



Accounting Principles

Thirteenth Edition

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Chapter 5

Accounting for Merchandising Operations



Chapter Outline

Learning Objectives

- LO 1** Describe merchandising operations and inventory systems.
- LO 2** Record purchases under a perpetual inventory system.
- LO 3** Record sales under a perpetual inventory system.
- LO 4** Apply the steps in the accounting cycle to a merchandising company.
- LO 5** Prepare a multiple-step income statement and a ~~comprehensive income statement~~.
Single-step income statement

LEARNING OBJECTIVE 1

Describe merchandising operations and inventory systems.

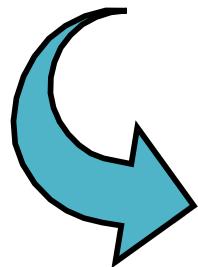
- Merchandising Companies **Buy and Sell Goods**
- Need to maintain **inventory**.
- The primary source of revenues is referred to as **sales revenue or sales**.
- Two categories of expense: **Cost of goods sold** and **operating expenses**.





WHOLESALER

RETAILER



Purchase goods



CUSTOMERS



Sell goods



Service Company

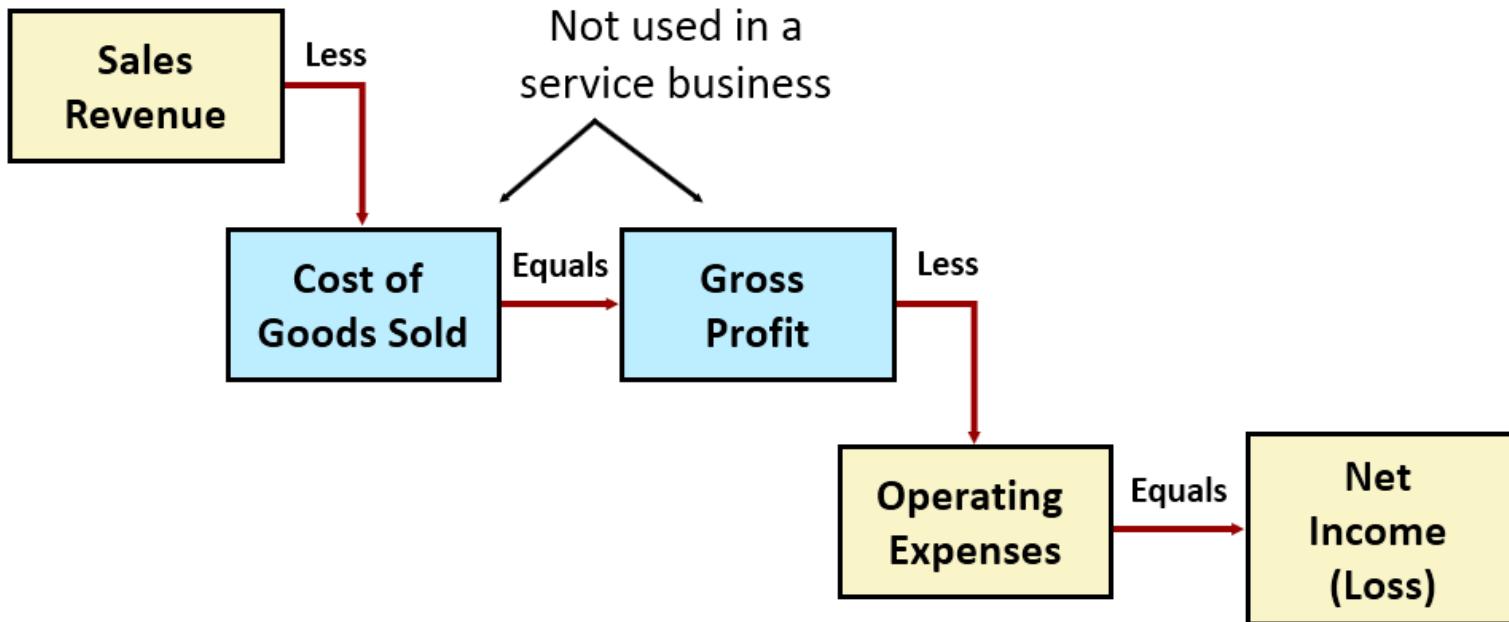


Merchandising Company



Merchandising Operations

Income Measurement

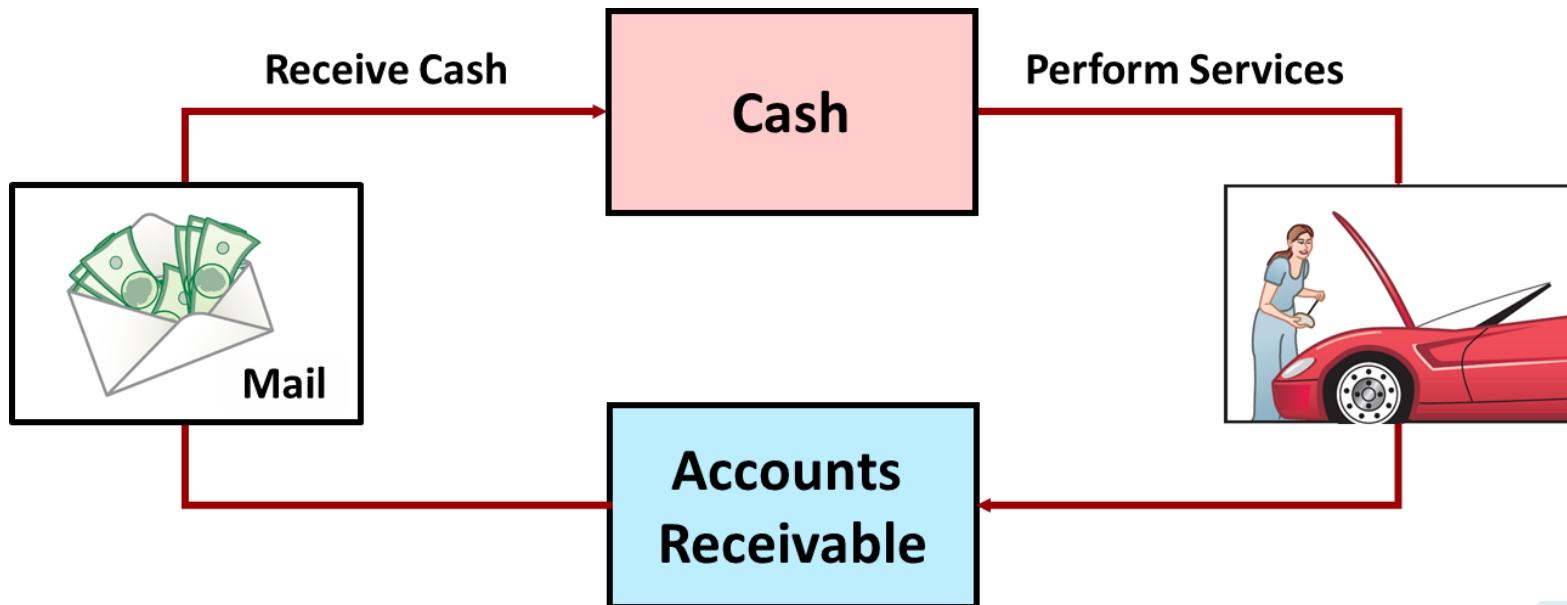


Cost of goods sold is the total cost of merchandise sold during the period.

