Financial Accounting

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Chapter 04

Reporting and Analyzing Merchandising Operations

Conceptual Learning Objectives

C1: Describe merchandising activities and identify income components for a merchandising company.

C2: Identify and explain the inventory asset and cost flows of a merchandising company.

Analytical Learning Objectives

A1: Compute the acid-test ratio and explain its use to assess liquidity.

A2: Compute the gross margin ratio and explain its use to assess profitability.

Procedural Learning Objectives

P1: Analyze and record transactions for merchandise purchases using a perpetual system.

P2: Analyze and record transactions for merchandise sales using a perpetual system.

P3: Prepare adjustments and close accounts for a merchandising company.

P4: Define and prepare multiple-step and single-step income statements.

P5: Appendix 4A – Record and compare merchandising transactions using both periodic and perpetual inventory systems (see text for details).

C 1

Merchandising Activities

Service organizations sell time to earn revenue.

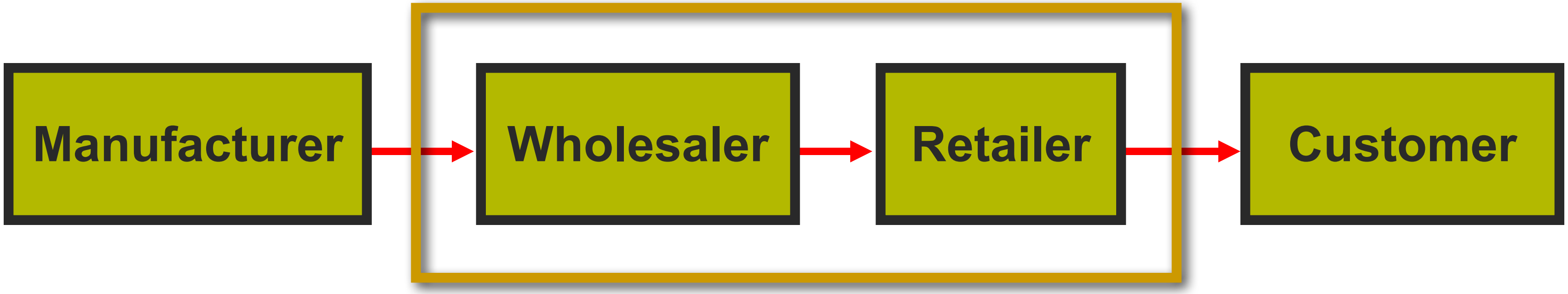
Examples: Accounting firms, law firms, and plumbing services

Revenues Minus **Expenses** Equals **Net income**

C 1

Merchandising Activities

Merchandising Companies



Manufacturer → Wholesaler → Retailer → Customer

C1

Reporting Income for a Merchandiser

Merchandising companies sell products to earn revenue.

Examples: sporting goods, clothing, and auto parts stores

Net sales Minus **Cost of goods sold** Equals **Gross profit** Minus **Expenses** Equals **Net income**

Merchandising Company
Income Statement
For Year Ended December 31, 2011

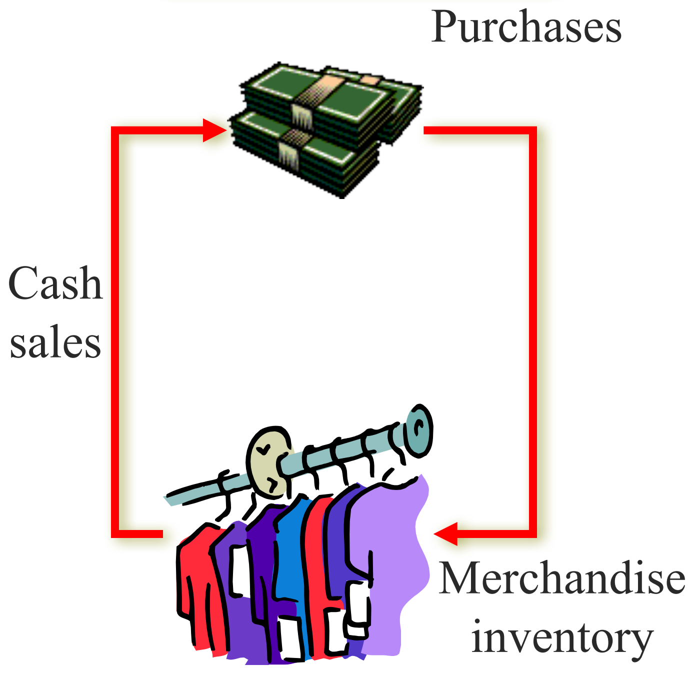
Net sales	**$**	**150,000**
Cost of goods sold		**80,000**
Gross profit	**$**	**70,000**
Operating expenses		**46,500**
Net income	**$**	**23,500**

