### **Chapter 6 Questions**

#### **Multiple Choice**

- 1. In a perpetual inventory system,
- a. LIFO cost of goods sold will be the same as in a periodic inventory system.
- b. average costs are based entirely on unit cost simple averages.
- c. a new average is computed under the average cost method after each sale.
- d. FIFO cost of goods sold will be the same as in a periodic inventory system.
- 2. Company Y has the following inventory data:

August 1	Beginning inventory	20 units at \$10
8	Purchases	130 units at \$15
17	Sale	80 units
25	Purchases	30 units at \$20
30	Sale	60 units

Assuming that a perpetual inventory system is used, what is ending inventory (rounded) under the average cost method for August? (DO NOT ROUND INTERMEDIATE CALCULATIONS).

- a. \$641.33
- b. \$611.11
- c. \$800.00
- d. \$500.00
- 3. Simpson Inc. purchased inventory as follows:

 Jan. 5
 500 units at \$10.00

 Jan. 15
 1,000 units at \$15.00

 Jan. 25
 200 units at \$20.00

What is the average unit cost of inventory?

- a. \$14.12
- b. \$15.00
- c. \$13.00
- d. \$15.83
- 4. Delightful Discs has the following inventory data:

Nov. 1	Inventory	30 units @ \$6.00 each
8	Purchase	120 units @ \$6.45 each
17	Purchase	60 units @ \$6.30 each
25	Purchase	90 units @ \$6.60 each

A physical count of merchandise inventory on November 30 reveals that there are 100 units on hand. Ending inventory under LIFO periodic inventory system is

- a. \$657
- b. \$632
- c. \$1,269
- d. \$1,295

5. Hardaway Inc. purchased inventory as follows:

 Jan. 10
 200 units at \$5.00

 Jan. 20
 500 units at \$10.00

 Jan. 30
 800 units at \$15.00

Hardaway Inc. had no beginning inventory and has 500 units on hand as of January 31. Assuming the specific identification method is used and ending inventory consists of 100 units from the Jan. 10 purchase, 300 units from the Jan. 20 purchase, and 100 units from the Jan. 30 purchase, ending inventory would be

- a. \$13,000
- b. \$4,000
- c. \$7,500
- d. \$5,000
- 6. Hardaway Inc. purchased inventory as follows:

 Jan. 10
 200 units at \$5.00

 Jan. 20
 500 units at \$10.00

 Jan. 30
 800 units at \$15.00

Hardaway Inc. had no beginning inventory and has 500 units on hand as of January 31. Assuming the specific identification method is used and ending inventory consists of 100 units from the Jan. 10 purchase, 300 units from the Jan. 20 purchase, and 100 units from the Jan. 30 purchase, cost of goods sold would be

- a. \$13,000
- b. \$4,000
- c. \$7,500
- d. \$5,000
- 7. Baker Bakery Company just began business and made the following four inventory purchases in June:

June	1	150 units	\$ 1,040
June	10	200 units	1,560
June	15	200 units	1,680
June	28	150 units	<u>1,320</u>
			<u>\$5.600</u>

A physical count of merchandise inventory on June 30 reveals that there are 210 units on hand. Using the FIFO periodic inventory method, the amount allocated to ending inventory for June is

- a. \$1,456
- b. \$1,508
- c. \$1,824
- d. \$1,848

- 8. Goods held on consignment are
- a. never owned by the consignee.
- b. included in the consignee's ending inventory.
- c. kept for sale on the premises of the consignor.
- d. included as part of no one's ending inventory.
- 9. Reeves Company is taking a physical inventory on March 31, the last day of its fiscal year. Which of the following must be included in this inventory count?
- a. Goods in transit to Reeves, FOB destination
- b. Goods that Reeves is holding on consignment for Parker Company
- c. Goods in transit that Reeves has sold to Smith Company, FOB shipping point
- d. Goods that Reeves is holding in inventory on March 31 for which the related Accounts Payable is 15 days past due
- 10. At December 31, 2019 Mohling Company's inventory records indicated a balance of \$632,000. Upon further investigation it was determined that this amount included the following:
- \$112,000 in inventory purchases made by Mohling shipped from the seller 12/27/19 terms FOB destination, but not due to be received until January 2<sup>nd</sup>,
- \$74,000 in goods sold by Mohling with terms FOB destination on December 27<sup>th</sup>. The goods are not expected to reach their destination until January 6<sup>th</sup>.
- \$6,000 of goods received on consignment from Dollywood Company

What is Mohling's correct ending inventory balance at December 31, 2019?

