**PRACTICE PROBLEMS AND SOLUTIONS – Class 12**

*From MyEducator Topic 7 (Inventory and the Cost of Sales)*



**15.** The LIFO inventory costing alternative results in paying the lowest taxes when prices are rising. With LIFO, the most current costs (and the most expensive when prices are rising) flow to the income statement.



### PE 7–5 (LO2) Inventory Purchases

1.

Perpetual

Inventory 37,500

Accounts Payable 37,500



### PE 7–6 (LO2) Transportation Costs

1.

Perpetual

Inventory 920

Cash 920



PE 7–7 (LO2) Purchase Returns

1.

Perpetual

Accounts Payable 3,000

Inventory 3,000

Returned 20 tables costing $150 each; 20 × $150 = $3,000.



### PE 7–8 (LO2) Purchase Discounts

1.

Perpetual

Accounts Payable 34,500

Inventory 690

Cash 33,810

Paid for 230 tables [(250 purchased – 20 returned) × $150 = $34,500] with a 2% discount ($34,500 × 0.02 = $690).



### PE 7–9 (LO2) Sales

1.

Perpetual

Accounts Receivable 14,000

Sales (70 × $200) 14,000

Cost of Goods Sold 10,570

Inventory (70 × $151) 10,570

Cost per table

Initial cost $150 per table

Transportation $920/(250 tables – 20 tables returned) = $920/230 tables =

$4 per table

Discount $690/230 tables = $3 per table

Total $150 + $4 – $3 = $151 per table



PE 7–10 (LO2) Sales Returns

1.

Perpetual

Sales Returns (6 × $200) 1,200

Accounts Receivable 1,200

Inventory (6 × $151) 906

Cost of Goods Sold 906

For computation of the cost per table, refer to PE 7–9.