Operating Cycles

Service Company

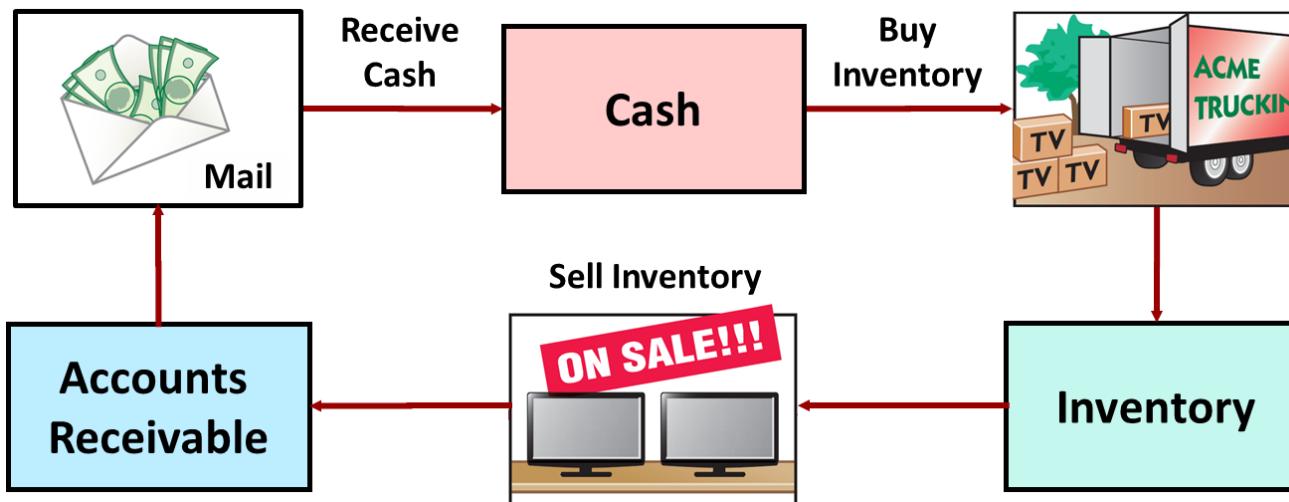
- Performed service June 1, 2020
- Service completed June 7, 2020
- Payment received July 1, 2020
- Total operating cycle 30 days