- a. \$520,000
- b. \$626,000
- c. \$440,000
- d. \$514,000
- 11. Zimmerman Inc. uses a periodic inventory system. Details for the inventory account for the month of October are shown below:

Date	Explanation	Units	Un	it Cost	To	tal Cost
Oct. 1	Beginning Inventory	50	\$	4.00	\$	200.00
Oct. 10	Purchase	100	\$	4.50	\$	450.00
Oct. 20	Purchase	150	\$	5.00	\$	750.00
	Total	300			\$1	,400.00

Assume that on October 31, there is 80 units on hand. If the company uses FIFO, what is the value of ending inventory?

- a. \$400
- b. \$335
- c. \$373
- d. \$360

12. Zimmerman Inc. uses a periodic inventory system. Details for the inventory account for the month of October are shown below:

Date	Explanation	Units	Un	it Cost	To	tal Cost
Oct. 1	Beginning Inventory	50	\$	4.00	\$	200.00
Oct. 10	Purchase	100	\$	4.50	\$	450.00
Oct. 20	Purchase	150	\$	5.00	\$	750.00
	Total	300			\$1	,400.00

Assume that on October 31, there is 80 units on hand. If the company uses LIFO, what is the value of cost of goods sold for October?

- a. \$1,000
- b. \$1,200
- c. \$1,065
- d. \$1,028

13. Nelson Corporation sells three different products. The following information is available on December 31:

Inventory Item	Units	Cost per unit	Market value per unit
Х	300	\$4.00	\$3.50
Υ	600	\$2.00	\$1.50
Z	1,500	\$3.00	\$4.00

When applying the lower of cost or market rule to each item, what will Nelson's total ending inventory balance be?

- a. \$6,900
- b. \$6,450
- c. \$7,950
- d. \$6,600

14. Inventory costing methods place primary reliance on assumptions about the flow of

- a. goods.
- b. costs.
- c. resale prices.
- d. values.

15. The Boxwood Company sells blankets for \$60 each. The following was taken from the inventory records during May. The company had no beginning inventory on May 1.

Date	Blankets	Units	Cost
May 3	Purchase	5	\$20
10	Sale	3	
17	Purchase	10	\$24
20	Sale	6	
23	Sale	3	
30	Purchase	10	\$30

Assuming that the company uses the perpetual inventory system, determine the **COST OF GOODS SOLD** for the **month of May** using the **LIFO** inventory cost method.

a. \$364

b. \$300

c. \$268

d. \$276

#### **EXERCISES**

- 1. Company M uses the perpetual inventory system. They want to calculate **the cost of goods sold** and **the value of their ending inventory** using each of the following methods:
- A) FIFO
- B) LIFO
- C) Average Cost Method

Use the information below along with the tables provided for each method.

Date	Explanation	Units	Unit	Cost	<b>Total Cost</b>
Mar. 1	Beginning Inventory	50	\$	2.00	\$100.00
Mar. 5	Sale	20			
Mar. 10	Purchase	30	\$	2.50	\$ 75.00
Mar. 15	Sale	40			
Mar. 22	Purchase	50	\$	3.00	\$150.00
Mar. 26	Purchase	20	\$	3.25	\$ 65.00
Mar. 28	Sale	60			

		Units	Acquired		Co	ost of Goo	ds Sold	Ending Balance			
Date	Activities	Units Acquired	\$ per Unit	Total \$ Amount	Units Sold	\$ per Unit	Total \$ Amount	Units On Hand	\$ per Unit	Total \$ Am	ount
Mar. 1	Beg Inventory						\$ -	50	\$ 2.00	\$ 10	0.00
Mar. 5	Sales- 20 units										
Mar. 10	Purchase- 30 units										
Mar. 15	Sales- 40 units										
Mar. 22	Purchase- 50 units										
Mar. 26	Purchase- 20 units										
Mar. 28	Sales- 60 units										

