

Survey of Accounting, 9e

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 CENGAGE

SURVEY OF ^{9E}
ACCOUNTING
WITH WARREN'S METRIC ANALYSIS

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Chapter 4

Accounting for Retail Operations

 CENGAGE

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Learning Objectives

- Distinguish the operations and financial statements of a service business from those of a retail business
- Describe the accounting for the purchase of merchandise
- Describe the accounting for the sale of merchandise
- Describe the accounting for freight and sales taxes
- Illustrate the dual nature of merchandising transactions

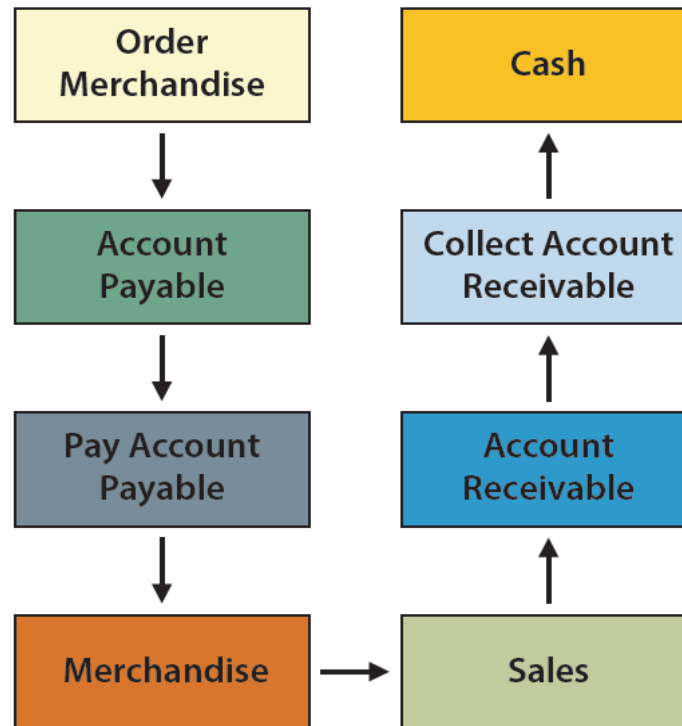
Learning Objectives (continued)

- Describe and illustrate adjustments for retail operations
- Describe and illustrate the financial statements of a retail company
- Describe and illustrate the markup percent

Learning Objective 1

Distinguish the operations and financial statements of a service business from those of a retail business

Exhibit 1: Retail Operating Cycle



Differences between the Financial Statements of Retail and Service Businesses

Retail Business		Service Business	
Sales	\$XXX	Fees earned	\$XXX
Cost of goods sold	<u>(XXX)</u>	Operating expenses	<u>(XXX)</u>
Gross profit	\$XXX	Operating income	<u><u>\$XXX</u></u>
Operating expenses	<u>(XXX)</u>		
Operating income	<u><u>\$XXX</u></u>		

Learning Objective 2

Describe the accounting for the purchase of merchandise

Purchase Transactions

- TechSource, a retailer of computer hardware and software, is used to illustrate merchandise transactions
 - Effects of each merchandise transaction on TechSource's financial statements are illustrated using the Integrated Financial Statement Framework
 - Metrics used to measure the effect of transactions
 - **Working capital**
$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$
 - **Gross profit percent**

Systems for Recording and Accounting for Merchandise Transactions

- Perpetual inventory system
 - Each purchase and sale of merchandise is recorded
 - Records consist of the **controlling account** and a **subsidiary ledger**
- Periodic inventory system
 - A **physical inventory** is prepared at the end of the accounting period

Computation of Cost of Goods Sold

Beginning inventory.....	\$XXX
Purchases	<u>XXX</u>
Merchandise available for sale	\$XXX
Ending inventory (from physical count)	<u>(XXX)</u>
Cost of goods sold	\$XXX

Purchase of Merchandise for Cash

- TechSource purchases \$5,000 of merchandise for cash on September 3

BALANCE SHEET			
Assets		=	Liabilities + Stockholders' Equity
Cash	+ Inventory	=	
Sept. 3.	(5,000)		5,000

STATEMENT OF CASH FLOWS	
Sept. 3. Operating	(5,000)

INCOME STATEMENT	

- Transaction metric effects

LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent	No Effect

Purchase of Merchandise on Account

- Terms of the purchase are indicated on the invoice or bill sent to the buyer by the seller
- Terms for when payments for merchandise are to be made, agreed on by the buyer and the seller, are **credit terms**
 - If payment is required on delivery, the terms are cash or net cash
 - The buyer should make the payments within a **credit period**