C 2

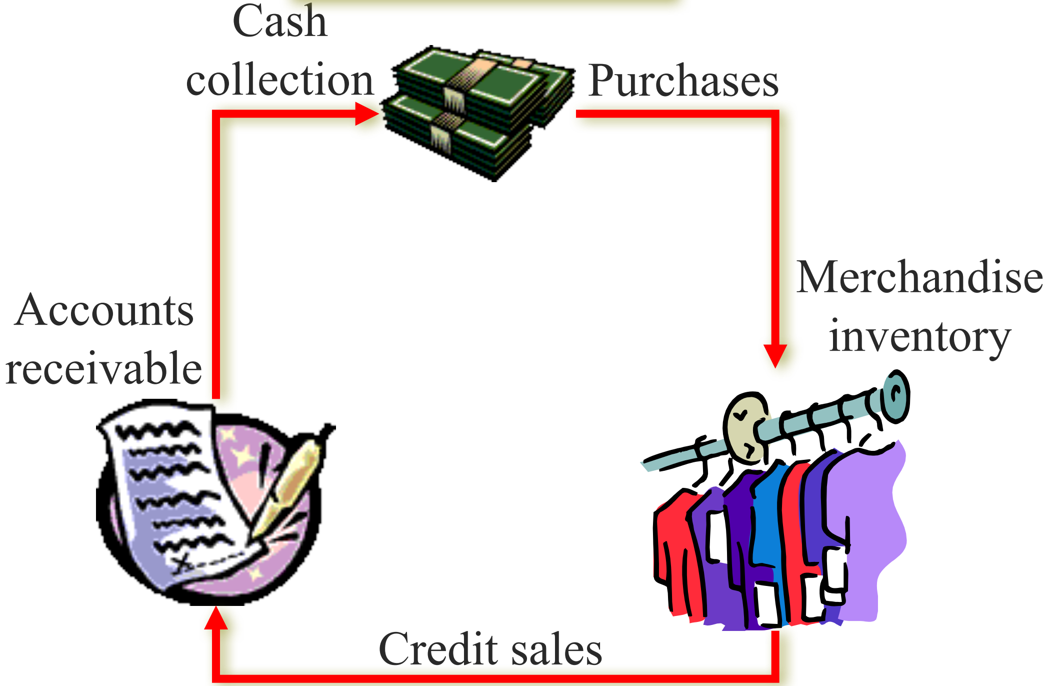
Operating Cycle for a Merchandiser

Begins with the purchase of merchandise and ends with the collection of cash from the sale of merchandise.

