 purchased merchandise from D. DeVito Company for $18,000, terms 2/10, net/30, FOB shipping point.
2. On April 6 paid freight costs of $900 on merchandise purchased from D. DeVito Company.
3. On April 7 purchased equipment on account for $26,000.
4. On April 8 returned some of April 5 merchandise to D. DeVito Company which cost $2,800.
5. On April 15 paid the amount due to D. DeVito Company in full.

**Instructions**
**(a)** Prepare the journal entries to record these transactions on the books of Hans Olaf Co. using a periodic inventory system.
**(b)** Assume that Hans Olaf Co. paid the balance due to D. DeVito Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

*Journalize purchase transactions.*
(SO 8)

***E5-13** Presented below is the following information related to Argentina Co.

1. On April 5, purchased merchandise from Chile Company for $18,000, terms 2/10, net/30, FOB shipping point.

2. On April 6, paid freight costs of $800 on merchandise purchased from Chile.
3. On April 7, purchased equipment on account from Wayne Higley Mfg. Co. for $26,000.
4. On April 8, returned damaged merchandise to Chile Company and was granted a $4,000 allowance.
5. On April 15, paid the amount due to Chile Company in full.

**Instructions**

**(a)** Prepare the journal entries to record these transactions on the books of Argentina Co. using a periodic inventory system.

**(b)** Assume that Argentina Co. paid the balance due to Chile Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

*Complete work sheet.* (SO 9)

***E5-14** Presented below are selected accounts for Streisand Company as reported in the work sheet at the end of May 2006.

| Accounts | Adjusted Trial Balance | | Income Statement | | Balance Sheet | |
|---|---|---|---|---|---|---|
| | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Cash | 9,000 | | | | | |
| Merchandise Inventory | 76,000 | | | | | |
| Sales | | 450,000 | | | | |
| Sales Returns and Allowances | 10,000 | | | | | |
| Sales Discounts | 9,000 | | | | | |
| Cost of Goods Sold | 250,000 | | | | | |

**Instructions**

Complete the work sheet by extending amounts reported in the adjusted trial balance to the appropriate columns in the work sheet. Do not total individual columns.

## PROBLEMS: SET A

*Journalize purchase and sales transactions under a perpetual inventory system.* (SO 2, 3)

**P5-1A** Phantom Book Warehouse distributes hardback books to retail stores and extends credit terms of 2/10, n/30 to all of its customers. At the end of May, Phantom's inventory consisted of 240 books purchased at $1,200. During the month of June the following merchandising transactions occurred.

June 1 Purchased 160 books on account for $5 each from Ex Libris Publishers, FOB destination, terms 2/10, n/30. The appropriate party also made a cash payment of $50 for the freight on this date.
3 Sold 120 books on account to Readers-R-Us for $10 each.
6 Received $50 credit for 10 books returned to Ex Libris Publishers.
9 Paid Ex Libris Publishers in full, less discount.
15 Received payment in full from Readers-R-Us.
17 Sold 120 books on account to Bargain Books for $10 each.
20 Purchased 110 books on account for $5 each from Bookem Publishers, FOB destination, terms 2/15, n/30. The appropriate party also made a cash payment of $50 for the freight on this date.
24 Received payment in full from Bargain Books.
26 Paid Bookem Publishers in full, less discount.
28 Sold 110 books on account to Read-n-Weep Bookstore for $10 each.
30 Granted Read-n-Weep Bookstore $150 credit for 15 books returned costing $75.

Phantom Book Warehouse's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, No. 505 Cost of Goods Sold.

**Instructions**

Journalize the transactions for the month of June for Phantom Book Warehouse using a perpetual inventory system.

*Journalize, post, and prepare a partial income statement.*

(SO 2, 3, 5, 6)

**P5-2A** Copple Hardware Store completed the following merchandising transactions in the month of May. At the beginning of May, the ledger of Copple showed Cash of $5,000 and Common Stock of $5,000.

May 1 Purchased merchandise on account from Nute Wholesale Supply $6,000, terms 2/10, n/30.
2 Sold merchandise on account $5,000, terms 1/10, n/30. The cost of the merchandise sold was $3,100.
5 Received credit from Nute Wholesale Supply for merchandise returned $600.
9 Received collections in full, less discounts, from customers billed on sales of $5,000 on May 2.
10 Paid Nute Wholesale Supply in full, less discount.
11 Purchased supplies for cash $900.
12 Purchased merchandise for cash $2,700.
15 Received refund for poor quality merchandise from supplier on cash purchase $230.
17 Purchased merchandise from Sherrick Distributors $1,900, FOB shipping point, terms 2/10, n/30.
19 Paid freight on May 17 purchase $250.
24 Sold merchandise for cash $6,200. The merchandise sold had a cost of $4,600.
25 Purchased merchandise from Duffy Inc. $1,000, FOB destination, terms 2/10, n/30.
27 Paid Sherrick Distributors in full, less discount.
29 Made refunds to cash customers for defective merchandise $100. The returned merchandise had a scrap value of $20.
31 Sold merchandise on account $1,600, terms n/30. The cost of the merchandise sold was $1,120.

Copple Hardware's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 126 Supplies, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, No. 505 Cost of Goods Sold.

**Instructions**

**(a)** Journalize the transactions using a perpetual inventory system.
**(b)** Enter the beginning cash and common stock balances and post the transactions. (Use J1 for the journal reference.)
**(c)** Prepare an income statement through gross profit for the month of May 2006.

