

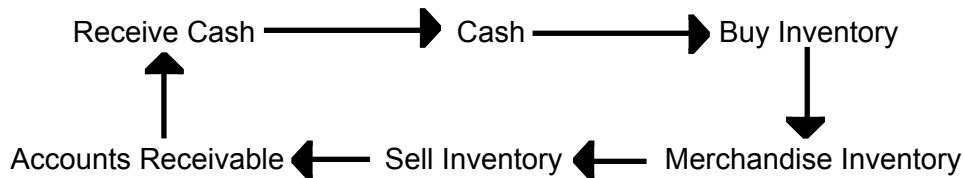
# CHAPTER REVIEW

## Measuring Net Income

1. (S.O. 1) A merchandiser is an enterprise that buys and sells goods to earn revenue. Merchandisers that purchase and sell directly to consumers are **retailers**, and those that sell to retailers are known as **wholesalers**.
2. The primary source of revenue for a merchandiser is **sales revenue**. Expenses are divided into two categories: (1) cost of goods sold and (2) operating expenses.
3. Sales less cost of goods sold is called the gross profit (or gross margin) on sales. For example, if sales are \$5,000 and cost of goods sold is \$3,000, gross profit is \$2,000.
4. After gross profit is calculated, operating expenses are deducted to determine net income (or loss).
5. **Operating expenses** are expenses incurred in the process of earning sales revenue.

## Operating Cycles

6. The operating cycle of a merchandiser is as follows:



## Inventory Systems

7. A merchandiser may use either a perpetual or a periodic inventory system in determining cost of goods sold.
  - a. In a **perpetual inventory system**, detailed records of the cost of each inventory item are maintained and the cost of each item sold is determined from the records when the sale occurs.
  - b. In a **periodic inventory system**, detailed inventory records are not maintained and the cost of goods sold is determined only at the end of an accounting period.

## Purchase Transactions

8. (S.O. 2) Under the perpetual inventory system, purchases of merchandise for sale are recorded in the Merchandise Inventory account. For a cash purchase, Cash is credited; for a credit purchase, Accounts Payable is credited.
9. **FOB shipping point** means that goods are placed free on board the carrier by the seller, and the buyer must pay the freight costs. **FOB destination** means that goods are placed free on board at the buyer's place of business, and the seller pays the freight.
10. When the purchaser pays the freight, Merchandise Inventory is debited and Cash is credited. When the seller pays the freight, Delivery Expense or Freight-out is debited and cash is credited. This account is classified as an operating expense by the seller.
11. A purchaser may be dissatisfied with the merchandise received because the goods may be damaged or defective, of inferior quality, or not in accord with the purchaser's specifications. The

purchaser may **return** the merchandise, or choose to keep the merchandise if the supplier is willing to grant an **allowance** (deduction) from the purchase price. When merchandise is returned, Merchandise Inventory is credited.

12. When the credit terms of a purchase on account permits the purchaser to claim a cash discount for the prompt payment of a balance due, this is called a **purchase discount**. If a purchase discount has terms 3/10, n/30, then a 3% discount is taken on the invoice price (less any returns or allowances) if payment is made within 10 days. If payment is not made within 10 days, then there is no purchase discount, and the net amount of the bill is due within 30 days.
13. When an invoice is paid within the discount period, the amount of the discount is credited to Merchandise Inventory. When an invoice is not paid within the discount period, then the usual entry is made with a debit to Accounts Payable and a credit to Cash.

### **Sales Transactions**

14. (S.O. 3) In accordance with the **revenue recognition principle**, sales revenues are recorded when earned. Typically sales revenues are earned when the goods are transferred from the seller to the buyer.
15. All sales transactions should be supported by a **business document**. Cash register tapes provide evidence of cash sales; sales invoices provide support for credit sales.
16. A sale on credit is recorded as follows:

Accounts Receivable .....	XXXX	
Sales .....		XXXX
Cost of Goods Sold .....	XXXX	
Merchandise Inventory .....		XXXX

After the cash payment is received by the seller, the following entry is recorded:

Cash.....	XXXX	
Accounts Receivable .....		XXXX

A cash sale is recorded by a debit to Cash and a credit to Sales, and a debit to Cost of Goods Sold and a credit to Merchandise Inventory.