A) FIFO

- 1. Cost of Goods Sold = \$
- 2. Ending Inventory = \$

		Units	Acquired		Cost of Goods Sold		Ending Balance			
Date	Activities	Units Acquired	\$ per Unit	Total \$ Amount	<b>Units Sold</b>	\$ per Unit	Total \$ Amount	Units On Hand	\$ per Unit	Total \$ Amount
Mar. 1	Beg Inventory							50	\$ 2.00	\$ 100.00
Mar. 5	Sales- 20 units									
Mar. 10	Purchase- 30 units									
Mar. 15	Sales- 40 units									
Mar. 22	Purchase- 50 units									
Mar. 26	Purchase- 20 units									
Mar. 28	Sales- 60 units									

# B) LIFO

- 1. Cost of Goods Sold=\$
- 2. Ending Inventory = \$

		Units	Acquired		Cost of Goods Sold			Ending Balance			
Date	Activities	Units Acquired		Total \$ Amount	<b>Units Sold</b>	\$ per Unit	Total \$ Amount				Amount
Mar. 1	Beg Inventory							50	\$ 2.00	\$ \$	100.00
Mar. 5	Sales- 20 units										
Mar. 10	Purchase- 30 units										
		Weighted Average C	ost= Total	Cost of Invento	ry on Hand	l ÷ Total U	Inits of Invento	ry on Hand			
				Weighted Av	erage Cos	t =					
Mar. 15	Sales- 40 units										
Mar. 22	Purchase- 50 units										
Mar. 26	Purchase- 20 units										
		Weighted Average C	ost= Total	Cost of Invento	ry on Hand	i ÷ Total U	Inits of Invento	ry on Hand			
				Weighted Av	verage Cos	t =					
Mar. 28	Sales- 60 units										

# C) AVERAGE COST

- 1. Cost of Goods Sold = \$
- 2. Ending Inventory = \$

- 2. The Cain Company has just completed a physical inventory count at year end, December 31, 2017. Only the items on the shelves, in storage, and in the receiving area were counted and costed on the FIFO basis. The inventory amounted to \$80,000. During the audit, the independent CPA discovered the following additional information:
- (a) There were goods in transit on December 31, 2017, from a supplier with terms FOB destination, costing \$10,000. Because the goods had not arrived, they were excluded from the physical inventory count.
- (b) On December 27, 2017, a regular customer purchased goods for cash amounting to \$1,000 and had them shipped to a bonded warehouse for temporary storage on December 28, 2017. The goods were shipped via common carrier with terms FOB shipping point. The customer picked the goods up from the warehouse on January 4, 2018. Cain Company had paid \$500 for the goods and, because they were in storage, Cain included them in the physical inventory count.
- (c) Cain Company, on the date of the inventory, received notice from a supplier that goods ordered earlier, at a cost of \$4,000, had been delivered to the transportation company on December 28, 2017; the terms were FOB shipping point. Because the shipment had not arrived on December 31, 2017, it was excluded from the physical inventory.
- (d) On December 31, 2017, there were goods in transit to customers, with terms FOB shipping point, amounting to \$800 (expected delivery on January 8, 2018). Because the goods had been shipped, they were excluded from the physical inventory count.
- (e) On December 31, 2017, Cain Company shipped \$2,500 worth of goods to a customer, FOB destination. The goods arrived on January 5, 2017. Because the goods were not on hand, they were not included in the physical inventory count.
- (f) Cain Company, as the consignee, had goods on consignment that cost \$3,000. Because these goods were on hand as of December 31, 2017, they were included in the physical inventory count.

#### Instructions

Analyze the above information and calculate a corrected amount for the ending inventory. Explain the basis for your treatment of each item.

3. Hanlin Company uses the periodic inventory system to account for inventories. Information related to Hanlin Company's inventory at January 31 is given below:

January	1	Beginning inventory	400	units @ \$12.00 =	\$ 4,800
	8	Purchase	800	units @ \$12.40 =	9,920
	16	Purchase	600	units @ \$12.80 =	7,680
	24	Purchase	200	units @ \$13.20 =	2,640
		Total units and cost	2,000	units	\$25,040

#### Instructions

- A. Show computations to value the ending inventory using the FIFO cost assumption if 600 units remain on hand at January 31.
- B. Show computations to value the ending inventory using the weighted-average cost method if 600 units remain on hand at January 31.
- C. Show computations to value the ending inventory using the LIFO cost assumption if 600 units remain on hand at January 31.