(c) Gross profit $3,850

*Prepare financial statements and adjusting and closing entries.*

(SO 4, 5)

**P5-3A** Moulton Department Store is located in midtown Metropolis. During the past several years, net income has been declining because of suburban shopping centers. At the end of the company's fiscal year on November 30, 2006, the following accounts appeared in two of its trial balances.

| | Unadjusted | Adjusted | | Unadjusted | Adjusted |
|---|---|---|---|---|---|
| Accounts Payable | $ 47,310 | $ 47,310 | Interest Revenue | $ 5,000 | $ 5,000 |
| Accounts Receivable | 11,770 | 11,770 | Merchandise Inventory | 36,200 | 36,200 |
| Accumulated Depr.—Delivery Equip. | 15,680 | 18,816 | Notes Payable | 46,000 | 46,000 |
| Accumulated Depr.—Store Equip. | 32,300 | 41,800 | Prepaid Insurance | 13,500 | 3,000 |
| Cash | 8,000 | 8,000 | Property Tax Expense | | 3,500 |
| Common Stock | 60,000 | 60,000 | Property Taxes Payable | | 3,500 |
| Cost of Goods Sold | 633,220 | 633,220 | Rent Expense | 19,000 | 19,000 |
| Delivery Expense | 8,200 | 8,200 | Retained Earnings | 24,200 | 24,200 |
| Delivery Equipment | 57,000 | 57,000 | Salaries Expense | 120,000 | 120,000 |
| Depr. Expense—Delivery Equip. | | 3,136 | Sales | 850,000 | 850,000 |
| Depr. Expense—Store Equip. | | 9,500 | Sales Commissions Expense | 8,000 | 10,500 |
| Dividends | 12,000 | 12,000 | Sales Commissions Payable | | 2,500 |
| Insurance Expense | | 10,500 | Sales Returns and Allowances | 10,000 | 10,000 |
| Interest Expense | 8,000 | 8,000 | Store Equip. | 125,000 | 125,000 |
| | | | Utilities Expense | 10,600 | 10,600 |

Analysis reveals the following additional data.

**1.** Salaries expense is 75% selling and 25% administrative.
**2.** Insurance expense is 50% selling and 50% administrative.

**3.** Rent expense, utilities expense, and property tax expense are administrative expenses.
**4.** Notes payable are due in 2009.

### Instructions

**(a)** Prepare a multiple-step income statement, a retained earnings statement, and a classified balance sheet.
**(b)** Journalize the adjusting entries that were made.
**(c)** Journalize the closing entries that are necessary.

(a) Net income $8,844
Retained earnings $21,044
Total assets $180,354

**P5-4A** Bill Kokott, a former professional golf star, operates Bill's Pro Shop at Bay Golf Course. At the beginning of the current season on April 1, the ledger of Bill's Pro Shop showed Cash $2,500, Merchandise Inventory $3,500, and Common Stock $6,000. The following transactions were completed during April.

*Journalize, post, and prepare a trial balance.*
(SO 2, 3, 4)

Apr. 5 Purchased golf bags, clubs, and balls on account from Ellis Co. $1,800, FOB shipping point, terms 2/10, n/60.
7 Paid freight on Ellis purchase $80.
9 Received credit from Ellis Co. for merchandise returned $100.
10 Sold merchandise on account to members $1,200, terms n/30. The merchandise sold had a cost of $810.
12 Purchased golf shoes, sweaters, and other accessories on account from Penguin Sportswear $660, terms 1/10, n/30.
14 Paid Ellis Co. in full, less discount.
17 Received credit from Penguin Sportswear for merchandise returned $60.
20 Made sales on account to members $700, terms n/30. The cost of the merchandise sold was $490.
21 Paid Penguin Sportswear in full, less discount.
27 Granted an allowance to members for clothing that did not fit properly $40.
30 Received payments on account from members $1,000.

The chart of accounts for the pro shop includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 505 Cost of Goods Sold.

### Instructions

**(a)** Journalize the April transactions using a perpetual inventory system.
**(b)** Enter the beginning balances in the ledger accounts and post the April transactions. (Use J1 for the journal reference.)
**(c)** Prepare a trial balance on April 30, 2006.

(c) Total debits $7,900

**P5-5A** At the end of Stampfer Department Store's fiscal year on November 30, 2006, these accounts appeared in its adjusted trial balance.

*Determine cost of goods sold and gross profit under periodic approach.*
(SO 6, 7)

| | |
|---|---|
| Freight-in | $ 5,060 |
| Merchandise Inventory | 44,360 |
| Purchases | 630,000 |
| Purchase Discounts | 7,000 |
| Purchase Returns and Allowances | 3,000 |
| Sales | 910,000 |
| Sales Returns and Allowances | 20,000 |

Additional facts:

**1.** Merchandise inventory on November 30, 2006, is $36,200.
**2.** Note that Stampfer Department Store uses a periodic system.

### Instructions

Prepare an income statement through gross profit for the year ended November 30, 2006.

Gross profit $256,780

*Calculate missing amounts and assess profitability.*

(SO 6, 7)

**P5-6A** Psang Inc. operates a retail operation that purchases and sells snowmobiles, amongst other outdoor products. The company purchases all merchandise inventory on credit and uses a perpetual inventory system. The accounts payable account is used for recording inventory purchases only; all other current liabilities are accrued in separate accounts. You are provided with the following selected information for the fiscal years 2004 through 2007, inclusive.

| | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| **Income Statement Data** | | | | |
| Sales | | $96,850 | $ (e) | $82,220 |
| Cost of goods sold | | (a) | 27,140 | 26,550 |
| Gross profit | | 69,260 | 61,540 | (i) |
| Operating expenses | | 63,500 | (f) | 52,060 |
| Net income | | $ (b) | $ 4,570 | $ (j) |
| **Balance Sheet Data** | | | | |
| Merchandise inventory | $13,000 | $ (c) | $14,700 | $ (k) |
| Accounts payable | 5,000 | 6,500 | 4,600 | (l) |
| **Additional Information** | | | | |
| Purchases of merchandise inventory on account | | $25,890 | $ (g) | $24,050 |
| Cash payments to suppliers | | (d) | (h) | 24,650 |

### Instructions

(c) $11,300
(g) $30,540
(l) $ 4,000

**(a)** Calculate the missing amounts.

**(b)** Sales declined over the 3-year fiscal period, 2005–2007. Does that mean that profitability necessarily also declined? Explain, computing the gross profit rate and the profit margin ratio for each fiscal year to help support your answer.