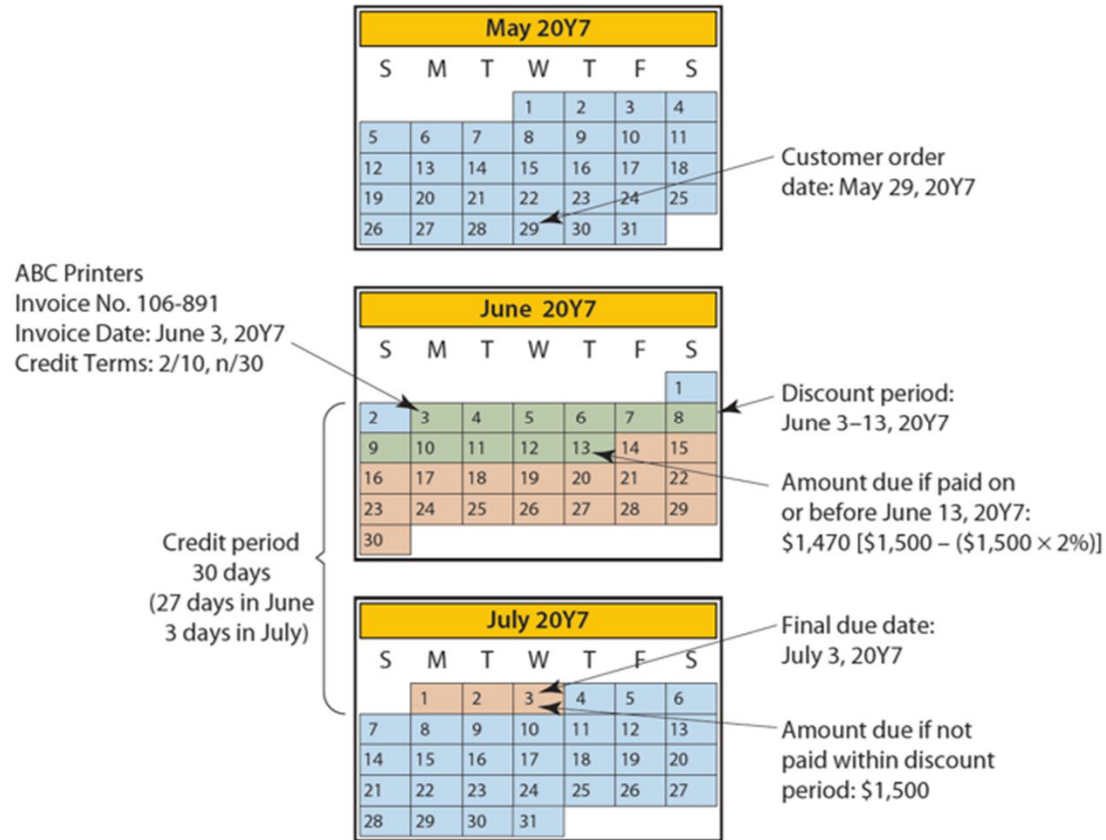
Exhibit 2: Invoice

		1000 Matrix PWY San Jose, CA 95116-1000		106-891
SOLD TO TechSource 5101 Washington Ave. Cincinnati, OH 45227-5101		CUSTOMER'S ORDER NO. 10537		DATE May 29, 20Y7
DATE SHIPPED June 3, 20Y7	HOW SHIPPED AND ROUTE US Express Trucking Co.	TERMS 2/10, n/30	INVOICE DATE June 3, 20Y7	
FROM Cincinnati	F.O.B. Cincinnati			
QUANTITY 10	DESCRIPTION Printer/Fax/Scanner/Copier	UNIT PRICE 150.00	AMOUNT 1,500.00	

Purchases Discounts

- Received by buyers for making early payment of an invoice
- Buyers usually borrow to pay within a discount period in order to take the discount
- Offered by sellers to encourage buyers to pay before the end of the credit period

Exhibit 3: Credit Terms



Effects of Purchase on Financial Statements

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
	=	Accounts Payable	
June 3.		1,470	