Operating Cycles

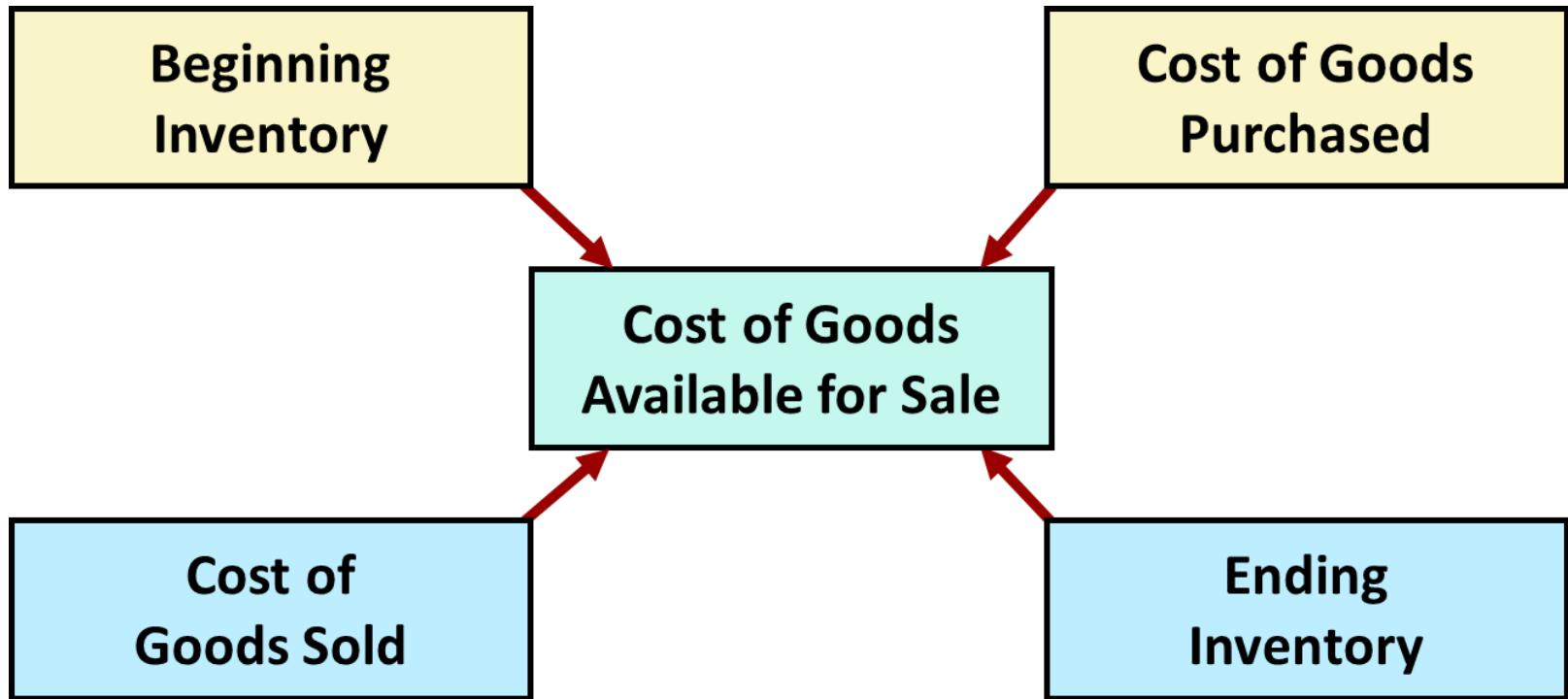
Merchandising Company

- Purchase inventory June 1, 2020
- Make goods available for sale June 15, 2020
- **Sell goods on credit June 30, 2020**
- **Receive cash for sale of goods August 1, 2020**
- Total operating cycle 60 days



Ordinarily is longer than that of a **service company**.

Flow of Costs



Companies use a **perpetual** or a **periodic** inventory system.

Flow of Costs

Perpetual System

- *Maintain detailed records of cost of each inventory purchase and sale*
- *Records continuously show inventory that should be on hand for every item*
- *Company determines cost of goods sold each time a sale occurs*

Flow of Costs

Periodic System

Do not keep detailed records of the goods on hand.

Cost of goods sold determined by count at the end of the accounting period.

Calculation of Cost of Goods Sold:

Beginning inventory	\$ 100,000
Add: Purchases, net	800,000
Goods available for sale	<hr/> 900,000
Less: Ending inventory	<hr/> 125,000
Cost of goods sold	<hr/> \$ 775,000

Flow of Costs

Advantages of the Perpetual System

- *Traditionally used for merchandise with high unit values*
- *Shows quantity and cost of inventory that should be on hand at any time*
- *Provides better control over inventories than a periodic system*

LEARNING OBJECTIVE 2

Record purchases under a perpetual inventory system.

Made using **cash or credit** (on account)

Normally **record when** goods are received from seller

Purchase invoice should support each credit purchase



Recording Purchases Under Perpetual System

Purchase
invoice should
support each
credit purchase.

INVOICE NO. 731						
S	Firm Name <u>Sauk Stereo</u>					
O	Attention of <u>James Hoover, Purchasing Agent</u>					
L	Address <u>125 Main Street</u>					
D	<u>Chelsea</u>	<u>Illinois</u>	<u>60915</u>			
T	City	State	Zip			
Date 5/4/20		Salesperson Malone	Terms 2/10, n/30 FOB Shipping Point			
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

Recording Purchases Under Perpetual System

~~Illustration: Sauk Stereo (the buyer) uses as a purchase invoice the sales invoice prepared by PW Audio Supply (the seller).~~