*Journalize, post, and prepare trial balance and partial income statement using periodic approach.*

(SO 7, 8)

***P5-7A** At the beginning of the current season on April 1, the ledger of Tri-State Pro Shop showed Cash $2,500; Merchandise Inventory $3,500; and Common Stock $6,000. These transactions occured during April 2006.

Apr. 5 Purchased golf bags, clubs, and balls on account from Balata Co. $1,700, FOB shipping point, terms 2/10, n/60.
7 Paid freight on Balata Co. purchases $80.
9 Received credit from Balata Co. for merchandise returned $200.
10 Sold merchandise on account to members $950, terms n/30.
12 Purchased golf shoes, sweaters, and other accessories on account from Arrow Sportswear $660, terms 1/10, n/30.
14 Paid Balata Co. in full.
17 Received credit from Arrow Sportswear for merchandise returned $60.
20 Made sales on account to members $700, terms n/30.
21 Paid Arrow Sportswear in full.
27 Granted credit to members for clothing that did not fit properly $75.
30 Received payments on account from members $1,100.

The chart of accounts for the pro shop includes Cash; Accounts Receivable; Merchandise Inventory; Accounts Payable; Common Stock; Sales; Sales Returns and Allowances; Purchases; Purchase Returns and Allowances; Purchase Discounts, and Freight-in.

### Instructions

(c) Tot. trial balance $7,946
Gross profit $ 455

**(a)** Journalize the April transactions using a periodic inventory system.

**(b)** Using T accounts, enter the beginning balances in the ledger accounts and post the April transactions.

**(c)** Prepare a trial balance on April 30, 2006.

**(d)** Prepare an income statement through gross profit, assuming merchandise inventory on hand at April 30 is $4,524.

***P5-8A** The trial balance of Loren Foelske Wholesale Company contained the following accounts at December 31, the end of the company's fiscal year.

*Complete accounting cycle beginning with a work sheet.*

(SO 4, 5, 6, 9)

**LOREN FOELSKE WHOLESALE COMPANY**
Trial Balance
December 31, 2006

| | Debit | Credit |
|---|---|---|
| Cash | $ 25,400 | |
| Accounts Receivable | 37,600 | |
| Merchandise Inventory | 90,000 | |
| Land | 92,000 | |
| Buildings | 197,000 | |
| Accumulated Depreciation—Buildings | | $ 54,000 |
| Equipment | 83,500 | |
| Accumulated Depreciation—Equipment | | 42,400 |
| Notes Payable | | 50,000 |
| Accounts Payable | | 39,000 |
| Common Stock | | 200,000 |
| Retained Earnings | | 67,800 |
| Dividends | 10,000 | |
| Sales | | 904,100 |
| Sales Discounts | 6,100 | |
| Cost of Goods Sold | 709,900 | |
| Salaries Expense | 69,800 | |
| Utilities Expense | 19,400 | |
| Repair Expense | 5,900 | |
| Gas and Oil Expense | 7,200 | |
| Insurance Expense | 3,500 | |
| Totals | $1,357,300 | $1,357,300 |

Adjustment data:

1. Depreciation is $10,000 on buildings and $9,000 on equipment. (Both are administrative expenses.)
2. Interest of $5,000 is due and unpaid on notes payable at December 31.
3. Merchandise inventory actually on hand is $88,900.

Other data:

1. Salaries are 80% selling and 20% administrative.
2. Utilities expense, repair expense, and insurance expense are 100% administrative.
3. $10,000 of the notes payable are payable next year.
4. Gas and oil expense is a selling expense.

**Instructions**

**(a)** Enter the trial balance on a work sheet, and complete the work sheet.
**(b)** Prepare a multiple-step income statement and a retained earnings statement for the year, and a classified balance sheet at December 31, 2006.
**(c)** Journalize the adjusting entries.
**(d)** Journalize the closing entries.
**(e)** Prepare a post-closing trial balance.

(a) Adj. trial balance total $1,381,300
Net income $57,200
(b) Gross profit $187,000
Total assets $409,000
(e) Total debits $524,400

**P5-1B** Ready-Set-Go distributes suitcases to retail stores and extends credit terms of 1/10, n/30 to all of its customers. At the end of July, R-S-G's inventory consisted of 40 suitcases purchased at $30 each. During the month of July the following merchandising transactions occurred.

*Journalize purchase and sales transactions under a perpetual inventory system.*

(SO 2, 3)

July 1 Purchased 50 suitcases on account for $30 each from Trunk Manufacturers, FOB destination, terms 2/10, n/30. The appropriate party also made a cash payment of $100 for freight on this date.
3 Sold 40 suitcases on account to Satchel World for $55 each.

9 Paid Trunk Manufacturers in full.
12 Received payment in full from Satchel World.
17 Sold 30 suitcases on account to The Going Concern for $55 each.
18 Purchased 60 suitcases on account for $1,700 from Holiday Manufacturers, FOB shipping point, terms 1/10, n/30. The appropriate party also made a cash payment of $100 for freight on this date.
20 Received $300 credit (including freight) for 10 suitcases returned to Holiday Manufacturers.
21 Received payment in full from The Going Concern.
22 Sold 45 suitcases on account to Fly-By-Night for $55 each.
30 Paid Holiday Manufacturers in full.
31 Granted Fly-By-Night $220 credit for 4 suitcases returned costing $120.

Ready-Set-Go's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, No. 505 Cost of Goods Sold.

**Instructions**

Journalize the transactions for the month of July for Ready-Set-Go using a perpetual inventory system.