### **Sales Returns and Allowances**

17. A **sales return** results when a customer is dissatisfied with merchandise and is allowed to return the goods to the seller for credit or for a cash refund. A **sales allowance** results when a customer is dissatisfied with merchandise and the seller is willing to grant an allowance (deduction) from the selling price.
18. To give the customer a sales return or allowance, the seller normally makes the following entry if the sale was a credit sale (the second entry is made only if the goods are returned):

Sales Returns and Allowances .....	XXXX	
Accounts Receivable .....		XXXX
Merchandise Inventory .....	XXXX	
Cost of Goods Sold .....		XXXX

For a sales return or allowance on a cash sale, a cash refund is made and Cash is credited instead of Accounts Receivable. The second entry is the same as above.

19. Sales Returns and Allowances is a **contra-revenue account** and the normal balance of the account is a debit.

### **Sales Discounts**

20. A **sales discount** is the offer of a cash discount to a customer for the prompt payment of a balance due. If a credit sale has terms 2/10, n/30, then a 2% discount is taken on the invoice price (less any returns or allowances) if payment is made within 10 days. If payment is not made within 10 days, then there is no sales discount, and the net amount of the bill, without discount, is due within 30 days. Sales Discounts is a **contra-revenue account** and the normal balance of this account is a debit.
21. Both Sales Returns and Allowances and Sales Discounts are subtracted from Sales in the income statement to arrive at **net sales**.

### **The Accounting Cycle**

22. (S.O. 4) Each of the required steps in the accounting cycle applies to a merchandising company.

### **Adjusting Entries and Closing Entries**

23. A merchandising company generally has the same types of adjusting entries as a service company but a merchandiser using a perpetual inventory system will require an additional adjustment to reflect the difference between a physical count of the inventory and the accounting records. In addition, like a service company, a merchandising company makes closing entries to and from Income Summary.

### **Multiple-Step vs. Single-Step Income Statement**

24. (S.O. 5) A **multiple-step income statement** shows two steps in determining net income: (1) cost of goods sold is subtracted from net sales for determining gross profit and (2) operating expenses are deducted from gross profit to determine net income. In addition, there may be nonoperating sections for:
  - a. Revenues and expenses that result from secondary or auxiliary operations, and
  - b. Gains and losses that are unrelated to the company's operations.

### **Gross Profit and Operating Expenses**

25. (S.O. 6) **Gross profit** is net sales less cost of goods sold. The gross profit rate is expressed as a percentage by dividing the amount of gross profit by net sales. Operating expenses are the third component in measuring net income for a merchandising company.
26. A multiple-step income statement may also subdivide operating expenses into two functional groupings: (a) selling expenses, and (b) administrative expenses.

27. Nonoperating sections are reported in the income statement after income from operations and are classified as (a) Other revenues and gains and (b) Other expenses and losses.
28. The income statement is referred to as a **single-step income statement** when all data are classified under two categories: (a) Revenues and (b) Expenses, and only one step is required in determining net income or net loss.

### **Classified Balance Sheet**

29. A merchandiser generally has the same type of balance sheet as a service company except merchandise inventory is reported as a current asset.