STATEMENT OF CASH FLOWS	INCOME STATEMENT
Net Purchase Price	

- Transaction metric effects

LIQUIDITY	PROFITABILITY
Working Capital	Gross Profit Percent
No Effect	No Effect

Effects of Paying the Invoice

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
Cash	=	Accounts Payable	
June 13. (1,470)		(1,470)	

STATEMENT OF CASH FLOWS	
June 13. Operating	(1,470)

INCOME STATEMENT	

- Transaction metric effects

LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent	No Effect

Exhibit 4: Debit Memorandum

	5101 Washington Ave. Cincinnati, OH 45227-5101	No. 18
DEBIT MEMORANDUM		
TO Maxim Systems 7519 East Willson Ave. Seattle, WA 98101-7519	DATE October 13, 20Y7	
WE DEBIT (DECREASE) YOUR ACCOUNT AS FOLLOWS		
10 Server Network Interface Cards, your Invoice No. 7291, are being returned via parcel post. Our order specified No. 825X.	@ 90.00	900.00

Effects of Issuing the Debit Memo

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
		Accounts Payable	
Oct 7.		(900)	

STATEMENT OF CASH FLOWS	INCOME STATEMENT

- Transaction metric effects

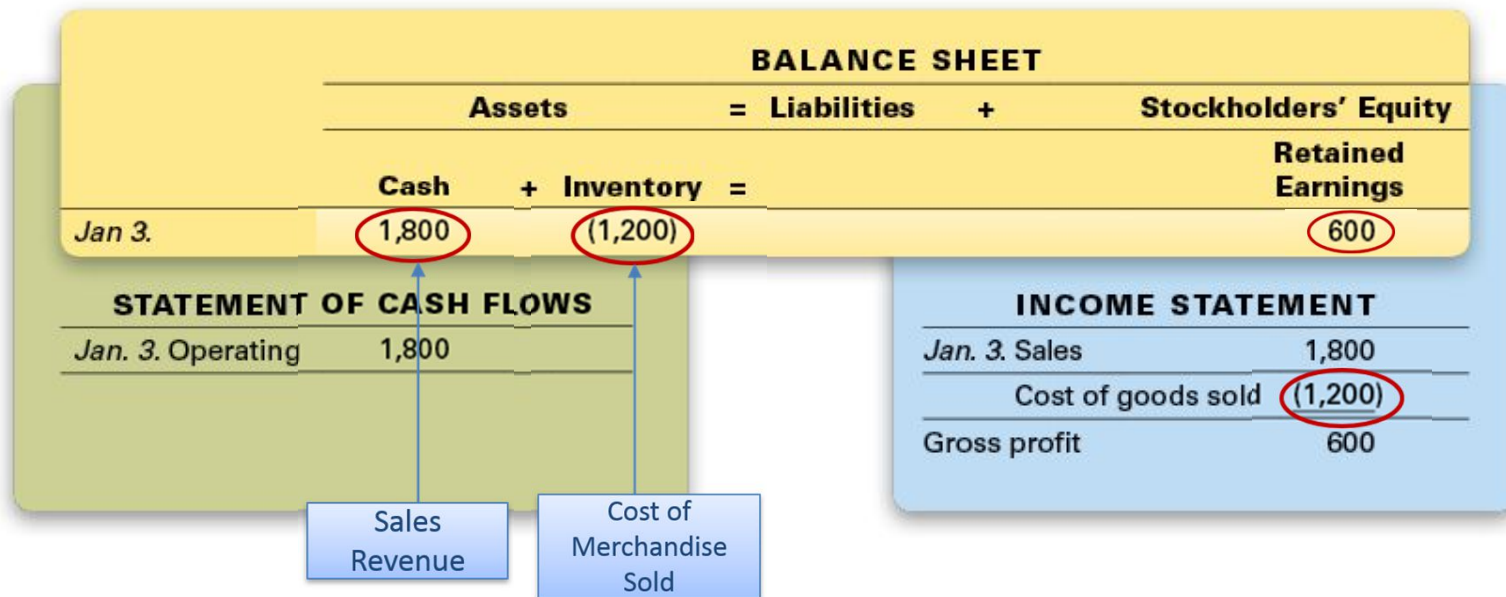
LIQUIDITY	PROFITABILITY
Working Capital	Gross Profit Percent
No Effect	No Effect

Learning Objective 3

Describe the accounting for the sale of merchandise

Sales Transaction

- On January 3, TechSource sold merchandise for \$1,800 that cost \$1,200 with credit terms n/30



Sales Transaction (continued 1)