*Journalize, post, and prepare a partial income statement.*

(SO 2, 3, 5, 6)

**P5-2B** Shmi Distributing Company completed the following merchandising transactions in the month of April. At the beginning of April, the ledger of Shmi showed Cash of $9,000 and Common Stock of $9,000.

Apr. 2 Purchased merchandise on account from Wookie Supply Co. $5,900, terms 1/10, n/30.
4 Sold merchandise on account $5,200, FOB destination, terms 1/10, n/30. The cost of the merchandise sold was $4,100.
5 Paid $240 freight on April 4 sale.
6 Received credit from Wookie Supply Co. for merchandise returned $500.
11 Paid Wookie Supply Co. in full, less discount.
13 Received collections in full, less discounts, from customers billed on April 4.
14 Purchased merchandise for cash $3,800.
16 Received refund from supplier for returned goods on cash purchase of April 14, $500.
18 Purchased merchandise from Skywalker Distributors $4,200, FOB shipping point, terms 2/10, n/30.
20 Paid freight on April 18 purchase $100.
23 Sold merchandise for cash $6,400. The merchandise sold had a cost of $5,120.
26 Purchased merchandise for cash $2,300.
27 Paid Skywalker Distributors in full, less discount.
29 Made refunds to cash customers for defective merchandise $90. The returned merchandise had a scrap value of $30.
30 Sold merchandise on account $3,700, terms n/30. The cost of the merchandise sold was $2,800.

Shmi Company's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, No. 505 Cost of Goods Sold, and No. 644 Freight-out.

**Instructions**

**(a)** Journalize the transactions using a perpetual inventory system.
**(b)** Enter the beginning cash and capital balances, and post the transactions. (Use J1 for the journal reference.)
**(c)** Prepare the income statement through gross profit for the month of April 2006.

(c) Gross profit $3,168

*Prepare financial statements and adjusting and closing entries.*

(SO 4, 5)

**P5-3B** Starz Department Store is located near the Village Shopping Mall. At the end of the company's fiscal year on December 31, 2006, the following accounts appeared in two of its trial balances.

| | Unadjusted | Adjusted | | Unadjusted | Adjusted |
|---|---|---|---|---|---|
| Accounts Payable | $ 78,700 | $ 78,700 | Interest Payable | | $ 5,000 |
| Accounts Receivable | 50,300 | 50,300 | Interest Revenue | $ 4,000 | 4,000 |
| Accumulated Depr.—Building | 42,100 | 52,500 | Merchandise Inventory | 75,000 | 75,000 |
| Accumulated Depr.—Equipment | 30,200 | 42,900 | Mortgage Payable | 80,000 | 80,000 |
| Building | 190,000 | 190,000 | Office Salaries Expense | 32,000 | 32,000 |
| Cash | 20,800 | 20,800 | Prepaid Insurance | 9,600 | 2,400 |
| Common Stock | 110,000 | 110,000 | Property Taxes Expense | | 4,800 |
| Cost of Goods Sold | 412,700 | 412,700 | Property Taxes Payable | | 4,800 |
| Depr. Expense—Building | | 10,400 | Retained Earnings | 66,600 | 66,600 |
| Depr. Expense—Equipment | | 12,700 | Sales Salaries Expense | 76,000 | 76,000 |
| Dividends | 28,000 | 28,000 | Sales | 628,000 | 628,000 |
| Equipment | 110,000 | 110,000 | Sales Commissions Expense | 10,200 | 15,500 |
| Insurance Expense | | 7,200 | Sales Commissions Payable | | 5,300 |
| Interest Expense | 6,000 | 11,000 | Sales Returns and Allowances | 8,000 | 8,000 |
| | | | Utilities Expense | 11,000 | 12,000 |
| | | | Utilities Expense Payable | | 1,000 |

Analysis reveals the following additional data.

1. Insurance expense and utilities expense are 60% selling and 40% administrative.
2. $20,000 of the mortgage payable is due for payment next year.
3. Depreciation on the building and property tax expense are administrative expenses; depreciation on the equipment is a selling expense.

**Instructions**

**(a)** Prepare a multiple-step income statement, a retained earnings statement, and a classified balance sheet.
**(b)** Journalize the adjusting entries that were made.
**(c)** Journalize the closing entries that are necessary.

(a) Net income $29,700
Retained earnings $68,300
Total assets $353,100

**P5-4B** J. Ackbar, a former professional tennis star, operates Ackbar's Tennis Shop at the Miller Lake Resort. At the beginning of the current season, the ledger of Ackbar's Tennis Shop showed Cash $2,500, Merchandise Inventory $1,700, and Common Stock $4,200. The following transactions were completed during April.

*Journalize, post, and prepare a trial balance.*
(SO 2, 3, 4)

Apr. 4 Purchased racquets and balls from Jay-Mac Co. $640, FOB shipping point, terms 2/10, n/30.
6 Paid freight on purchase from Jay-Mac Co. $40.
8 Sold merchandise to members $1,150, terms n/30. The merchandise sold had a cost of $790.
10 Received credit of $40 from Jay-Mac Co. for a damaged racquet that was returned.
11 Purchased tennis shoes from Venus Sports for cash, $420.
13 Paid Jay-Mac Co. in full.
14 Purchased tennis shirts and shorts from Serena's Sportswear $700, FOB shipping point, terms 3/10, n/60.
15 Received cash refund of $50 from Venus Sports for damaged merchandise that was returned.
17 Paid freight on Serena's Sportswear purchase $30.
18 Sold merchandise to members $760, terms n/30. The cost of the merchandise sold was $530.
20 Received $500 in cash from members in settlement of their accounts.
21 Paid Serena's Sportswear in full.
27 Granted an allowance of $30 to members for tennis clothing that did not fit properly.
30 Received cash payments on account from members, $660.

The chart of accounts for the tennis shop includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 505 Cost of Goods Sold.