### **Determining Cost of Goods Sold Under a Periodic System**

30. (S.O. 7) 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 inventory, as well as cost of goods sold for the period, is calculated at the end of the period. The determination of cost of goods sold for Tsutsui Co. using a periodic inventory system, is as follows:

**Tsutsui Company  
Cost of Goods Sold  
For the Year Ended December 31, 2009**

Cost of goods sold:			
Inventory, January 1			\$28,000
Purchases		\$234,000	
Less: Purchases returns and allowances	\$8,200		
Purchase discounts	<u>4,600</u>	<u>12,800</u>	
Net Purchases		221,200	
Add: Freight-in		<u>10,800</u>	
Cost of goods purchased			<u>232,000</u>
Cost of goods available for sale			260,000
Inventory, December 31			<u>30,000</u>
Cost of goods sold			230,000

### **Periodic Inventory System**

- \*31. (S.O. 8) 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 to determine (1) the cost of the merchandise then on hand and (2) the cost of the goods sold during the period.
- \*32. Under the periodic inventory system, purchases of merchandise for sale are recorded in a Purchases account. For a cash purchase, Cash is credited; for a credit purchase, Accounts Payable is credited.

- \*33. A purchase return and allowance is recorded by debiting Accounts Payable or Cash and crediting the account Purchase Returns and Allowances. Purchase Returns and Allowances is a temporary account whose normal balance is a credit.
- \*34. If payment is made within a discount period, the amount of the discount is credited to the account Purchases Discounts. When an invoice is not paid within the discount period, then the usual entry is made with a debit to Accounts Payable and a credit to Cash.

### **Cost of Goods Sold**

- \*35. To determine the **cost of goods sold** under a periodic inventory system, three steps are required: (1) Record purchases of merchandise; (2) Determine the cost of goods purchased; and (3) Determine the cost of goods on hand at the beginning and end of the accounting period.

### **Cost of Goods Purchased**

- \*36. In determining cost of goods purchased, (a) contra-purchase accounts are subtracted from purchases to produce **net purchases**, and (b) freight-in is then added to net purchases.

### **Cost of Inventory**

- \*37. **Cost of inventory on hand** under the periodic inventory method is obtained from a physical inventory. Taking a physical inventory involves:
- Counting the units on hand for each item of inventory.
  - Applying unit costs to the total units on hand for each item.
  - Totaling the costs for each item of inventory, to determine the total cost of goods on hand.

### **Cost of Goods Sold**

- \*38. **Cost of goods sold** is determined by two steps:
- The cost of goods purchased is added to the cost of goods on hand at the beginning of the period to obtain the cost of goods available for sale.
  - The cost of goods on hand at the end of the period is subtracted from **the cost of goods available for sale**.
- \*39. The income statement for retailers and wholesalers under a periodic inventory system will generally contain more detail listing the above calculations.

### **Using a Worksheet**

- \*40. (S.O. 9) As indicated in Chapter 4, a worksheet enables financial statements to be prepared before the adjusting entries are journalized and posted. The steps in preparing a worksheet for a merchandiser are the same as they are for a service enterprise except the additional merchandising accounts are included.