Cash Sale

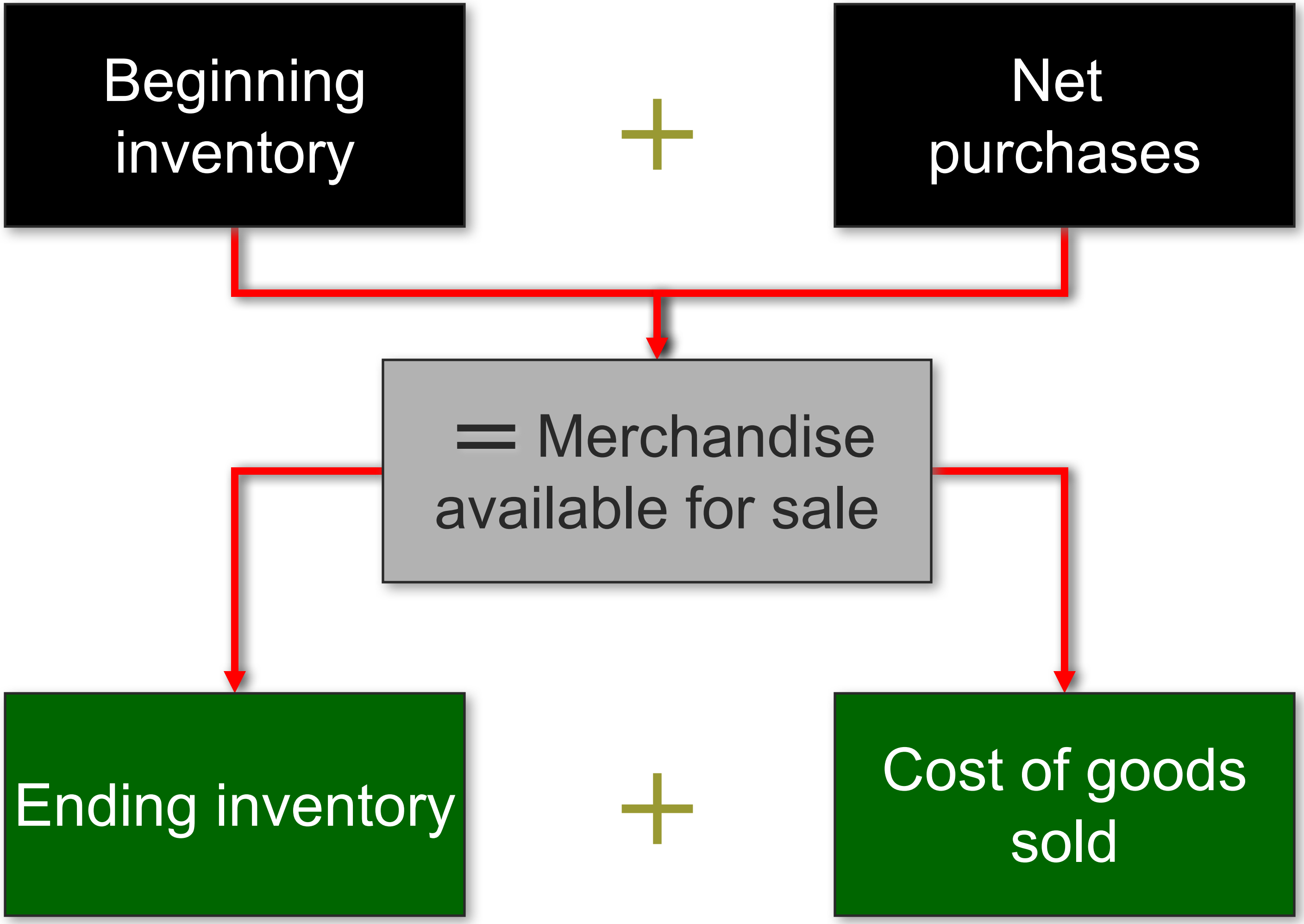


Credit Sale



C 3

Inventory Systems



Beginning inventory + Net purchases

= Merchandise available for sale

Ending inventory + Cost of goods sold

P1

Merchandise Purchases

On June 20, Jason, Inc. purchased $14,000 of Merchandise Inventory paying cash.

		Dr.	Cr.
Jun. 20	**Merchandise Inventory**	**14,000**	
	Cash		**14,000**
	Purchase merchandise for cash		

P1

Trade Discounts

Used by manufacturers and wholesalers to offer better prices for greater quantities purchased.