~~Prepare the journal entry for Sauk Stereo for the invoice from PW Audio Supply.~~

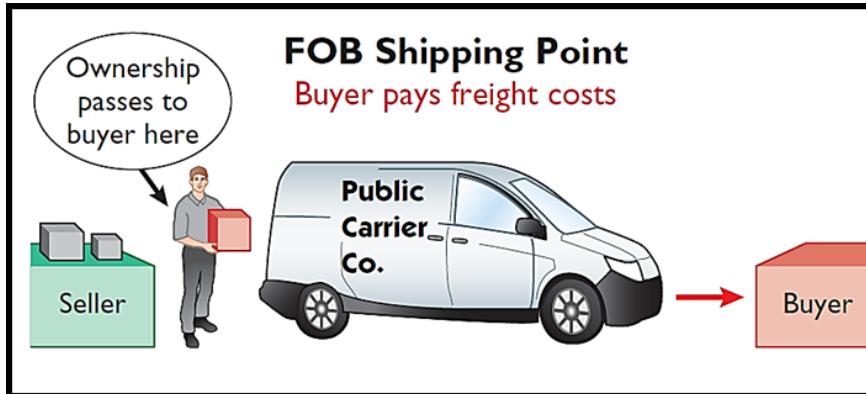
Sauk Stereo purchased \$3,800 of goods from PW Audio Supply on account.

INVOICE NO. 731				
PW AUDIO SUPPLY 27 CIRCLE DRIVE HARDING, MICHIGAN 48281				
S	Firm Name <u>Sauk Stereo</u>			
O	Attention of <u>James Hoover, Purchasing Agent</u>			
D	Address <u>125 Main Street</u>			
T	<u>Chelsea, Illinois 60916</u>			
O	<u>City State Zip</u>			
Date 5/4/20	Salesperson Malone	Terms 2/10, n/30	FOB Shipping Point	
Catalog No.	Description		Quantity	Price
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

May 4 Inventory 3,800

 Accounts Payable 3,800

Freight Costs



Ownership of goods passes to buyer when public carrier accepts goods from seller.



Ownership of goods remains with seller until the goods reach buyer.

Freight costs incurred by the seller are an **operating expense**.

Freight Costs

Illustration: If Sauk Stereo (the buyer) pays Public Carrier Co. \$150 for freight charges on May 6, the entry on Sauk Stereo's books is:

May 6	Inventory	150
	Cash	150

If the freight terms on the invoice in Illustration 5.6 had required **PW Audio Supply (the seller) to pay the freight charges**, the entry by PW Audio Supply would be:

May 4	Freight-Out (Delivery Expense)	150
	Cash	150

Purchase Returns and Allowances

Purchaser may be dissatisfied because goods are damaged or defective, of inferior quality, or do not meet specifications.

Purchase Return

Return goods for credit if purchase was made on credit, or for a cash refund if purchase was for cash.

Purchase Allowance

May choose to keep merchandise if seller will grant a reduction from purchase price.

Purchase Returns and Allowances

Illustration: Assume that Sauk Stereo returned goods costing \$300 to PW Audio Supply on May 8.

May 8	Accounts Payable	300
	Inventory	300

Illustration: Assume that Sauk Stereo was granted a purchase allowance of \$50 and decided to keep the goods on May 8.

May 8	Accounts Payable	50
	Inventory	50

Purchase Discounts

Credit terms may permit buyer to claim a cash discount for prompt payment. Example: Credit terms 2/10, n/30.

Advantages:

Purchaser saves money

Seller shortens operating cycle by converting accounts receivable into cash earlier

Purchase Discounts

2/10, n/30

2% discount if paid within 10 days, otherwise net amount due within 30 days.