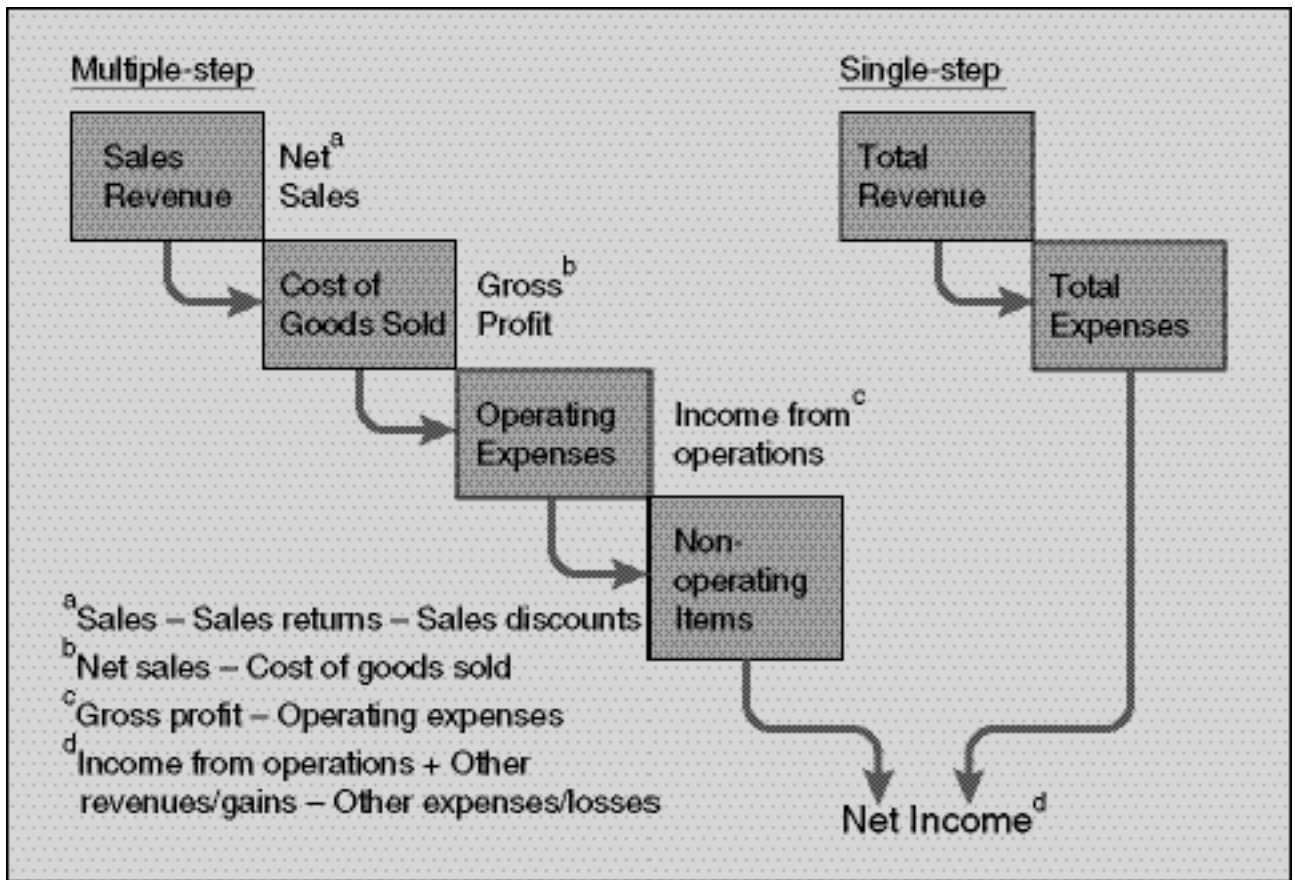
**ILLUSTRATION 5-1**  
**MERCHANDISE PURCHASE ENTRIES FOR A**  
**MERCHANDISING COMPANY (PERPETUAL SYSTEM)**

BUYER COMPANY		
June 5	Merchandise Inventory .....	5,000
	Accounts Payable .....	5,000
	(To record goods purchased on account, terms 2/10, n/30)	
10	Accounts Payable .....	1,000
	Merchandise Inventory .....	1,000
	(To record return of merchandise)	
13	Accounts Payable .....	4,000
	Merchandise Inventory .....	80
	Cash .....	3,920
	(To record payment on account within discount period)	
Entry if discount is not taken:		
July 5	Accounts Payable .....	4,000
	Cash .....	4,000
	(To record payment on account with no discount taken)	
<b>FREIGHT TERMS: FOB SHIPPING POINT—BUYER PAYS FREIGHT</b>		
July 5	Merchandise Inventory .....	200
	Cash .....	200
	(To record freight charges, terms FOB shipping point)	
Note: If freight terms were <b>FOB DESTINATION</b> , the seller company would be responsible for paying the freight charges.		