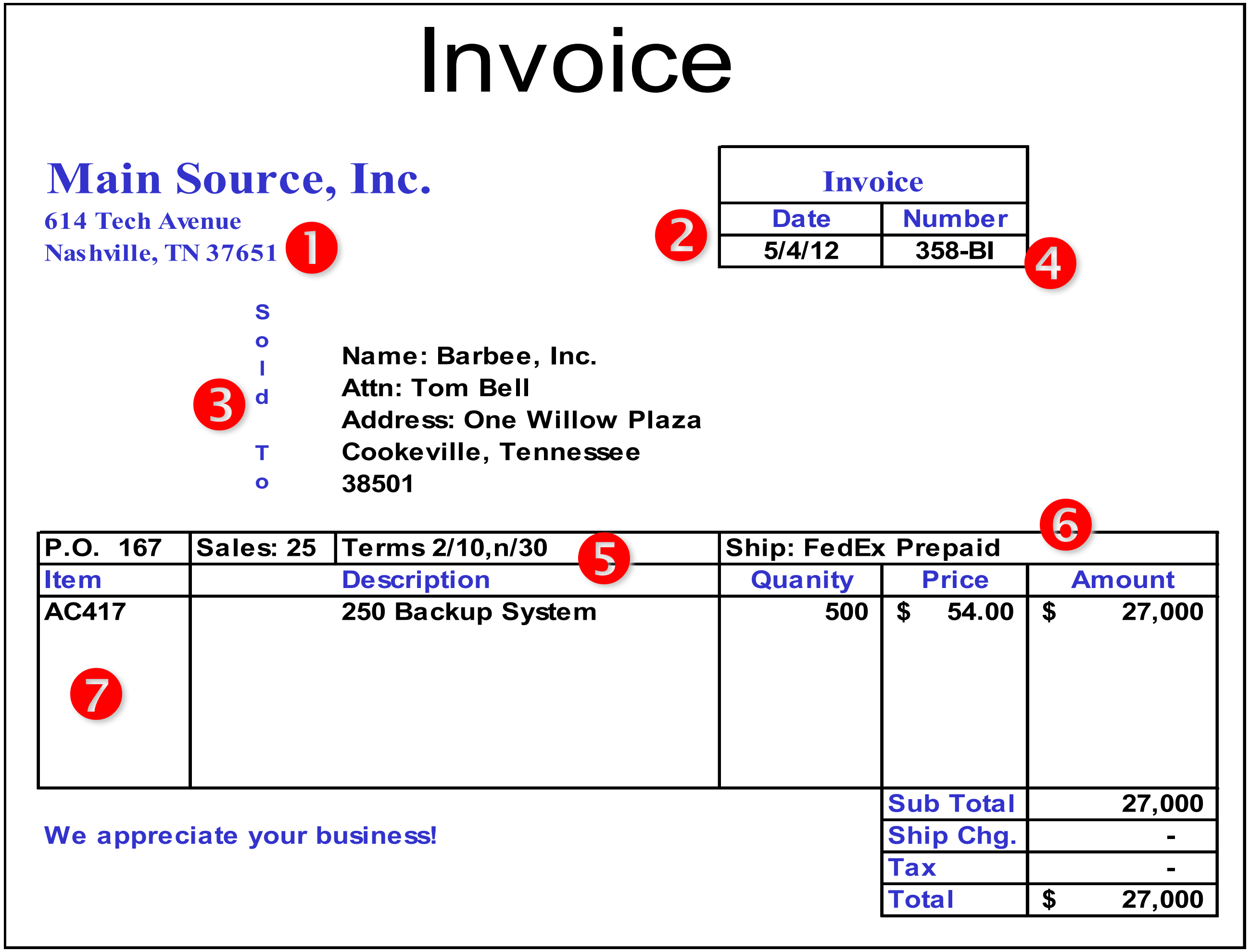
Example

Matrix, Inc. offers a 30% trade discount on orders of 1,000 units or more of their popular product Racer. Each Racer has a list price of $5.25.

Quantity sold	**1,000**
Price per unit	**$ 5.25**
Total	**5,250**
Less 30% discount	**(1,575)**
Invoice price	**$ 3,675**

P1

Vendor’s Invoice for Purchase of Merchandise



Invoice

Main Source, Inc.
614 Tech Avenue