**Instructions**

**(a)** Journalize the April transactions using a perpetual inventory system.
**(b)** Enter the beginning balances in the ledger accounts and post the April transactions. (Use J1 for the journal reference.)
**(c)** Prepare a trial balance on April 30, 2006.

(c) Total debits $6,110

*Determine cost of goods sold and gross profit under periodic approach.*
(SO 6, 7)

**P5-5B** At the end of High-Point Department Store's fiscal year on December 31, 2006, these accounts appeared in its adjusted trial balance.

| | |
|---|---|
| Freight-in | $5,600 |
| Merchandise Inventory | 40,500 |
| Purchases | 442,000 |
| Purchase Discounts | 12,000 |
| Purchase Returns and Allowances | 6,400 |
| Sales | 718,000 |
| Sales Returns and Allowances | 8,000 |

Additional facts:

1. Merchandise inventory on December 31, 2006, is $75,000.
2. Note that High-Point Department Store uses a periodic system.

**Instructions**

Gross profit $315,300

Prepare an income statement through gross profit for the year ended December 31, 2006.

*Calculate missing amounts and assess profitability.*
(SO 6, 7)

**P5-6B** Danielle MacLean operates a retail clothing operation. She purchases all merchandise inventory on credit and uses a perpetual inventory system. The accounts payable account is used for recording inventory purchases only; all other current liabilities are accrued in separate accounts. You are provided with the following selected information for the fiscal years 2004, 2005, 2006, and 2007.

| | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| Inventory (ending) | $ 13,000 | $ 11,300 | $ 14,700 | $ 12,200 |
| Accounts payable (ending) | 20,000 | | | |
| Sales | | 225,700 | 227,600 | 219,500 |
| Purchases of merchandise inventory on account | | 141,000 | 150,000 | 132,000 |
| Cash payments to suppliers | | 135,000 | 161,000 | 127,000 |

**Instructions**

(a) 2006 $146,600

(c) 2006 Ending accts payable $15,000

**(a)** Calculate cost of goods sold for each of the 2005, 2006, and 2007 fiscal years.
**(b)** Calculate the gross profit for each of the 2005, 2006, and 2007 fiscal years.
**(c)** Calculate the ending balance of accounts payable for each of the 2005, 2006, and 2007 fiscal years.
**(d)** Sales declined in fiscal 2007. Does that mean that profitability, as measured by the gross profit rate, necessarily also declined? Explain, calculating the gross profit rate for each fiscal year to help support your answer.

*Journalize, post, and prepare trial balance and partial income statement using periodic approach.*
(SO 7, 8)

***P5-7B** At the beginning of the current season, the ledger of Village Tennis Shop showed Cash $2,500; Merchandise Inventory $1,700; and Common Stock $4,200. The following transactions were completed during April.

Apr. 4 Purchased racquets and balls from Robert Co. $840, terms 3/10, n/30.
6 Paid freight on Robert Co. purchase $60.
8 Sold merchandise to members $900, terms n/30.
10 Received credit of $40 from Robert Co. for a damaged racquet that was returned.
11 Purchased tennis shoes from Newbee Sports for cash $300.
13 Paid Robert Co. in full.
14 Purchased tennis shirts and shorts from Venus's Sportswear $500, terms 2/10, n/60.
15 Received cash refund of $50 from Newbee Sports for damaged merchandise that was returned.
17 Paid freight on Venus's Sportswear purchase $30.
18 Sold merchandise to members $800, terms n/30.
20 Received $500 in cash from members in settlement of their accounts.
21 Paid Venus's Sportswear in full.
27 Granted an allowance of $30 to members for tennis clothing that did not fit properly.
30 Received cash payments on account from members $500.

The chart of accounts for the tennis shop includes Cash; Accounts Receivable; Merchandise Inventory; Accounts Payable; Common Stock; Sales; Sales Returns and Allowances; Purchases; Purchase Returns and Allowances; Purchase Discounts; and Freight-in.

**Instructions**

**(a)** Journalize the April transactions using a periodic inventory system.
**(b)** Using T accounts, enter the beginning balances in the ledger accounts and post the April transactions.
**(c)** Prepare a trial balance on April 30, 2006.
**(d)** Prepare an income statement through gross profit, assuming merchandise inventory on hand at April 30 is $2,296.

(c) Tot. trial balance $6,024
(d) Gross profit $ 660

***P5-8B** The trial balance of Kevin Poorten Fashion Center contained the following accounts at November 30, the end of the company's fiscal year.

*Complete accounting cycle beginning with a work sheet.*
(SO 4, 5, 6, 9)

**KEVIN POORTEN FASHION CENTER**
Trial Balance
November 30, 2006

| | Debit | Credit |
|---|---|---|
| Cash | $ 26,700 | |
| Accounts Receivable | 30,700 | |
| Merchandise Inventory | 44,700 | |
| Store Supplies | 6,200 | |
| Store Equipment | 85,000 | |
| Accumulated Depreciation—Store Equipment | | $ 18,000 |
| Delivery Equipment | 48,000 | |
| Accumulated Depreciation—Delivery Equipment | | 6,000 |
| Notes Payable | | 51,000 |
| Accounts Payable | | 48,500 |
| Common Stock | | 80,000 |
| Retained Earnings | | 30,000 |
| Dividends | 12,000 | |
| Sales | | 759,200 |
| Sales Returns and Allowances | 8,800 | |
| Cost of Goods Sold | 497,400 | |
| Salaries Expense | 140,000 | |
| Advertising Expense | 26,400 | |
| Utilities Expense | 14,000 | |
| Repair Expense | 12,100 | |
| Delivery Expense | 16,700 | |
| Rent Expense | 24,000 | |
| Totals | $992,700 | $992,700 |

Adjustment data:

**1.** Store supplies on hand totaled $3,500.
**2.** Depreciation is $9,000 on the store equipment and $6,000 on the delivery equipment.
**3.** Interest of $4,080 is accrued on notes payable at November 30.
**4.** Merchandise inventory actually on hand is $44,400.