4. Wolf Camera Shop Inc. uses the lower-of-cost-or-market basis for its inventory. The following data are available at December 31.

			Market
	<u>Units</u>	Cost/Unit	<u>Value/Unit</u>
Cameras			
Minolta	5	\$175	\$168
Canon	7	148	152
Light Meters			
Vivitar	15	125	119
Kodak	10	120	135

#### Instructions

What amount should be reported on Wolf Camera Shop's financial statements, assuming the lower-of-cost-or-market rule is applied?

A. Merchandise Inventory First-in, first-out (FIFO) method Last-in, first-out (LIFO) method B. Work in process G. C. FOB shipping point Н. Average cost method D. FOB destination LIFO reserve E. Specific identification method J. Inventory turnover ratio 1. The difference between inventory reported using LIFO and inventory using FIFO. 2. Tracks the actual physical flow for each inventory item available for sale. 3. Goods that are only partially completed in a manufacturing company. 4. Cost of goods sold consists of the most recent inventory purchases. 5. Goods ready for sale to customers by retailers and wholesalers. 6. Title to the goods transfers when the public carrier accepts the goods from the seller. 7. Ending inventory valuation consists of the most recent inventory purchases. 8. The same unit cost is used to value ending inventory and cost of goods sold. 9. Title to goods transfers when the goods are delivered to the buyer.

10. Measures the number of times the inventory sold during the period.

5. Match the items below by entering the appropriate code letter in the space provided.

# **Chapter 6 Solutions**

# **Multiple Choice Solutions**

- 1. **D**
- 2. **A**
- 3. **A**
- 4. **B**
- 5. **D**
- 6. **A**
- 7. **C**
- 8. **A**
- 9. **D**
- 10. **D**
- 11. **A**
- 12. **C**
- 13. **B**
- 14. **B**
- 15. **D**

# **Chapter 6 Solutions (Cont.)**

# **Exercise Solutions**

1.

		FIFO Class Exercise														
		Unit	s Ac	quired			Cost of Goods Sold					Ending Balance				
Date	Activities	Units Acquired	\$ p	er Unit	To	otal \$ Amount	Units Sold	\$ p	er Unit	To	otal \$ Amount	Units On Hand	\$ p	er Unit	Total	\$ Amount
Mar. 1	Beg Inventory				\$	-				\$		50	\$	2.00	\$	100.00
					\$	-				\$	-				\$	-
Mar. 5	Sales- 20 units				\$	-	20	\$	2.00	\$	40.00	30	\$	2.00	\$	60.00
					\$	-				\$	-				\$	-
Mar. 10	Purchase- 30 units	30	\$	2.50	\$	75.00				\$	-	30	\$	2.00	\$	60.00
IVIAI. 10					\$	-				\$	-	30	\$	2.50	\$	75.00
Mar. 15	Sales- 40 units				\$	-	30	\$	2.00	\$	60.00	20	\$	2.50	\$	50.00
IVIAI. 13					\$	-	10	\$	2.50	\$	25.00				\$	-
Mar. 22	Purchase- 50 units	50	\$	3.00	\$	150.00				\$	-	20	\$	2.50	\$	50.00
Mar. 22					\$	-				\$	-	50	\$	3.00	\$	150.00
Mar. 26	Purchase- 20 units	20	\$	3.25	\$	65.00				\$	-	20	\$	2.50	\$	50.00
Mar. 26					\$	-				\$	-	50	\$	3.00	\$	150.00
												20	\$	3.25	\$	65.00
M== 20	Sales- 60 units				\$	-	20	\$	2.50	\$	50.00	10	\$	3.00	\$	30.00
Mar. 28					\$	-	40	\$	3.00	\$	120.00	20	\$	3.25	\$	65.00