### PE 7–12 (LO3) Inventory Shrinkage

Inventory Shrinkage 3,500

Inventory ($182,000 – $178,500) 3,500



PE 7–15 (LO4) Specific Identification Inventory Cost Flow

Cameras Costs

Beginning inventory 8 $ 800

Net purchases 34 4,000

Goods available for sale 42 $4,800

Ending inventory 16 1,755

Cost of goods sold 26 $3,045

1. Cost of goods sold calculation:

4 cameras from beginning inventory, $100 each $ 400

5 cameras purchased October 3, $110 each 550

3 cameras purchased on October 14, $115 each 345

14 cameras purchased on October 20, $125 each 1,750

Total cost of goods sold (26 units) $3,045

2. Ending inventory calculation:

4 cameras from beginning inventory, $100 each $ 400

7 cameras purchased on October 3, $110 each 770

4 cameras purchased on October 14, $115 each 460

1 camera purchased on October 20, $125 125

Total ending inventory (16 units) $1,755



### PE 7–16 (LO4) FIFO Cost Flow Assumption

Cameras Costs

Beginning inventory 8 $ 800

Net purchases 34 4,000

Goods available for sale 42 $4,800

Ending inventory 16 1,990

Cost of goods sold 26 $2,810

1. FIFO Cost of goods sold calculation (oldest 26 units):

8 cameras from beginning inventory, $100 each $ 800

12 cameras purchased October 3, $110 each 1,320

6 cameras purchased on October 14, $115 each 690

Total cost of goods sold (26 units) $2,810

2. FIFO Ending inventory calculation (newest 16 units):

1 camera purchased on October 14, $115 $ 115

15 cameras purchased on October 20, $125 each 1,875

Total ending inventory (16 units) $1,990



PE 7–17 (LO4) LIFO Cost Flow Assumption

Cameras Costs

Beginning inventory 8 $ 800

Net purchases 34 4,000

Goods available for sale 42 $4,800

Ending inventory 16 1,680

Cost of goods sold 26 $3,120

1. LIFO Cost of goods sold calculation (newest 26 units):

4 cameras purchased October 3, $110 each $ 440

7 cameras purchased October 14, $115 each 805

15 cameras purchased on October 20, $125 each 1,875

Total cost of goods sold (26 units) $3,120

2. LIFO Ending inventory calculation (oldest 16 units):

8 cameras from beginning inventory, $100 each $ 800

8 cameras purchased October 3, $110 each 880

Total ending inventory (16 units) $1,680



### PE 7–18 (LO4) Average Cost Flow Assumption

Cameras Costs

Beginning inventory 8 $ 800

Net purchases 34 4,000

Goods available for sale 42 $4,800

($4,800/42 units) = $114.286 per unit

1. Average cost of goods sold: 26 units × $114.286 per unit = $2,971 (rounded)

2. Average ending inventory: 16 units × $114.286 per unit = $1,829 (rounded)



### E 7–23 (LO2) Recording Sales Transactions—Perpetual Inventory Method

June 24 Accounts Receivable 75,000

Sales Revenue 75,000

Cost of Goods Sold 45,000

Inventory 45,000

*Sold merchandise to Emily Clark, terms 2/10,*

*n/30 (cost is $75,000 × 0.60 = $45,000).*

30 Cash 39,200

Sales Discounts 800

Accounts Receivable 40,000

*Received partial payment from Emily Clark*

*(discount is $40,000* × *0.02 = $800).*

June 30 Sales Returns 10,000

Accounts Receivable 10,000

Inventory 6,000

Cost of Goods Sold 6,000

*Accepted return of merchandise that*

*originally sold for $10,000*

*(cost is $10,000* × *0.60 = $6,000).*



### E 7–24 (LO2) Perpetual Inventory Method

Oct. 2 Inventory 27,650

Accounts Payable 27,000

Cash 650

5 Accounts Receivable 8,250

Sales Revenue 8,250

Cost of Goods Sold 4,900

Inventory 4,900

10 Accounts Payable 13,950

Inventory 279\*

Cash 13,671

\*($13,950 × 0.02 = $279)

14 Accounts Payable 1,100

Inventory 1,100

19 Cash 4,560

Accounts Receivable 4,560

20 Accounts Payable 11,950\*

Cash 11,950

\*($27,000 – $13,950 – $1,100)

22 Accounts Receivable 5,200

Sales Revenue 5,200

Cost of Goods Sold 3,800

Inventory 3,800

E 7–24 (LO2) (Concluded)

Oct. 24 Sales Returns 3,250

Cash 3,250

Inventory 1,800

Cost of Goods Sold 1,800

Beginning inventory $12,000

27,650

(4,900)

(279)

(1,100)

(3,800)

1,800

Ending inventory $31,371



### E 7–33 (LO4) Inventory Costing Methods

1. LIFO

2. LIFO

3. FIFO

4. Average cost

5. LIFO



### E 7–35 (LO4) FIFO, LIFO, and Average Cost Calculations (Periodic Inventory Method)

(a) FIFO

Cost of goods sold 40 computers at $1,350 = $54,000

Cost of goods available for sale $150,100

Less cost of goods sold 54,000

Ending inventory $ 96,100

Cost of goods available for sale:

Beginning inventory 60 computers at $1,350 = $ 81,000

Nov. 5 Purchase 14 computers at $1,400 = 19,600

11 Purchase 12 computers at $1,500 = 18,000

24 Purchase 18 computers at $1,750 = 31,500

Cost of goods available for sale $150,100

(b) LIFO

Cost of goods sold 18 computers at $1,750 = $31,500

12 computers at $1,500 = 18,000

10 computers at $1,400 = 14,000

$63,500

Cost of goods available for sale $150,100

Less cost of goods sold 63,500

Ending inventory $ 86,600

E 7–35 (LO4) (Concluded)

(c) Average Cost

Units

Model B computers available for sale 104 (60 + 14 + 12 + 18)

Model B computers sold 40

Model B computers ending inventory 64

Average Cost =  = $1,443.27 per computer (rounded)