Nashville, TN 37651

Invoice	
Date	Number
5/4/12	358-BI

Sold To

Name: Barbee, Inc.
Attn: Tom Bell
Address: One Willow Plaza
Cookeville, Tennessee
38501

P.O. 167	Sales: 25	Terms 2/10,n/30	Ship: FedEx Prepaid		
Item	Description		Quanity	Price	Amount
AC417	250 Backup System		500	$ 54.00	$ 27,000

Sub Total	27,000
Ship Chg.	-
Tax	-
Total	$ 27,000

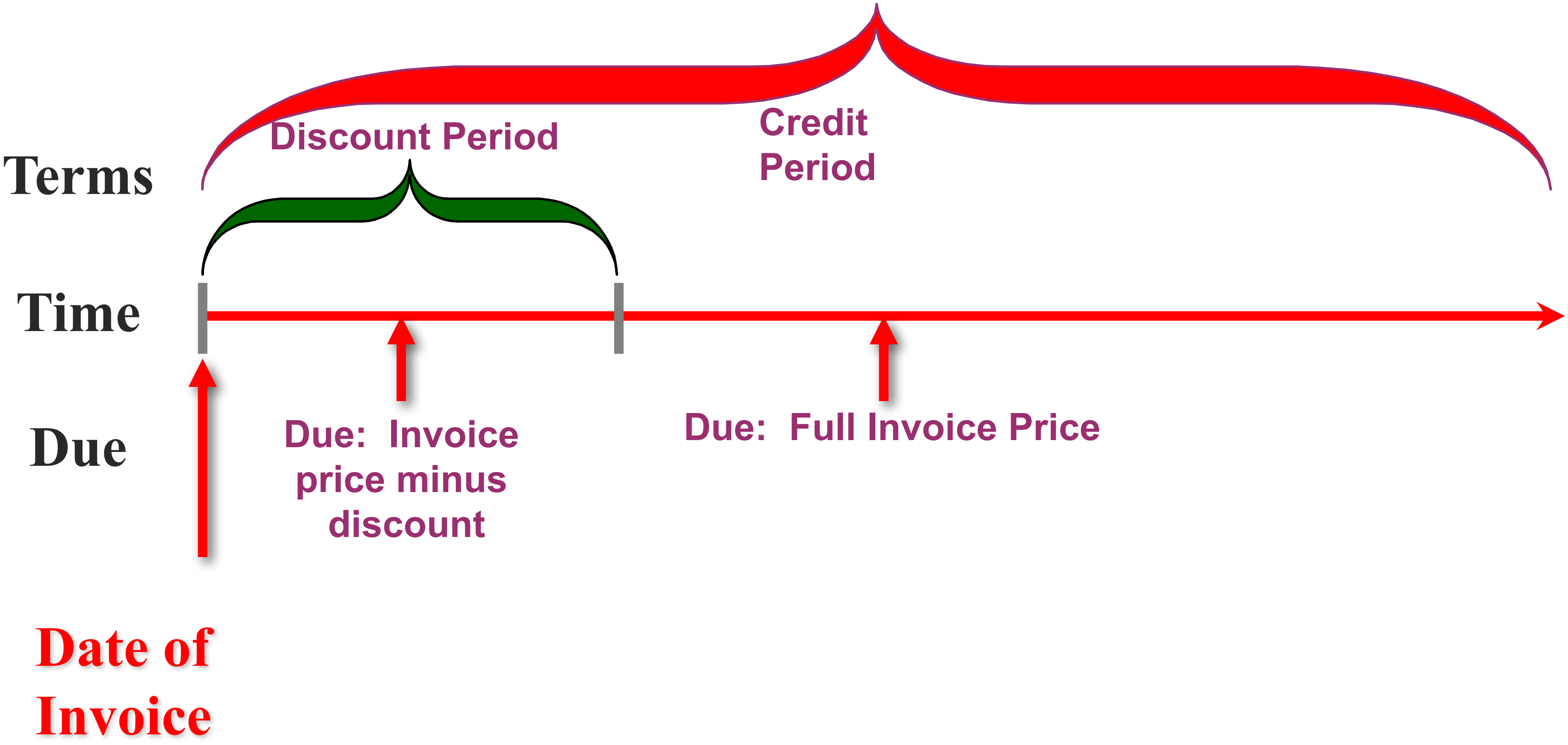
We appreciate your business!