1/10 EOM

1% discount if paid within first 10 days of next month.

n/10 EOM

Net amount due within the first 10 days of the next month.

$$2\% \text{ discount} = \frac{2}{100} = 0.02$$

Purchase Discount = Net Invoice Price X Rate of Discount

$$= \$3,500 \times 0.02$$

$$= \$70$$

Calculation of Purchase Discount

Discount must be calculated on net invoice price

2/10, n/30

Purchaser gets a 2% discount on the net invoice price if paid within 10 days.

Let's consider that the net invoice price was \$ 3,500

$$2\% \text{ discount} = \frac{2}{100} = 0.02$$

Purchase Discount = Net Invoice Price X Rate of Discount

$$= \$3,500 \times 0.02$$

$$= \$70$$

Purchase Discounts

Illustration: Assume Sauk Stereo 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 credit term was 2/10, n/30.

May 14	Accounts Payable	3,500
	Cash	3,430
	Inventory	70
$(\text{Discount} = \$3,500 \times 2\% = \$70)$		

Purchase Discounts

Illustration: If Sauk Stereo failed to take the discount, and instead made full payment of \$3,500 on June 3, the journal entry would be:

June 3	Accounts Payable	3,500
	Cash	3,500

Summary of Purchase Transactions

Inventory					
Purchase	May 4	3,800	May 8	300	Purchase return
Freight-in	6	150	14	70	Purchase discount
Balance		3,580			

Summary of Purchase Transactions

Transactions	Daily Recurring Entries	Dr.	Cr.
Purchasing merchandise for resale.	Inventory	XX	
	Cash or Accounts Payable		XX
Paying freight costs on merchandise purchased; FOB shipping point.	Inventory	XX	
	Cash		XX
Receiving purchase returns or allowances from suppliers.	Cash or Accounts Payable	XX	
	Inventory		XX
Paying suppliers within discount period.	Accounts Payable	XX	
	Inventory		XX
	Cash		XX

LEARNING OBJECTIVE 3

Record sales under a perpetual inventory system.

Made using cash or credit (on account)

Sales revenue, like service revenue, is recorded when performance obligation is satisfied

Performance obligation is satisfied when goods are transferred from seller to buyer

Sales invoice should support each credit sales



Recording Sales Perpetual System

Journal Entries to Record a Sale

#1

Cash **or** Accounts receivable
Sales revenue

XXX

XXX

**Selling
Price**

#2

Cost of goods sold
Inventory

XXX

XXX

Cost

Recording Sales Perpetual System

Illustration: PW Audio Supply records its May 4 sale of \$3,800 to Sauk Stereo (Illustration 5.6) as follows (assume merchandise cost PW Audio Supply \$2,400).

May 4	Accounts Receivable	3,800
	Sales Revenue	3,800
4	Cost of Goods Sold	2,400
	Inventory	2,400

Sales Returns and Allowances

“Flip side” of purchase returns and allowances

Contra-revenue account to Sales Revenue (debit)

Sales not reduced (debited) because:

- Would obscure importance of sales returns and allowances as a percentage of sales
- Could distort comparisons

Sales Returns and Allowances

Illustration: Prepare the entry PW Audio Supply would make to record the credit for returned goods that had a \$300 selling price (assume a \$140 cost). Assume the **goods were not defective**.

May 8	Sales Returns and Allowances	300
	Accounts Receivable	300
8	Inventory	140
	Cost of Goods Sold	140