Cost of goods sold 40 computers at $1,443.27 = $57,731

Ending inventory 64 computers at $1,443.27 = $92,369



### P 7–42 (LO4) Inventory Cost Flow Alternatives

1. a. FIFO

Beginning inventory units 460

Purchase, January 16 110

Purchase, February 16 105

Purchase, March 10 150

Total units available 825

Units sold:

January 25 (216)

February 27 (307)

March 30 (190)

Total units sold (713)

Ending inventory 112

Units Total Cost

Ending inventory 112 (at $28) $3,136

Cost of goods sold: Units Total Cost

Beginning inventory 460 (at $30) $13,800

Purchase, January 16 110 (at $32) 3,520

Purchase, February 16 105 (at $36) 3,780

Purchase, March 10 38 (at $28) 1,064

713 $22,164

*Or:*

Cost of goods available for sale $25,300

Less ending inventory 3,136

Cost of goods sold $22,164

Gross margin:

Sales revenue $31,500\*

Less cost of goods sold 22,164

Gross margin $ 9,336

\*Sales revenue:

216 at $45 = $ 9,720

307 at 40 = 12,280

190 at 50 = 9,500

$31,500

P 7–42 (LO4) (Continued)

b. LIFO

Units Total Cost

Ending inventory 112 (at $30) $3,360

Cost of goods sold: Units Total Cost

Purchase, March 10 150 (at $28) $ 4,200

Purchase, February 16 105 (at $36) 3,780

Purchase, January 16 110 (at $32) 3,520

Beginning inventory 348 (at $30) 10,440

713 $21,940

*Or:*

Cost of goods available for sale $25,300

Less ending inventory 3,360

Cost of goods sold $21,940

Gross margin:

Sales revenue $31,500

Less cost of goods sold 21,940

Gross margin $ 9,560

c. Average cost

Units Total Cost

Beginning inventory 460 (at $30) $13,800

Purchase, January 16 110 (at $32) 3,520

Purchase, February 16 105 (at $36) 3,780

Purchase, March 10 150 (at $28) 4,200

825 $25,300

 = $30.67 average cost (rounded)

Ending inventory:

112 at $30.67 = $3,435

Cost of goods sold:

Cost of goods available for sale $25,300

Less ending inventory 3,435

Cost of goods sold $21,865

Gross margin:

Sales revenue $31,500

Less cost of goods sold 21,865

Gross margin $ 9,635

P 7–42 (LO4) (Concluded)

2. In this case, the average cost alternative results in the highest gross margin. The reason for this unusual result is that prices are neither going up nor going down consistently, but are moving randomly in both directions. Since the highest costs are the average costs (not the earliest or latest), the average cost alternative keeps more of these costs in inventory than do the other two alternatives.



### P 7–43 (LO4) Periodic Inventory Cost Flow Method

1. FIFO

Cases remaining 4,370

Cost of goods available for sale:

5,100 at $10.50 $ 53,550

1,210 at $12.00 14,520

1,050 at $12.50 13,125

2,120 at $13.00 27,560

9,480 $108,755

Cost of goods sold:

5,100 cases at $10.50 = $53,550

10 cases at $12.00 = 120

$53,670

Cost of goods available for sale $108,755

Cost of goods sold 53,670

Ending inventory $ 55,085

2. LIFO

Cost of goods sold:

2,120 cases at $13.00 = $27,560

1,050 cases at $12.50 = 13,125

1,210 cases at $12.00 = 14,520

730 cases at $10.50 = 7,665

$62,870

Cost of goods available for sale $108,755

Cost of goods sold 62,870

Ending inventory $ 45,885

3. Average cost

Cost of goods available for sale $108,755

Total units available ÷ 9,480

Average cost per unit $ 11.47

Cost of goods sold: $11.47 × 5,110 = $58,612

Ending inventory: $108,755 – $58,612 = $50,143