- Transaction metric effects

LIQUIDITY	
Working Capital	\$600

PROFITABILITY	
Gross Profit Percent (33%)	Increases ability to achieve minimum of 20%

Sales Transaction (continued 2)

- Sales made to customers using credit cards are treated as cash sales
- In case of retail sales on credit, Accounts Receivable increases instead of Cash
 - When the customer pays the amount, Accounts Receivable decreases and Cash increases

Customer Discounts

- Encourage customers to pay their invoices early
- Generally accepted accounting principles (GAAP) require that revenue be recorded in the amount expected to be received from selling a product or rendering services

Customer Discounts (continued 1)

- TechSource sells \$15,000 of merchandise on account to Medical Health Services Inc. with credit terms 2/10, n/30

BALANCE SHEET			
Assets		= Liabilities	+ Stockholders' Equity
Accounts Receivable	+ Inventory	=	Retained Earnings
Aug 7.	14,700	(12,495)	2,205

STATEMENT OF CASH FLOWS	

INCOME STATEMENT	
Aug 7. Sales	14,700
Cost of goods sold	(12,495)
Gross profit	2,205

- Transaction metric effects

LIQUIDITY	
Working Capital	\$2,205

PROFITABILITY	
Gross Profit Percent (15%)	Decreases ability to achieve minimum of 20%

Customer Refunds and Allowances

- A seller may pay a refund or grant an allowance if:
 - A customer receives a defective or damaged product
 - A product does not meet a customer's expectations
- The seller needs to estimate the amount of refunds and allowances expected to be granted in the future at the end of each accounting period
 - Estimate is used in the adjusting process to record a current liability called **Customer Refunds Payable**

Effect of Sales Refund on TechSource's Financial Statements

- On August 13, TechSource pays Krier Company a refund of \$225 for merchandise damaged in shipment

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
Cash	=	Customer Refunds Payable	Retained Earnings
Aug. 13. (225)		(225)	

STATEMENT OF CASH FLOWS		
Aug. 13. Operating	(225)	

INCOME STATEMENT	

- Transaction metric effects

LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent	No Effect

Exhibit 5: Credit Memorandum



5101 Washington Ave.
Cincinnati, OH 45227-5101

No. 32

CREDIT MEMORANDUM

TO
Krier Company
7608 Melton Avenue
Los Angeles, CA 90025-3942

DATE
August 13, 20Y7

WE CREDIT YOUR ACCOUNT AS FOLLOWS

Allowance for merchandise damaged in shipment	225.00
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Effects of Issuing the Credit Memo

BALANCE SHEET			
	Assets	=	Liabilities + Stockholders' Equity
	Accounts Receivable	=	Customer Refunds Payable + Retained Earnings
Aug. 13.	(225)	=	(225)

STATEMENT OF CASH FLOWS

INCOME STATEMENT

- Transaction metric effects

LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent	No Effect

Merchandise Returns

- Customer may return merchandise for a cash refund or allowance
 - Receipt of the returned inventory needs to be recorded
- Inventory expected to be returned is represented as **Estimated Returns Inventory**
 - It is a current asset
 - Estimated at the end of the period as part of the adjusting process

Merchandise Returns (continued 1)

- On September 2, Wallis Co. returned merchandise to TechSource with a selling price of \$4,000, terms n/30, that had a cost of goods sold of \$3,000

BALANCE SHEET								
Assets			=	Liabilities	+ Stockholders' Equity			
Accounts Receivable	+	Inventory	+	Estimated Returns Inventory	=	Customer Refunds Payable	+	Retained Earnings
Sept. 2	(4,000)		3,000	(3,000)	=	(4,000)		