- ①Seller
- ②Invoice date
- ③Purchaser
- ④Order number
- ⑤Credit terms
- ⑥Freight terms
- ⑦Goods
- ⑧Invoice amount

P1

Purchase Discounts

A deduction from the invoice price granted to induce early payment of the amount due.



Terms

Discount Period

Credit Period

Time

Due

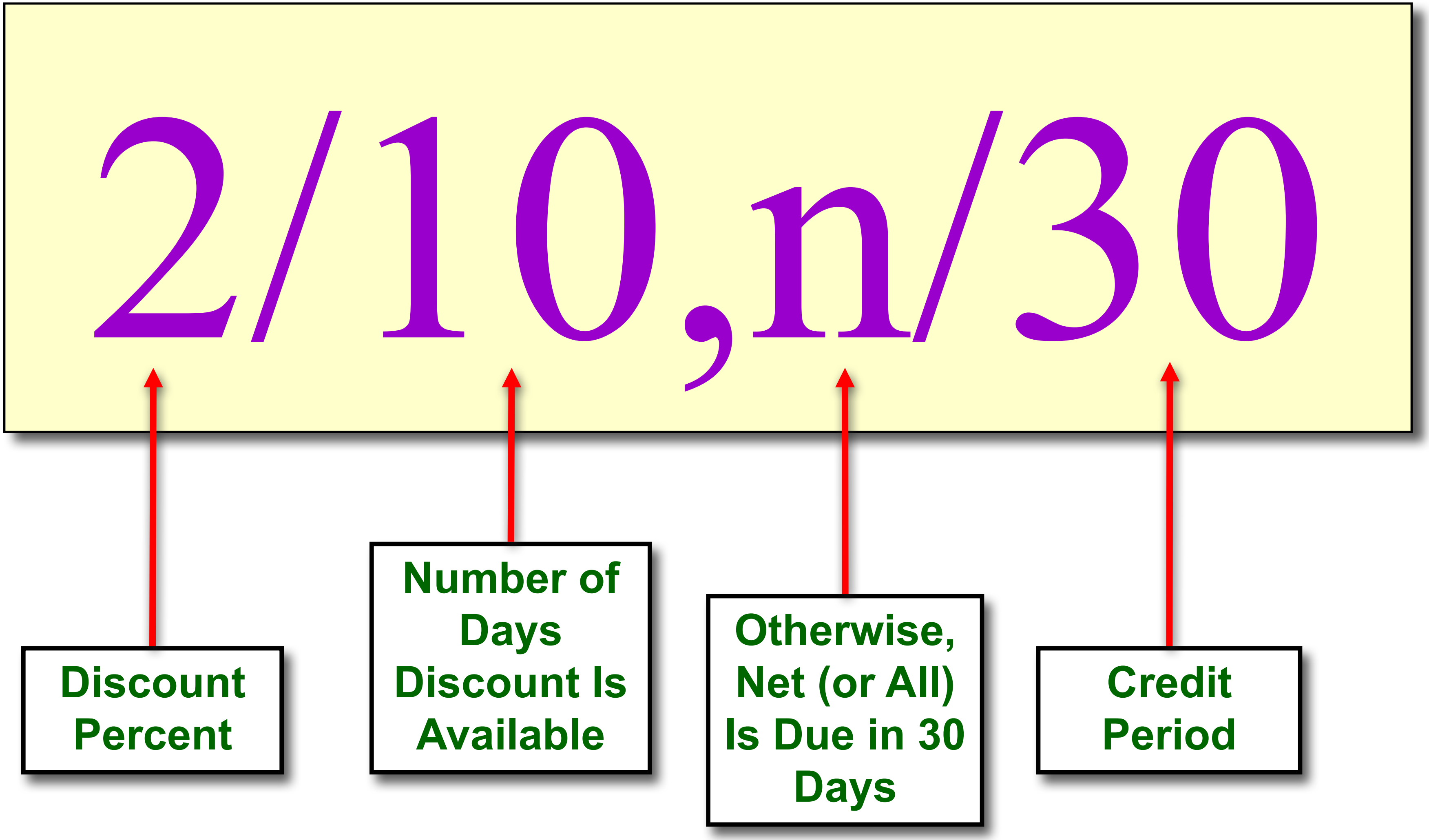
Due: Invoice price minus discount

Due: Full Invoice Price

Date of Invoice

P1

Purchase Discounts



2/10,n/30

P1

Purchase Discounts

On May 7, Jason, Inc. purchased $27,000 of merchandise inventory on account, credit terms are 2/10, n/30.

	Dr.	Cr.
Merchandise Inventory	**27,000**	
Accounts Payable		**27,000**
Purchase merchandise on account		

Purchase Discounts

On May 15, Jason, Inc. paid the amount due on the purchase of May 7.

		Dr.	Cr.
May 15	**Accounts Payable**	**27,000**	
	Cash		**26,460**
	Merchandise Inventory*		**540**
	Paid accounts payable in full		

***$27,000 × 2% = $540 discount**

P1

Purchase Discounts

After we post these entries, the accounts involved look like this:

Merchandise Inventory

5/7	27,000	5/15	540
Bal.	26,460		

Accounts Payable

5/15	27,000	5/7	27,000
		Bal.	0

P1

When Discount Is Not Taken

If we fail to take a 2/10, n/30 discount, is it really expensive?

365 days ÷ 20 days × 2% = 36.5% annual rate

Days in a year

Number of additional days before payment

Percent paid to keep money

P1

Purchase Returns and Allowances

Purchase returns . . .

refer to merchandise a buyer acquires but then returns to the seller.

Purchase allowance . . .

is a reduction in the cost of defective or unacceptable merchandise that a buyer acquires.

P1

Purchase Returns and Allowances

On May 9, Matrix, Inc. purchased $20,000 of merchandise inventory on account, credit terms are 2/10, n/30.

May 9	**Merchandise Inventory**	**20,000**	
	Accounts Payable		**20,000**
	Purchase merchandise on account		

P1

Purchase Returns and Allowances

On May 10, Matrix, Inc. returned $500 of defective merchandise to the supplier.

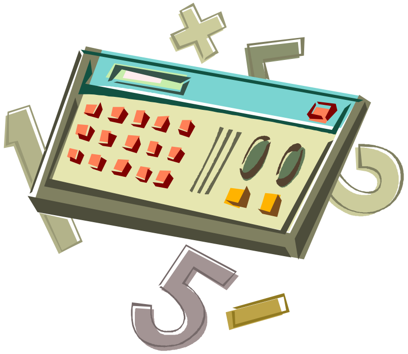
		Dr.	Cr.
May 10	**Accounts Payable**	**500**	
	Merchandise Inventory		**500**
	Returned defective merchandise		

P1

Purchase Returns and Allowances

On May 18, Matrix, Inc. paid the amount owed for the purchase of May 9.

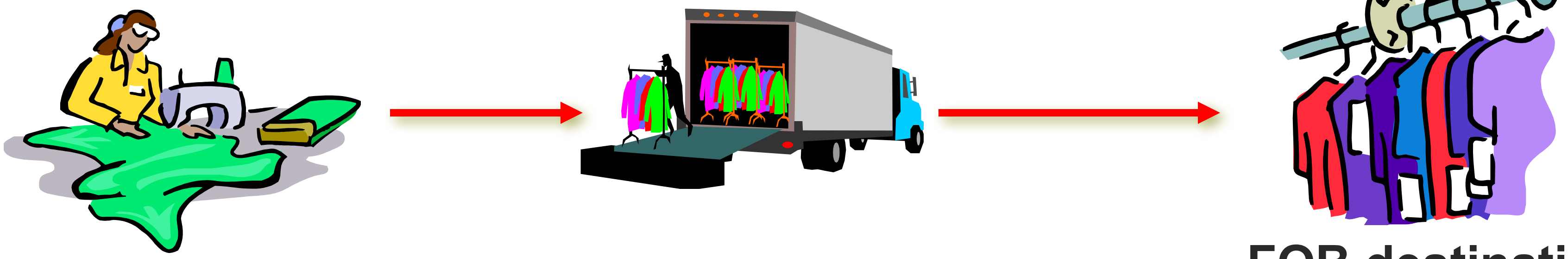
		Dr.	Cr.
May 18	Accounts Payable	19,500	
	Cash		19,110
	Merchandise Inventory		390
	Paid account in full		