A) FIFO

1. Cost of Goods Sold \$ 295.00

2. Ending Inventory = \$ 95.00

OGS Ending Inventory

	Units Acquired					Co	ost	of Goo	ds S	old	Ending Balance				
Activities	Units Acquired	\$ p	er Unit	To	otal \$ Amount	<b>Units Sold</b>	\$ p	er Unit	Tot	al \$ Amount	Units On Hand	\$ p	er Unit	Total	\$ Amount
Beg Inventory				\$	-				\$	-	50	\$	2.00	\$	100.00
				\$	-				\$	-				\$	-
Sales- 20 units				\$	-	20	\$	2.00	\$	40.00	30	\$	2.00	\$	60.00
				\$	-				\$	-				\$	-
Purchase- 30 units	30	\$	2.50	\$	75.00				\$	-	30	\$	2.00	\$	60.00
				\$	-				\$	-	30	\$	2.50	\$	75.00
Sales- 40 units				\$	-	30	\$	2.50	\$	75.00	20	\$	2.00	\$	40.00
				\$	-	10	\$	2.00	\$	20.00					
Purchase- 50 units	50	\$	3.00	\$	150.00				\$	-	20	\$	2.00	\$	40.00
				\$	-				\$	-	50	\$	3.00	\$	150.00
														\$	-
Purchase- 20 units	20	\$	3.25	\$	65.00				\$	-	20	\$	2.00	\$	40.00
				\$	-				\$	-	50	\$	3.00	\$	150.00
											20	\$	3.25	\$	65.00
														\$	-
Sales- 60 units				\$	-	20	\$	3.25	\$	65.00	20	\$	2.00	\$	40.00
				\$	-	40	\$	3.00	\$	120.00	10	\$	3.00	\$	30.00
				\$	-				\$	-				\$	-
	Beg Inventory Sales- 20 units Purchase- 30 units Sales- 40 units Purchase- 50 units Purchase- 50 units	Activities Units Acquired  Beg Inventory  Sales- 20 units  Purchase- 30 units  Purchase- 40 units  Purchase- 50 units  20	Activities Units Acquired \$ p  Beg Inventory  Sales- 20 units  Purchase- 30 units 30 \$  Sales- 40 units  Purchase- 50 units 50 \$  Purchase- 20 units 20 \$	Activities Units Acquired \$ per Unit  Beg Inventory  Sales- 20 units  Purchase- 30 units  Purchase- 50 units  Purchase- 50 units  20 \$ 3.25	Activities   Units Acquired   S per Unit   To	Notivities   Units Acquired   S per Unit   Total \$ Amount	Notivities   Units Acquired   S per Unit   Total S Amount   Units Sold	Activities   Units Acquired   S per Unit   Total \$ Amount   Units Sold   S per Unit   S   S   S   S   S   S   S   S   S	Activities   Units Acquired   S per Unit   Total \$ Amount   Units Sold   S per Unit	Activities   Units Acquired   S per Unit   Total S Amount   Units Sold   S per Unit   Total S Amount   S   S   S   S   S   S   S   S   S	Activities   Units Acquired   S per Unit   Total \$ Amount   Units Sold   S per Unit   Total \$ Amount	Activities   Units Acquired   S per Unit   Total S Amount   Units Sold   S per Unit   Total S Amount   Units On Hand	Activities   Units Acquired   S per Unit   Total S Amount   Units Sold   S per Unit   Total S Amount   Units On Hand   S per Unit   S	Activities   Units Acquired   S per Unit   Total S Amount   Units Sold   S per Unit   Total S Amount   Units On Hand   S per Unit	Activities   Units Acquired   S per Unit   Total S Amount   Units Sold   S per Unit   Total S Amount   Units On Hand   S per Unit   Total S Amount