STATEMENT OF CASH FLOWS		INCOME STATEMENT	

- Transaction metric effects

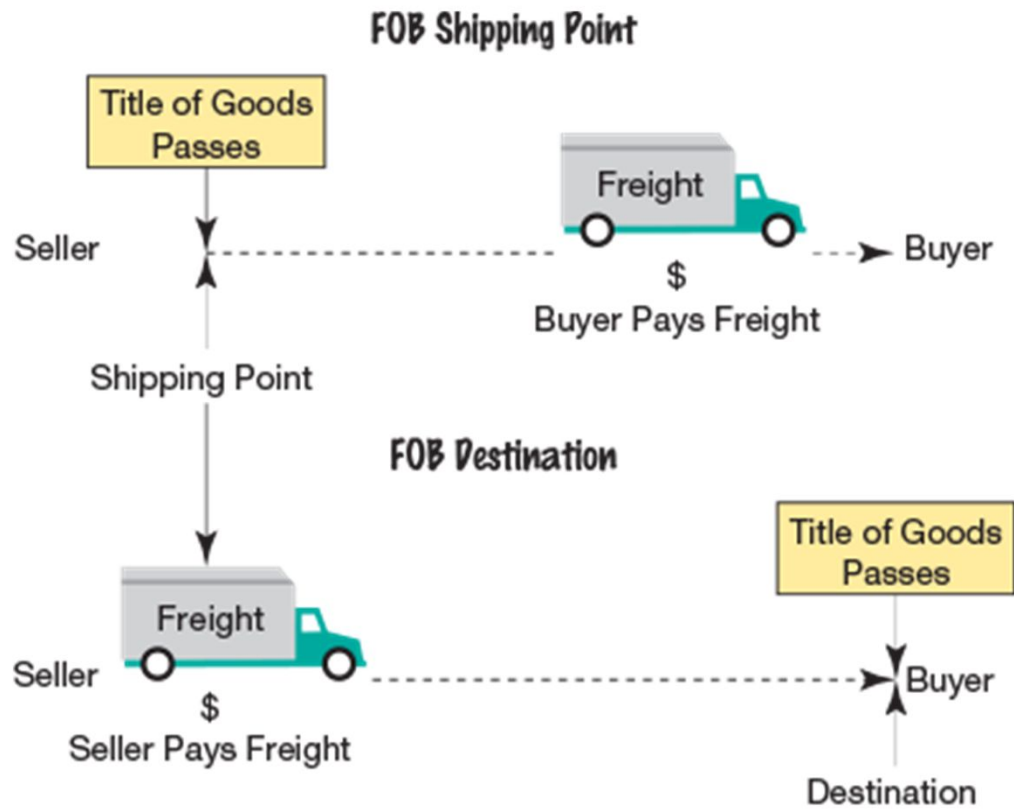
LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent (25%)	Decreases ability to achieve minimum of 20%

Learning Objective 4

Describe the accounting for freight and sales taxes

Exhibit 6: Freight Terms



Freight

- On December 10, TechSource buys merchandise from Magna Data on account, \$900, terms FOB shipping point
 - Pays the freight cost of \$50

BALANCE SHEET					
Assets		=	Liabilities	+	Stockholders' Equity
Cash	+ Inventory	=	Accounts Payable		
Dec. 10.	(50)		950		900

STATEMENT OF CASH FLOWS	
Dec. 10. Operating	(50)

INCOME STATEMENT	

- Transaction metric effects

LIQUIDITY	
Working Capital	No Effect

PROFITABILITY	
Gross Profit Percent	No Effect

Sales Taxes

- Liability for sales tax is incurred when a sale is made
 - Cash sale: Seller collects the sales tax
 - Sale made on account: Seller charges the buyer by increasing Accounts Receivable
- Seller pays to the taxing unit the amount of the sales tax collected on a regular basis
 - Records the payment by decreasing Sales Tax Payable and Cash

Learning Objective 5

Illustrate the dual nature of merchandising transactions

Dual Nature of Merchandise Transactions

- On July 1, Scully Company sold merchandise on account to Burton Co. for \$7,500
 - Terms: FOB destination and 2/10, n/30
 - Cost of the merchandise sold was \$4,500

Dual Nature of Merchandise Transactions (continued 1)

- Scully Company (seller)

BALANCE SHEET					
Assets		=	Liabilities	+	Stockholders' Equity
Accounts Receivable	+ Inventory	=			Retained Earnings
July 1.	7,350*		(4,500)		2,850

STATEMENT OF CASH FLOWS	

INCOME STATEMENT	
July 1. Sales	7,350
Cost of goods sold	(4,500)
Gross profit	2,850

Dual Nature of Merchandise Transactions (continued 2)

- Burton Co. (buyer)

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
	=	Accounts Payable	
July 1.		7,350	

Inventory 7,350

STATEMENT OF CASH FLOWS

INCOME STATEMENT

Learning Objective 6

Describe and illustrate adjustments for retail operations

Adjustments for Retail Operations

- Inventory shrinkage
- Estimated customer refunds and allowances
- Estimated customer merchandise returns

Inventory Shrinkage

- Difference between the balance of Inventory and the physical inventory on hand at the end of the accounting period
- TechSource's inventory records on December 31, 20Y7