Purchase	$ 20,000
Returns	(500)
Amount Due	19,500
Discount	(390)
Cash Paid	$ 19,110

P1

Transportation Costs



Seller

Buyer

FOB shipping point
(buyer pays)

Merchandise

FOB destination
(seller pays)

Terms	Ownership transfers to buyer when goods are passed to	Transportation costs paid by
FOB shipping point	Carrier	Buyer
FOB destination	Buyer	Seller

P1

Transportation Costs

On May 12, Jason, Inc. purchased $8,000 of merchandise inventory for cash and also paid $100 transportation costs.

		Dr.	**Cr.**
May 12	**Merchandise Inventory**	**8,100**	
	Cash		**8,100**
	Paid for merchandise and transportation		

P1

Quick Check ☑

On July 6, 2011, Seller Co. sold $7,500 of merchandise to Buyer, Co. on account; terms of 2/10,n/30. The shipping terms were FOB shipping point. The shipping cost was $100. Which of the following will be part of Buyer’s July 6 journal entry?

a. Credit Sales $7,500

b. Credit Purchase Discounts $150

[✓ c. Debit Merchandise Inventory $7,600]

d. Debit Accounts Payable $7,450

FOB shipping point indicates the buyer ultimately pays the freight. This is recorded with a debit to Merchandise Inventory.

P1

Cost of Merchandise Purchased

MATRIX, INC.
Itemized Cost of Merchandise Purchases
For Year Ended May 31, 2011

Invoice cost of merchandise purchases	$ 692,500
Less:	
Purchase discounts	(10,388)
Purchase returns and allowances	(4,275)
Add:	
Cost of transportation-in	4,895
Total cost of merchandise purchases	$ 682,732

P2

Accounting for Merchandise Sales

MATRIX, INC.
Computation of Gross Profit
For Year Ended May 31, 2011

Sales		$ 2,451,000
Less:		
Sales discounts	$ 29,412	
Sales returns and allowances	18,500	47,912
Net sales		$ 2,403,088
Cost of goods sold		(1,928,600)
Gross profit		$ 474,488

Sales discounts and returns and allowances are contra revenue accounts.

P2

Sales of Merchandise

On March 18, Diamond Store sold $25,000 of merchandise on account. The merchandise was carried in inventory at a cost of $18,000.

		Dr.	Cr.
Mar. 18	**Accounts Receivable**	**25,000**	
	Sales		**25,000**
	Sales of merchandise on credit		
	Cost of Goods Sold	**18,000**	
	Merchandise Inventory		**18,000**
	To record cost of sales		

P2

Sales Discounts

On June 8, Barton Co. sold merchandise costing $3,500 for $6,000 on account. Credit terms were 2/10, n/30. Let’s prepare the journal entries.

		Dr.	Cr.
Jun. 8	**Accounts Receivable**	6,000	
	Sales		6,000
	Sales of merchandise on credit		
	Cost of Goods Sold	3,500	
	Merchandise Inventory		3,500
	To record cost of sales		

P2

Sales Discounts

On June 17, Barton Co. received a check for $5,880 in full payment of the June 8 sale.

Jun 17	**Cash**	**5,880**	
	Sales Discounts	**120**	
	Accounts Receivable		**6,000**
	Received payment less discount		

P2

Sales Returns and Allowances

On June 12, Barton Co. sold merchandise costing $4,000 for $7,500 on account. The credit terms were 2/10, n/30.

		Dr.	Cr.
Jun. 12	**Accounts Receivable**	**7,500**	
	Sales		**7,500**
	Sales of merchandise on credit		
	Cost of Goods Sold	**4,000**	
	Merchandise Inventory		**4,000**
	To record cost of sales		

P2

Sales Returns and Allowances

On June 14, merchandise with a sales price of $800 and a cost of $470 was returned to Barton. The return is related to the June 12 sale.

		Dr.	Cr.
Jun. 14	**Sales Returns and Allowances**	**800**	
	Accounts Receivable		**800**
	Customer returned merchandise		
	Merchandise Inventory	**470**	
	Cost of Goods Sold		**470**
	Returned goods placed in inventory		

P2

Sales Returns and Allowances

On June 20, Barton received the amount owed to it from the sale of June 12.