Sales Returns and Allowances

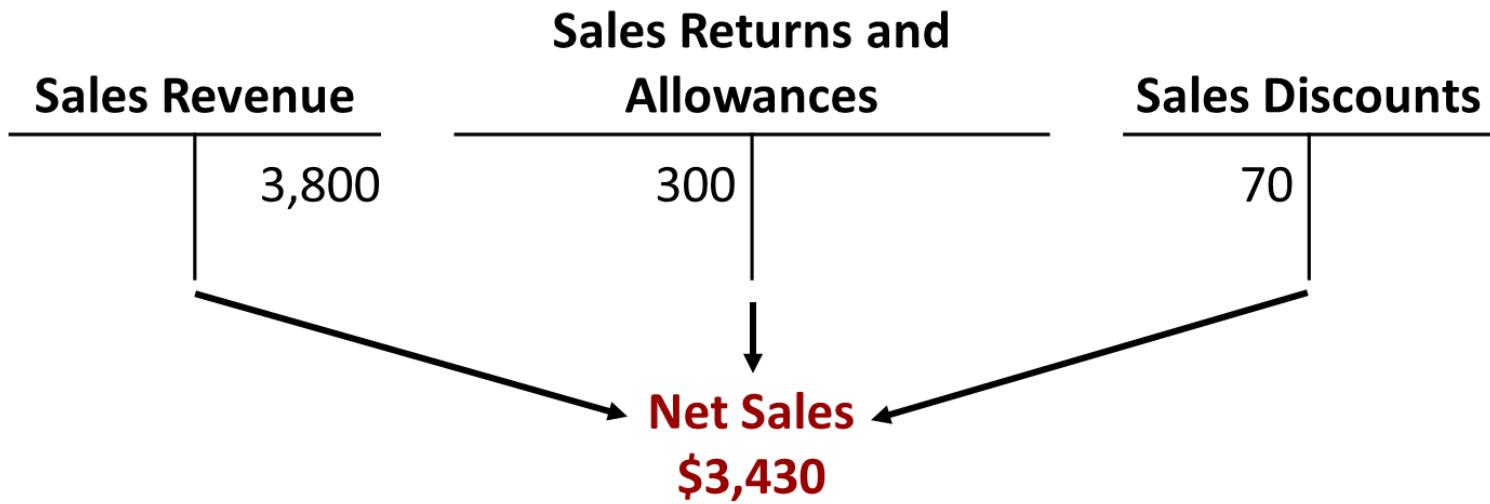
Illustration: Assume the returned goods **were defective** and had a scrap value of \$50, PW Audio would make the following entries.

May 8	Sales Returns and Allowances	300
	Accounts Receivable	300
8	Inventory	50
	Cost of Goods Sold	50

Sales Discounts

Offered to customers to promote prompt payment of balance due

Contra-revenue account (debit) to Sales Revenue



Sales Discounts

Illustration: Assume Sauk Stereo 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. Prepare the journal entry PW Audio Supply makes to record the receipt on May 14.

Cash	3,430
Sales Discounts	70
Accounts Receivable	3,500

$$[(\$3,800 - \$300) \times 2\%]$$

Summary of Sales Transactions

Transactions	Daily Recurring Entries	Dr.	Cr.
Selling merchandise to customers.	Cash or Accounts Receivable	XX	
	Sales Revenue		XX
	Cost of Goods Sold		XX
	Inventory		XX
Granting sales returns or allowances to customers.	Sales Returns and Allowances	XX	
	Cash or Accounts Receivable		XX
	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

LEARNING OBJECTIVE 4

Apply the steps in the accounting cycle to a merchandising company.

Adjusting Entries

Generally same as a service company

One additional adjustment to make records agree with actual inventory on hand

Involves adjusting Inventory and Cost of Goods Sold

Adjusting Entries

Illustration: Suppose that PW Audio Supply has an unadjusted balance of \$40,500 in Inventory. Through a physical count, PW Audio Supply determines that its actual merchandise inventory at December 31 is \$40,000. The company would make an adjusting entry as follows.