COGS Ending Inventory

B) LIFO

1. <u>Cost of Goods Sold</u>= \$ 320.00

2. **Ending Inventory** = \$ 70.00

# **Chapter 6 Solutions (Cont.)**

# **Exercise Solutions (Cont.)**

# 1. (Cont.)

Date	Activities	Units Acquired	\$ ре	er Unit	Tot	al \$ Amount	<b>Units Sold</b>	\$ p	er Unit	To	otal \$ Amount	Units On Hand	\$ p	er Unit	Total	\$ Amount
Mar. 1	Beg Inventory				\$	-				\$	-	50	\$	2.00	\$	100.00
Widi. 1					\$	-				\$	-				\$	-
Mar. 5	Sales- 20 units				\$	-	20	\$	2.00	\$	40.00	30	\$	2.00	\$	60.00
Widi. 5					\$	-				\$	-		L		\$	-
Mar. 10	Purchase- 30 units	30	\$	2.50	\$	75.00				\$	-	30	\$	2.00	\$	60.00
11101. 10					\$	-				\$	-	30	\$	2.50	\$	75.00
Weighted Average Cost= Total Cost of Inventory on Hand ÷ Total Units of Inventory on Hand																
Weighted Average Cost = (\$60 + \$75) ÷ (30 + 30) = \$2.25																
Mar. 15	Sales- 40 units				\$	-	40	\$	2.25	\$	90.00	20	\$	2.25	\$	45.00
Widi. 13					\$	-				\$	-		L		\$	-
Mar. 22	Purchase- 50 units	50	\$	3.00	\$	150.00				\$	-	20	\$	2.25	\$	45.00
Widi. 22					\$	-				\$	-	50	\$	3.00	\$	150.00
										L			L		\$	-
Mar. 26	Purchase- 20 units	20	\$	3.25	\$	65.00				\$	-	20	\$	2.25	\$	45.00
Widi. 20					\$	-				\$	-	50	\$	3.00	\$	150.00
												20	\$	3.25	\$	65.00
															\$	-
		Weighted Average	Cos	t= Tota	al Cos	t of Inventor	on Hand -	÷ To	tal Un	its	of Inventory	on Hand				
		Weighted	Ave	rage C	ost =	(\$45 + \$150 -	+ \$65) ÷ (20	+ 5	0 + 20)		= \$2.89					
Mar. 28	Sales- 60 units				\$	-	60	\$	2.89	\$	173.40	30	\$	2.89	\$	86.70
iviar. 28					\$	-				\$	-				\$	-
					\$	-				\$	-				\$	-

### C) AVERAGE COST

- 1. <u>Cost of Goods Sold</u>= \$ 303.40
- 2. **Ending Inventory** = \$ 86.70

2.

Start with	\$80,000	
Item (a)	-	(Because the goods were shipped FOB destination title will pass to Cain upon arrival. Properly excluded.)
Item (b)	- 500	(Goods should be excluded. The customer accepted title when the goods left Cain FOB shipping point.)
Item (c)	+ 4,000	(Goods belong to Cain. Title passed when supplier delivered the goods to the transportation company.)
Item (d)	_	(Because the goods were shipped FOB shipping point Cain no longer has title to these goods. Properly excluded.)
Item (e)	+ 2,500	(Goods were shipped FOB destination. Cain retains title until the customer receives them.)
Item (f)	- 3,000	(These goods are owned by the consignor, not the consignee, and should not be included in Cain's inventory.)
O 1 1 !		

#### Corrected inventory \$83,000

#### **Chapter 6 Solutions (Cont.)**

### **Exercise Solutions (Cont.)**

A. 600 units in ending inventory.

Under FIFO, the units remaining in inventory are the ones purchased most recently.

$$1/24$$
 200 units @ \$13.20 = \$2,640 (1/24 units × 1/24 cost)

$$\frac{400}{600}$$
 units @ \$12.80 =  $\frac{5,120}{57,760}$  ((1/31 units – 1/24 units) × 1/16 cost)

B. 600 units in ending inventory.

Under average cost method, the weighted-average cost per unit must be computed.

600 units x \$12.52 = 
$$\frac{$7,512}{}$$
 (Tot. cost/tot. units) × end. inv. units

C. 600 units in ending inventory.

Under LIFO, the units remaining are the ones purchased earliest.

C

$$1/1$$
 400 units @ 12.00 = \$4,800 1/1 units × 1/1 cost

$$\frac{1}{8}$$
  $\frac{200}{200}$  units @  $\frac{12.40}{200}$  =  $\frac{2,480}{200}$  ((1/31 units – 1/1 units) × 1/8 cost)

4.

		Market	Lower-of-Cost-		Lower-of-Cost-
	Cost/Unit	Value/Unit	or-Market	Units	or-Market
Cameras:					
Minolta	\$175	\$168	\$168	5	\$ 840
Canon	148	152	148	7	1,036
Light Meters:					
Vivitar	125	119	119	15	1,785
Kodak	120	135	120	10	1,200
Total					<u>\$4,861</u>

#### 5. Answers to Matching

- 1. I 6. 2. E 7. F
- 3. B 8. H
- 4. G 9. D
- 5. A 10. J