	Dec. 31, 20Y7
Account balance of Inventory	\$ 63,950
Physical merchandise inventory on hand	<u>(62,150)</u>
Inventory shrinkage	<u><u>\$ 1,800</u></u>

Merchandise Shrinkage

- Effects of the shrinkage on TechSource's financial statements

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
Inventory	=		Retained Earnings
Dec. 31. Adjustments			
(1,800)			(1,800)

STATEMENT OF CASH FLOWS	

INCOME STATEMENT	
Dec. 31. Cost of goods sold	(1,800)

- Transaction metric effects

LIQUIDITY	
Working Capital	\$(1,800)

PROFITABILITY	
Gross Profit Percent	Decreases ability to achieve minimum of 20%

Customer Refunds, Allowances, and Returns

- Retailers estimate, based upon past operations, the percent of sales resulting in customer refunds and allowances
- The Customer Refund Payable account is adjusted to reflect future refunds and allowances

Customer Refunds, Allowances, and Returns

(continued)

- Data for TechSource for the year ending December 31, 20Y7

Unadjusted Balances	
December 31, 20Y7	
Account	Balances*
Estimated Returns Inventory	\$ 300
Customer Refunds Payable	800
Sales	715,409
Cost of Goods Sold	513,505
Adjustment Data	
Estimated percent of sales that is expected to be refunded or issued an allowance in 20Y8	1%
Estimated cost of inventory that is expected to be return in 20Y8	\$ 5,000
* Assume all normal balances (positive amounts)	

Effects of Adjustments on the Accounts and Financial Statements of TechSource

BALANCE SHEET			
Assets	=	Liabilities	+ Stockholders' Equity
Estimated Returns Inventory	=	Customer Refunds Payable	+ Retained Earnings
Dec. 31. 5,000	=	7,154	+ (2,154)

STATEMENT OF CASH FLOWS	

INCOME STATEMENT	
Dec. 31. Sales	(7,154)
Cost of goods sold	5,000
Gross profit	(2,154)

- Transaction metric effects

LIQUIDITY	
Working Capital	\$(2,154)

PROFITABILITY	
Gross Profit Percent (30.1%)	Decrease ability to achieve minimum of 20%

Learning Objective 7

Describe and illustrate the financial statements of a retail company

Exhibit 7: Multiple-Step Income Statement for TechSource

TechSource Income Statement For the Year Ended December 31, 20Y7		
Sales		\$ 708,255
Cost of goods sold.....		<u>(520,305)</u>
Gross profit		\$ 187,950
Operating expenses:		
Selling expenses:		
Sales salaries expense.....	\$53,430	
Advertising expense.....	10,860	
Depreciation expense—store equipment	3,100	
Delivery expense	2,800	
Miscellaneous selling expense	<u>630</u>	
Total selling expenses.....		\$70,820

Exhibit 7: Multiple-Step Income Statement for TechSource (continued)

Administrative expenses:		
Office salaries expense.....	\$21,020	
Rent expense.....	8,100	
Depreciation expense—office equipment.....	2,490	
Insurance expense.....	1,910	
Office supplies expense.....	610	
Miscellaneous administrative expense.....	<u>760</u>	
Total administrative expenses.....		<u>34,890</u>
Total operating expenses.....		<u>(105,710)</u>
Operating income.....		\$ 82,240
Other revenue and expense:		
Rent revenue.....	\$ 600	
Interest expense.....	<u>(2,440)</u>	<u>(1,840)</u>
Net income.....		<u>\$ 80,400</u>

Subsections in a Multiple-Step Income Statement

- Sales
- Cost of goods sold
- Gross profit
- Operating income
 - Selling expenses
 - Administrative expenses
- Other revenue
- Other expense

Exhibit 8: Single-Step Income Statement for TechSource

TechSource Income Statement For the Year Ended December 31, 20Y7		
Revenues:		
Sales.....		\$708,255
Rent revenue		<u>600</u>
Total revenues.....		\$708,855
Expenses:		
Cost of goods sold	\$520,305	
Selling expenses	70,820	
Administrative expenses	34,890	
Interest expense	<u>2,440</u>	
Total expenses		<u>(628,455)</u>
Net income.....		<u>\$ 80,400</u>