**ILLUSTRATION 5-2  
REVENUE ENTRIES FOR A MERCHANDISING COMPANY**

SELLER COMPANY		
June 5	Accounts Receivable .....	5,000
	Sales .....	5,000
	(To record credit sale, terms 2/10, n/30)	
	Cost of Goods Sold .....	2,500
	Merchandise Inventory .....	2,500
	(To record cost of merchandise sold)	
10	Sales Returns and Allowances .....	1,000
	Accounts Receivable .....	1,000
	(To record return of merchandise)	
	Merchandise Inventory .....	500
	Cost of Goods Sold .....	500
	(To record cost of goods returned)	
13	Cash .....	3,920
	Sales Discounts .....	80
	Accounts Receivable .....	4,000
	(To record collection within discount period)	
Entry if discount is not taken:		
July 5	Cash .....	4,000
	Accounts Receivable .....	4,000
	(To record collection with discount not taken)	
<b>FREIGHT TERMS: FOB DESTINATION—SELLER PAYS FREIGHT</b>		
July 5	Freight-out .....	200
	Cash .....	200
	(To record payment of freight on goods sold, FOB destination)	
Note: If freight terms were <b>FOB SHIPPING POINT</b> , the buyer company would be responsible for paying the freight charges.		

## ILLUSTRATION 5-3 MULTIPLE-STEP VS. SINGLE-STEP INCOME STATEMENT



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	Losses 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

## ILLUSTRATION 5-4 COST OF GOODS SOLD

### CALCULATION OF COST OF GOODS PURCHASED

Purchases		\$360,000
Less: Purchase returns and allowances	\$7,000	
Purchase discounts	<u>3,000</u>	<u>10,000</u>
Net purchases		350,000
Add: Freight-in		<u>5,000</u>
Cost of goods purchased		<u>\$355,000</u>

### CALCULATION OF COST OF GOODS SOLD

Inventory, January 1	\$ 40,000
Cost of goods purchased	<u>355,000</u>
Cost of goods available for sale	395,000
Inventory, December 31	<u>50,000</u>
Cost of goods sold	<u>\$345,000</u>



## ILLUSTRATION 5-5 COMPARISON OF JOURNAL ENTRIES UNDER PERPETUAL AND PERIODIC INVENTORY SYSTEMS

Transaction		Perpetual Inventory System		Periodic Inventory System	
July 5	Purchase of merchandise on credit.	Merchandise Inventory	40,000	Purchases	40,000
		Accounts Payable	40,000	Accounts Payable	40,000
July 6	Purchase returns and allowances.	Accounts Payable	2,000	Accounts Payable	2,000
		Merchandise Inventory	2,000	Purchase Returns and Allowances	2,000
July 8	Freight costs on purchases.	Merchandise Inventory	200	Freight-in	200
		Cash	200	Cash	200
July 14	Payment on account with a 2% discount.	Accounts Payable	38,000	Accounts Payable	38,000
		Cash	37,240	Cash	37,240
		Merchandise Inventory	760	Purchase Discounts	760
July 16	Sale of merchandise on credit.	Accounts Receivable	24,000	Accounts Receivable	24,000
		Sales Revenue	24,000	Sales Revenue	24,000
		Cost of Goods Sold	12,000	No entry	
		Merchandise Inventory	12,000		
July 18	Return of merchandise.	Sales Returns and Allowances	1,000	Sales Returns and Allowances	1,000
		Accounts Receivable	1,000	Accounts Receivable	1,000
		Merchandise Inventory	500	No entry	
		Cost of Goods Sold	500		
July 25	Cash received on account with a 1% discount.	Cash	22,770	Cash	22,770
		Sales Discounts	230	Sales Discounts	230
		Accounts Receivable	23,000	Accounts Receivable	23,000

**ILLUSTRATION 5-6  
WORKSHEET FOR A MERCHANDISING COMPANY**

PARTIAL WORKSHEET						
Account Title	Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Merchandise Inventory	xx				xx	
Sales		xx		xx		
Sales Returns & Allowances	xx		xx			
Sales Discounts	xx		xx			
Cost of Goods Sold	xx		xx			

**Procedure:**

- (1) Merchandise inventory is extended to the debit column of the balance sheet.
- (2) Sales is extended to the credit column of the income statement.
- (3) Sales Returns & Allowances and Sales Discounts are extended to the debit column of the income statement.
- (4) Cost of Goods Sold is extended to the debit column of the income statement.