Other data:

**1.** Salaries expense is 70% selling and 30% administrative.
**2.** Rent expense and utilities expense are 80% selling and 20% administrative.
**3.** $30,000 of notes payable are due for payment next year.
**4.** Repair expense is 100% administrative.

**Instructions**

**(a)** Enter the trial balance on a work sheet, and complete the work sheet.
**(b)** Prepare a multiple-step income statement and a retained earnings statement for the year, and a classified balance sheet as of November 30, 2006.
**(c)** Journalize the adjusting entries.
**(d)** Journalize the closing entries.
**(e)** Prepare a post-closing trial balance.

(a) Adj. trial balance $1,011,780
Net loss $2,280
(b) Gross profit $252,700
Total assets $199,300

# BROADENING YOUR PERSPECTIVE

## Financial Reporting and Analysis

### FINANCIAL REPORTING PROBLEM: PepsiCo, Inc.

**BYP5-1** The financial statements of **PepsiCo, Inc.** are presented in Appendix A at the end of this textbook.

**Instructions**

Answer the following questions using the Consolidated Statement of Income.

**(a)** What was the percentage change in (1) sales and in (2) net income from 2001 to 2002 and from 2002 to 2003?

**(b)** What was the company's gross profit rate in 2001, 2002, and 2003?

**(c)** What was the company's percentage of net income to net sales in 2001, 2002, and 2003? Comment on any trend in this percentage.

### COMPARATIVE ANALYSIS PROBLEM: PepsiCo vs. Coca-Cola

**BYP5-2** **PepsiCo**'s financial statements are presented in Appendix A. **The Coca-Cola Company**'s financial statements are presented in Appendix B.

**Instructions**

**(a)** Based on the information contained in these financial statements, determine each of the following for each company.

**(1)** Gross profit for 2003.

**(2)** Gross profit rate for 2003.

**(3)** Operating income for 2003.

**(4)** Percent change in operating income from 2002 to 2003.

**(b)** What conclusions concerning the relative profitability of the two companies can be drawn from these data?

### RESEARCH CASE

**BYP5-3** The January 25, 2001, issue of the *Wall Street Journal* includes an article by Nick Wingfield titled "**Webvan** Seeks to Refine Customers in Hopes of Surviving Cash Crunch."

**Instructions**

Read the article and answer the following questions.

**(a)** Describe in a few sentences Webvan's business plan.

**(b)** What was the biggest challenge to Webvan's survival?

**(c)** What was Webvan's gross profit rate (also called gross margin)? On the average $100 sale of goods, what was its gross profit? How did Webvan's gross profit rate compare to that of a traditional grocer?

**(d)** What operating expenses did Webvan have that a traditional grocer wouldn't have?

**(e)** According to the article, what were some things that Webvan could try to do to improve its profitability?

### INTERPRETING FINANCIAL STATEMENTS

**BYP5-4** **Zany Brainy, Inc.** was a specialty retailer of toys, games, books, and multimedia products for kids. As of the end of the fiscal year 2000, the company operated 188 stores in 34 states. On May 15, 2001, the company filed voluntary Chapter 11 bankruptcy. It went out of business in 2003. Provided below is financial information for the 2 years prior to the company's decision to file for bankruptcy, as well as information for a large competitor, **Toys R Us**.

**ZANY BRAINY, INC.**
(in millions of dollars, except number of shares)

| | 2/03/2001 | 1/29/2000 |
|---|---|---|
| Current assets | $131.5 | $142.5 |
| Total assets | 199.2 | 217.6 |
| Current liabilities | 117.8 | 57.3 |
| Total liabilities | 129.6 | 69.2 |
| Average number of shares outstanding | 31.3 million | 25.2 million |
| Sales revenue | $400.5 | $376.2 |
| Cost of goods sold | 312.5 | 267.8 |
| Net income (loss) | (80.7) | 17.1 |
| Preferred stock dividends | 0 | 0 |

At February 2, 2001, Toys R Us had the following ratio values.

| | | | |
|---|---|---|---|
| Earnings per share | $ 0.34 | Current ratio | 1.32:1 |
| Gross profit rate | 31.0% | Debt to total assets ratio | 58% |
| Profit margin ratio | 3.6% | | |

**Instructions**
Use the information above to answer the following questions.

**(a)** Calculate the company's earnings per share, gross profit rate, and profit margin ratio for both years. Discuss the change in the company's profitability and its profitability relative to Toys R Us.

**(b)** Calculate the current ratio for both years. Discuss the change in the company's liquidity and its liquidity relative to Toys R Us. The company's current liabilities at January 30, 1999, were $28.0 million.

**(c)** Calculate the debt to total assets ratio for both years. Discuss the change in the company's solvency and its solvency relative to Toys R Us. The company's total liabilities at January 30, 1999, were $33.9 million.

**(d)** Discuss whether your findings would have been useful in predicting whether the company was going to have to file for bankruptcy. That is, based on this analysis, should investors have been surprised by the company's bankruptcy filing?

## ■ A GLOBAL FOCUS

**BYP5-5** Recently it was announced that two giant French retailers, **Carrefour SA** and **Promodes SA**, would merge. A headline in the *Wall Street Journal* blared, "French Retailers Create New Wal-Mart Rival." While **Wal-Mart**'s total sales would still exceed those of the combined company, Wal-Mart's international sales are far less than those of the combined company. This is a serious concern for Wal-Mart, since its primary opportunity for future growth lies outside of the United States.