		Dr.	Cr.
Jun. 20	**Cash**	**6,566**	
	Sales Discount	**134**	
	Accounts Receivable		**6,700**
	Received payment less discount		

Sale	**$ 7,500**
Return	**(800)**
Amount due	**$ 6,700**
Discount	**(134)**
Cash received	**$ 6,566**

P3

Completing the Accounting Cycle

BARTON COMPANY
Adjusted Trial Balance
December 31, 2011

Cash	$	7,700		
Accounts receivable		11,200		
Merchandise inventory		14,300		
Supplies		1,300		
Equipment		41,200		
Accum. depr.- Equip.			$	7,00
Accounts payable				16,40
Salaries payable				1,00
Common Stock				42,40
Retained Earnings				
Dividends		4,000		
Sales				323,800
Sales discounts		4,300		
Sales returns		2,000		
Cost of goods sold		233,200		
Admin. salaries expense		18,200		
Sales salaries expense		29,600		
Insurance expense		1,200		
Rent expense		8,100		
Supplies expense		1,000		
Advertising expense		13,300		
	$	390,600	$	390,600

Next, let's complete the accounting cycle by preparing the closing entries for Barton Company.

P3

Step 1: Close Credit Balances in Temporary Accounts to Income Summary

		Dr.	Cr.
Dec. 31	**Sales**	**323,800**	
	Income Summary		**323,800**
	To close credit balances in temporary accounts		

BARTON COMPANY
Adjusted Trial Balance (partial)
December 31, 2011

Salaries payable		1,000
Common Stock		42,400
Dividends	4,000	
Sales		323,800
Sales discounts	4,300	
Sales returns	2,000	
Cost of goods sold	233,200	
Admin. salaries expense	18,200	
Sales salaries expense	29,600	
Insurance expense	1,200	
Rent expense	8,100	
Supplies expense	1,000	
Advertising expense	13,300	

Income Summary

	323,800

P3

Step 2: Close Debit Balances in Temporary Accounts to Income Summary

		Dr.	Cr.
Dec. 31	Income Summary	310,900	
	Sales Discounts		4,300
	Sales Returns		2,000
	Cost of Goods Sold		233,200
	Adm. Salaries Expense		18,200
	Sales Salaries Expense		29,600
	Insurance Expense		1,200
	Rent Expense		8,100
	Supplies Expense		1,000
	Advertising Expense		13,300
	To close debit balances in temporary accounts		

Income Summary

310,900	323,800
	12,900

P3

Step 3: Close Income Summary to Retained Earnings

		Dr.	Cr.
Dec. 31	**Income Summary**	**12,900**	
	Retained Earnings		**12,900**
	To close Income Summary account		

Income Summary	
310,900	323,800
12,900	
	-0-

P3

Step 4: Close Dividends to Retained Earnings

		Dr.	Cr.
Dec. 31	**Retained Earnings**	**4,000**	
	Dividends		**4,000**
	To close the dividends account		

P4

Multiple-Step Income Statement

BARTON COMPANY
Income Statement
For Year Ended December 31, 2011

Sales			$ 323,800
Less: Sales discounts		$ 4,300	
Sales returns		2,000	6,300
Net sales			$ 317,500
Cost of goods sold			233,200
Gross profit			$ 84,300
Operating expenses:			
Selling expenses:			
Salaries expense	$ 29,600		
Advertising expense	13,300	$ 42,900	
General and administrative expenses:			
Adm. salaries expense	$ 18,200		
Insurance expense	1,200		
Rent expense	8,100		
Supplies expense	1,000	28,500	
Total operating expenses			71,400
Net income			$ 12,900

P4

Single-Step Income Statement

BARTON COMPANY
Income Statement
For Year Ended December 31, 2011

Net sales		$ 317,500
Cost of goods sold	$ 233,200	
Operating expenses	71,400	
Total expenses		304,600
Net income		$ 12,900

P4

Balance Sheet

BARTON COMPANY
Balance Sheet
December 31, 2011

Assets:		
Cash	$ 7,700	
Accounts receivable	11,200	
Merchandise inventory	14,300	
Supplies	1,300	
Equipment	41,200	
Accum. depr.- Equip.	(7,000)	
Total assets		$ 68,700
Liabilities		
Accounts payable		16,400
Salaries payable		1,000
Total liabilities		17,400
Equity		
Common stock		42,400
Retained earnings		8,900
Total liabilities		$ 51,300
Total liabilities & equity		$ 68,700

A1

Acid-Test Ratio

$$\text{Acid-test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

$$\text{Acid-test ratio} = \frac{\text{Cash + S/T investments + receivables}}{\text{Current liabilities}}$$

A common rule of thumb is the acid-test ratio should have a value of at least 1.0 to conclude a company is unlikely to face liquidity problems in the near future.

A2

Gross Margin Ratio

$$\text{Gross margin ratio} = \frac{\text{Net sales} - \text{Cost of goods sold}}{\text{Net sales}}$$

Percentage of dollar sales available to cover expenses and provide a profit.

End of Chapter 04