Cost of Goods Sold	500
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Inventory (\$40,500 – \$40,000)	500
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Closing Entries

Dec. 31	Sales Revenue	480,000	
	Income Summary		480,000
	(Close credit balance accounts)		
31	Income Summary	450,000	
	Sales Returns and Allowances		12,000
	Sales Discounts		8,000
	Cost of Goods Sold		316,000
	Salaries and Wages Expense		64,000
	Freight-Out		7,000
	Advertising Expense		16,000
	Utilities Expense		17,000
	Depreciation Expense		8,000
	Insurance Expense		2,000
	(Close debit balance accounts)		

Closing Entries

Dec. 31	Income Summary	30,000	
	Owner's Capital (To close net income to capital)		30,000
31	Owner's Capital	15,000	
	Owner's Drawings (To close drawings to capital)		15,000

Multiple-Step and ~~Comprehensive~~ Income Statements

Single-step income statement

LEARNING OBJECTIVE 5

Prepare a multiple-step income statement and a ~~comprehensive income statement.~~

Single-step income statement



Shows several steps in determining net income

Two steps relate to principal operating activities

Distinguishes between operating and non-operating activities

Multiple-Step

- Determine the net Sales.
- Deduct Sales return and allowances and sales discount from the sales revenue.

PW Audio Supply Income Statement (Partial)		
Sales		
Sales Revenue		\$480,000
Less: Sales return and allowances	\$12,000	
Sales Discount	\$8,000	20,000
Net Sales		\$460,000

Multiple-Step

- Determine gross profit.
- Deduct cost of goods sold from the net sales.

PW Audio Supply Income Statement (Partial)	
Net Sales	\$460,000
Less: Cost of goods sold	316,000
Gross Profit	\$144,000

Multiple-Step

- Determine the income from operations.
- Deduct the operating expense from the gross profit

PW Audio Supply Income Statement (Partial)	
Gross Profit	\$144,000
Less: Operating Expenses	114,000
Income from Operations	\$30,000

Multiple-Step

~~Determine the non-operating expense~~ 

~~Deduct it from operating Income.~~

Other Revenues and Gains

Interest revenue from notes receivable and marketable securities.

Dividend revenue from investments in common stock.

Rent revenue from subleasing a portion of the store.

Gain from the sale of property, plant, and equipment.

Other Expenses and Losses

Interest expense on notes and loans payable.

Casualty losses from recurring causes, such as vandalism and accidents.

Loss from the sale or abandonment of property, plant, and equipment.

Loss from strikes by employees and suppliers.

Multiple-Step

Key Items:

- Net sales
- Gross profit
- Operating expenses
- Nonoperating activities
- Net income

PW Audio Supply Income Statement For the Year Ended December 31, 2020		
Sales		
Sales revenue		\$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
Operating expenses		
Salaries and wages expense	64,000	
Utilities expense	17,000	
Advertising expense	16,000	
Depreciation expense	8,000	
Freight-out	7,000	
Insurance expense	2,000	
Total operating expenses		114,000
Income from operations		30,000
Other revenues and gains		
Interest revenue	3,000	
Gain on disposal of plant assets	600	3,600
Other expenses and losses		
Interest expense	1,800	
Casualty loss from vandalism	200	2,000
Net income		<u>\$ 31,600</u>

Single-Step Income Statement

Subtract total expenses from total revenues

Two reasons for using single-step format:

- Company does not realize any profit until total revenues exceed total expenses
- Format is simpler and easier to read

Single-Step

PW Audio Supply
Income Statement
For the Year Ended December 31, 2020

Revenues

Net sales	\$460,000
Interest revenue	3,000
Gain on disposal of plant assets	600
Total revenues	<u>463,600</u>

Expenses

Cost of goods sold	\$316,000
Operating expenses	114,000
Interest expense	1,800
Casualty loss from vandalism	<u>200</u>
Total expenses	<u>432,000</u>

Net income

\$ 31,600

Classified Balance Sheet

PW Audio Supply
Balance Sheet (Partial)
December 31, 2020

Assets

Current assets

Cash	\$ 9,500
Accounts receivable	2,300
Inventory	40,000
Prepaid insurance	1,800
Total current assets	<u>67,400</u>
Property, plant, and equipment	
Equipment	\$80,000
Less: Accumulated depreciation	<u>24,000</u>
Total assets	<u><u>\$123,400</u></u>