Below are basic financial data for the combined corporation (in French francs) and Wal-Mart (in U.S. dollars). Even though their results are presented in different currencies, by employing ratios we can make some basic comparisons.

| | Carrefour/ Promodes (in billions) | Wal-Mart (in billions) |
|---|---|---|
| Sales | Fr 298.0 | $137.6 |
| Cost of goods sold | 274.0 | 108.7 |
| Operating expenses | 9.6 | 22.4 |
| Net income | 5.5 | 4.4 |
| Total assets | 155.0 | 50.0 |
| Average total assets | 140.4 | 47.7 |
| Current assets | 63.5 | 21.1 |
| Current liabilities | 85.8 | 16.8 |
| Total liabilities | 114.2 | 28.9 |

**Instructions**

Compare the two companies by answering the following.

**(a)** Calculate the gross profit rate for each of the companies, and discuss their relative abilities to control cost of goods sold.

**(b)** Calculate the operating expense to sales ratio (operating expenses ÷ sales), and discuss the companies' relative abilities to control operating expenses.

**(c)** What concerns might you have in relying on this comparison?

### EXPLORING THE WEB

**BYP5-6** No financial decision maker should ever rely solely on the financial information reported in the annual report to make decisions. It is important to keep abreast of financial news. This activity demonstrates how to search for financial news on the Web.

**Address:** biz.yahoo.com/i, or go to www.wiley.com/college/weygandt

**Steps:**

1. Type in either PepsiCo or Coca-Cola.
2. Choose **News**.
3. Select an article that sounds interesting to you.

**Instructions**

**(a)** What was the source of the article? (For example, Reuters, Businesswire, PR Newswire.)

**(b)** Pretend that you are a personal financial planner and that one of your clients owns stock in the company. Write a brief memo to your client, summarizing the article and explaining the implications of the article for their investment.

## Critical Thinking

### GROUP DECISION CASE

**BYP5-7** Three years ago, Debbie Sells and her brother-in-law Mike Mooney opened FedCo Department Store. For the first two years, business was good, but the following condensed income results for 2005 were disappointing.

**FEDCO DEPARTMENT STORE**
Income Statement
For the Year Ended December 31, 2005

| | | |
|---|---|---|
| Net sales | | $700,000 |
| Cost of goods sold | | 560,000 |
| Gross profit | | 140,000 |
| Operating expenses | | |
| Selling expenses | $100,000 | |
| Administrative expenses | 20,000 | 120,000 |
| Net income | | $ 20,000 |

Debbie believes the problem lies in the relatively low gross profit rate of 20%. Mike believes the problem is that operating expenses are too high.

Debbie thinks the gross profit rate can be improved by making both of the following changes:

1. Increase average selling prices by 17%. This increase is expected to lower sales volume so that total sales will increase only 8%.
2. Buy merchandise in larger quantities and take all purchase discounts. These changes are expected to increase the gross profit rate to 23%.

Debbie does not anticipate that these changes will have any effect on operating expenses.

Mike thinks expenses can be cut by making both of the following changes.

1. Cut 2005 sales salaries of $60,000 in half and give sales personnel a commission of 2% of net sales.

2. Reduce store deliveries to one day per week rather than twice a week; this change will reduce 2005 delivery expenses of $40,000 by 40%.

Mike feels that these changes will not have any effect on net sales.

Debbie and Mike come to you for help in deciding the best way to improve net income.

**Instructions**

With the class divided into groups, answer the following.

**(a)** Prepare a condensed income statement for 2006 assuming (1) Debbie's changes are implemented and (2) Mike's ideas are adopted.
**(b)** What is your recommendation to Debbie and Mike?
**(c)** Prepare a condensed income statement for 2006 assuming both sets of proposed changes are made.

## ■ COMMUNICATION ACTIVITY

**BYP5-8** The following situation is in chronological order.

1. Dexter decides to buy a surfboard.
2. He calls Surfing USA Co. to inquire about their surfboards.
3. Two days later he requests Surfing USA Co. to make him a surfboard.
4. Three days later, Surfing USA Co. sends him a purchase order to fill out.
5. He sends back the purchase order.
6. Surfing USA Co. receives the completed purchase order.
7. Surfing USA Co. completes the surfboard.
8. Dexter picks up the surfboard.
9. Surfing USA Co. bills Dexter.
10. Surfing USA Co. receives payment from Dexter.

**Instructions**

In a memo to the president of Surfing USA Co., answer the following.

**(a)** When should Surfing USA Co. record the sale?
**(b)** Suppose that with his purchase order, Dexter is required to make a down payment. Would that change your answer?

## ■ ETHICS CASE

**Accounting Matters!**

**BYP5-9** Anita Zurbrugg was just hired as the assistant treasurer of Dorchester Stores. The company is a specialty chain store with nine retail stores concentrated in one metropolitan area. Among other things, the payment of all invoices is centralized in one of the departments Anita will manage. Her primary responsibility is to maintain the company's high credit rating by paying all bills when due and to take advantage of all cash discounts.

Chris Dadian, the former assistant treasurer who has been promoted to treasurer, is training Anita in her new duties. He instructs Anita that she is to continue the practice of preparing all checks "net of discount" and dating the checks the last day of the discount period. "But," Chris continues, "we always hold the checks at least 4 days beyond the discount period before mailing them. That way we get another 4 days of interest on our money. Most of our creditors need our business and don't complain. And, if they scream about our missing the discount period, we blame it on the mail room or the post office. We've only lost one discount out of every hundred we take that way. I think everybody does it. By the way, welcome to our team!"

**Instructions**

**(a)** What are the ethical considerations in this case?
**(b)** Who are the stakeholders that are harmed or benefitted in this situation?
**(c)** Should Anita continue the practice started by Chris? Does she have any choice?

## ■ CONTINUING COOKIE CHRONICLE

**Accounting Matters!**

(Note: The Continuing Cookie Chronicle was started in Chapter 1 and continued in Chapters 2 through 4. From the information gathered through Chapter 4, follow the instructions below, using the general ledger accounts you have already prepared.)