Exhibit 9: Statement of Stockholders' Equity for TechSource

	Common Stock	Retained Earnings	Total
Balances, Jan. 1, 20Y7	\$25,000	\$128,800	\$153,800
Net income.....		80,400	80,400
Dividends.....		(18,000)	(18,000)
Balances, Dec. 31, 20Y7	<u>\$25,000</u>	<u>\$191,200</u>	<u>\$216,200</u>

Exhibit 10: Balance Sheet for TechSource

**TechSource
Balance Sheet
December 31, 20Y7**

Assets

Current assets:		
Cash		\$ 52,650
Accounts receivable		91,080
Inventory		62,150
Estimated returns inventory		5,300
Office supplies		480
Prepaid insurance		<u>2,650</u>
Total current assets		<u>\$214,310</u>
Property, plant, and equipment:		
Land	\$ 20,000	
Store equipment	\$27,100	
Less accumulated depreciation	<u>(5,700)</u>	21,400
Office equipment	\$15,570	
Less accumulated depreciation	<u>(4,720)</u>	<u>10,850</u>
Total property, plant, and equipment		<u>52,250</u>
Total assets		<u><u>\$266,560</u></u>

Exhibit 10: Balance Sheet for TechSource (continued)

Current liabilities:	
Accounts payable.....	\$ 14,466
Customer refunds payable.....	7,954
Note payable (current portion).....	5,000
Salaries payable.....	1,140
Unearned rent.....	<u>1,800</u>
Total current liabilities.....	\$ 30,360
Long-term liabilities:	
Note payable (final payment due in ten years).....	<u>20,000</u>
Total liabilities.....	\$ 50,360
Stockholders' Equity	
Common stock.....	\$ 25,000
Retained earnings.....	<u>191,200</u>
Total stockholders' equity.....	<u>216,200</u>
Total liabilities and stockholders' equity.....	<u>\$266,560</u>

Exhibit 11: Statement of Cash Flows for TechSource

TechSource
Statement of Cash Flows
For the Year Ended December 31, 20Y7

Cash flows from (used for) operating activities:		
Net income.....		\$80,400
Depreciation expense—store equipment	\$ 3,100	
Depreciation expense—office equipment.....	2,490	
Changes in noncash current operating assets and liabilities:		
Increase in accounts receivable	(38,080)	
Increase in inventory	(2,450)	
Increase in estimated returns inventory	(1,000)	
Decrease in office supplies	120	
Decrease in prepaid insurance	350	
Increase in accounts payable	7,650	
Increase in customer refunds payable	500	
Decrease in salaries payable	(360)	
Decrease in unearned rent.....	<u>(600)</u>	<u>(28,280)</u>
Net cash flows from operating activities		\$52,120

Exhibit 11: Statement of Cash Flows for TechSource (continued)

Cash flows from (used for) investing activities:		
Cash paid for store equipment.....	\$ (7,100)	
Cash paid for office equipment.....	<u>(5,570)</u>	
Net cash flows from investing activities.....		(12,670)
Cash flows from (used for) financing activities:		
Cash paid on note payable.....	\$ (5,000)	
Cash paid as dividends.....	<u>(18,000)</u>	
Net cash flows from financing activities.....		<u>(23,000)</u>
Net increase in cash.....		\$ 16,450
Cash as of January 1, 20Y7.....		<u>36,200</u>
Cash as of December 31, 20Y7.....		<u>\$ 52,650</u>

Learning Objective 8

Describe and illustrate the markup percent

Gross Profit Percent and Markup Percent

Gross Profit Percent = $\text{Gross Profit} \div \text{Net Sales}$

Markup Percent = $\text{Gross Profit} \div \text{Cost of Goods Sold}$

Gross Profit Percent and Markup Percent (continued)

Data (in millions) taken from two recent years' financial statements of Walmart Inc.

	Year 2	Year 1
Sales	\$514,405	\$500,343
Cost of goods sold	<u>(385,301)</u>	<u>(373,396)</u>
Gross profit	\$129,104	\$126,947
	Year 2	Year 1
Markup percent:		
\$129,104 ÷ \$385,301.....	33.5%	
\$126,947 ÷ \$373,396		34.0%
Gross profit percent:		
\$129,104 ÷ \$514,405.....	25.1%	
\$126,947 ÷ \$500,343		25.4%

How Are Markup and Gross Profit Percent Related?

Markup Percent = Gross Profit Percent \times (Selling Price \div Cost)

Gross Profit Percent = Markup Percent \times (Cost \div Selling Price)

End of Chapter 4