**BYP5-10** Because Natalie has had such a successful first few months, she is considering other opportunities to develop her business. One opportunity is the sale of fine European mixers. The owner of Mixer Deluxe has approached Natalie to become the exclusive distributor of these

fine mixers. The current cost of a mixer is approximately $525, and Natalie would sell each one for $1,050. Natalie comes to you for advice on how to account for these mixers. Each appliance has a serial number and can be easily identified.

Natalie asks you the following questions:

1. "Would you consider these mixers to be inventory? Or, should they be classified as supplies or equipment?"
2. "I've learned a little about keeping track of inventory using both the perpetual and the periodic systems of accounting for inventory. Which system do you think is better? Which one would you recommend for the type of inventory that I want to sell?"
3. "How often do I need to count inventory if I maintain it using the perpetual system? Do I need to count inventory at all?"

In the end, Natalie decides to use the perpetual method of accounting for inventory, and the following transactions happen during the month of January.

| | | |
|---|---|---|
| Jan. | 4 | She buys five deluxe mixers on account from Kzinski Supply Co. for $2,625, FOB shipping point, terms n/30. |
| | 6 | She pays $100 freight on the January 4 purchase. |
| | 7 | Natalie returns one of the mixers to Kzinski because it was damaged during shipping. Kzinski issues Cookie Creations credit for the cost of the mixer plus $20 for the cost of freight that was paid on January 6 for one mixer. |
| | 8 | She collects the amount due from the neighborhood community center that was accrued at the end of December, 2005. |
| | 12 | She sells three deluxe mixers on account for $3,150, FOB destination, terms n/30. |
| | 13 | Natalie pays her cell phone bill previously accrued in the December adjusting journal entries. |
| | 14 | She pays $75 of delivery charges for the three mixers that were sold on January 12. |
| | 14 | She buys four deluxe mixers on account from Kzinski Supply Co. for $2,100, FOB shipping point, terms n/30. |
| | 17 | Natalie is concerned that there is not enough cash available to pay for all of the mixers purchased. She issues additional common stock for $1,000. |
| | 18 | She pays $80 freight on the January 14 purchase. |
| | 20 | She sells two deluxe mixers for $2,100 cash. |
| | 28 | Natalie issues a check to her assistant. Her assistant worked 20 hours in January and is also paid for amounts owing at December 31, 2005. Recall that Natalie's assistant earns $8 an hour. |
| | 28 | Natalie collects amounts due from customers in the January 12 transaction. |
| | 31 | She pays Kzinski all amounts due. |
| | 31 | Cash dividends of $750 are paid. |

As of January 31, the following adjusting entry data is available.

1. A count of brochures and posters reveals that none were used in January.
2. A count of baking supplies reveals that none were used in January.
3. Another month's worth of depreciation needs to be recorded on the baking equipment bought in November. (Recall that the baking equipment has a useful life of 5 years or 60 months.)
4. One month's worth of amortization (write-off) needs to be recorded on the Web site. (Recall that the Web site has a useful life of 2 years or 24 months.)
5. An additional month's worth of interest on her grandmother's loan needs to be accrued. (The interest rate is 6%.)
6. One month's worth of insurance has expired.
7. Natalie receives her cell phone bill, $75. The bill is for services provided in January and is due February 15. (Recall that the cell phone is used only for business purposes.)
8. An analysis of the unearned revenue account reveals that Natalie has not had time to teach any of these lessons this month because she has been so busy selling mixers. As a result there is no change to the unearned revenue account. Natalie hopes to book the outstanding lessons in February.
9. An inventory count of mixers at the end of January reveals that Natalie has three mixers remaining.

**Instructions**

Using the information that you have gathered through Chapter 4, and the new information on page 236, do the following.

**(a)** Answer Natalie's questions.
**(b)** Prepare and post the January 2006 transactions.
**(c)** Prepare a trial balance.
**(d)** Prepare and post the adjusting journal entries required.
**(e)** Prepare an adjusted trial balance.
**(f)** Prepare a multiple-step income statement and retained earnings statement for the month ended January 31, 2006.
**(g)** Prepare a classified balance sheet as of January 31, 2006.

**Accounting Matters!**

**Answers to Accounting Matters! Questions**

**p. 193**

**Q:** How is a grocery store's accounting equation changed by the computer's bar-code actions?

**A:** Cash and Sales Revenue would increase; Inventory would decrease; and Cost of Goods Sold would increase.

**p. 197**

**Q:** The *distribution costs* of online sales can be greater than for traditional in-store sales. What costs may be less for online sales?

**A:** The costs of a sales force, store rent or depreciation, utilities, and other store operating expenses may decrease for online sales.

**p. 199**

**Q:** How does management know the amount of sales returns?

**A:** The activity in the contra sales account, Sales Returns and Allowances, communicates to management excessive returns.

**Q:** Would returns for a floral supply company have a greater negative impact on earnings than returns for a department store?

**A:** The negative impact of returned sales is probably greater for a floral supply company than for a department store because of the perishable nature of the inventory and the higher labor cost to prepare shipments.

**p. 205**

**Q:** Why have investors and analysts demanded more accuracy in isolating "Other gains and losses" from operating items?

**A:** Greater accuracy in the classification of operating versus nonoperating ("Other gains and losses") items permits investors and analysts to judge the real operating margin, the results of continuing operations, and management's ability to control operating expenses.

**Answer to PepsiCo Review It Question 1, p. 208**

For **PepsiCo**, the 2003 gross profit rate is 54.1% ($14,592 ÷ $26,971). The 2002 gross profit rate was 54.2% ($13,615 ÷ $25,112). The rate therefore decreased by 0.1% from 2002 to 2003.

**Answers to Self-Study Questions**

**1.** c **2.** a **3.** c **4.** b **5.** c **6.** d **7.** b **8.** c **9.** d **10.** d **11.** a ***12.** b ***13.** a

**REMEMBER** to go back to the Navigator box on the chapter-opening page and check off your completed work.