CHAPTER 6

SOLUTIONS TO EXERCISES—SET B

EXERCISE 6-1B

Ending inventory—physical count $255,000

1. Add to inventory: Title passed to Markham when goods

were shipped 22,000

2. No effect—title does not transfer to Markham until

goods are received 0

3. No effect—title passes to purchaser upon shipment

when terms are FOB shipping point 0

4. Add to inventory: Title remains with Markham until

purchaser receives goods 42,000

5. The goods did not arrive prior to year-end. The goods,

therefore, cannot be included in the inventory   (41,000)

Correct inventory $278,000

EXERCISE 6-2B

Ending inventory—as reported $550,000

1. No effect—title does not pass to Hobson until

goods are received (Jan. 3) 0

2. Subtract from inventory: The goods belong to

Discland Corporation. Hobson is merely holding

them as a consignee (170,000)

3. Subtract from inventory: Office supplies should

be carried in a separate account. They are not

considered inventory held for resale (21,000)

4. Add to inventory: The goods belong to Hobson

until they are shipped (Jan. 1) 19,000

5. Add to inventory: Gavin ordered goods

with a cost of $6,000. Hobson should record the

corresponding sales revenue of $10,000. Hobson’s

decision to ship extra “unordered” goods does not

constitute a sale. The manager’s statement that Gavin

could ship the goods back indicates that Hobson knows

this over-shipment is not a legitimate sale. The manager

acted unethically in an attempt to improve Hobson’s

reported income by over-shipping 30,000

6. Subtract from inventory: GAAP require that inventory

be valued at the lower of cost or market. Obsolete parts

should be adjusted from cost to zero if they have no

other use. (27,000)

Correct inventory $381,000

EXERCISE 6-3B

(a) FIFO Cost of Goods Sold

(#1012) $80 + (#1045) $70 = $150

(b) It could choose to sell specific units purchased at specific costs if it wished to impact earnings selectively. If it wished to minimize earnings it would choose to sell the units purchased at higher costs—in which case the Cost of Goods Sold would be $150. If it wished to maximize earnings it would choose to sell the units purchased at lower costs—in which case the cost of goods sold would be $135.

(c) I recommend they use the FIFO method because it produces a more appropriate balance sheet valuation and reduces the opportunity to manipulate earnings.

(The answer may vary depending on the method the student chooses.)

EXERCISE 6-4B

FIFO

Beginning inventory (20 X $120) $ 2,400

Purchases

July 12 (35 X $125) $4,375

July 19 (15 X $128) 1,920

July 26 (40 X $130) 5,200 11,495

Cost of goods available for sale 13,895

Less: Ending inventory (22 X $130) 2,860

Cost of goods sold $11,035

EXERCISE 6-4B (Continued)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Proof | | | | | | |
|  |  |  |  |  |  |  |
| Date |  | Units |  | Unit Cost |  | Total Cost |
| 7/1 |  | 20 |  | $120 |  | $ 2,400 |
| 7/12 |  | 35 |  | 125 |  | 4,375 |
| 7/19 |  | 15 |  | 128 |  | 1,920 |
| 7/26 |  | 18 |  | 130 |  | 2,340 |
|  |  | 88 |  |  |  | $11,035 |

LIFO

Cost of goods available for sale $13,895

Less: Ending inventory (20 X $120) $2,400 (2 X $125) 250 2,650

Cost of goods sold $11,245

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Proof | | | | | | |
|  |  |  |  |  |  |  |
| Date |  | Units |  | Unit Cost |  | Total Cost |
| 7/26 |  | 40 |  | $130 |  | $ 5,200 |
| 7/19 |  | 15 |  | 128 |  | 1,920 |
| 7/12 |  | 33 |  | 125 |  | 4,125 |
|  |  | 88 |  |  |  | $11,245 |
|  |  |  |  |  |  |  |

EXERCISE 6-5B

FIFO

Beginning inventory (40 X $7) $ 280

Purchases

May 15 (32 X $10) $320

May 24 (45 X $11) 495 815

Cost of goods available for sale 1,095

Less: Ending inventory (32 X $11) 352

Cost of goods sold $ 743

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Proof | | | | | | |
|  |  |  |  |  |  |  |
| Date |  | Units |  | Unit Cost |  | Total Cost |
| 5/1 |  | 40 |  | $ 7 |  | $280 |
| 5/15 |  | 32 |  | 10 |  | 320 |
| 5/24 |  | 13 |  | 11 |  | 143 |
|  |  |  |  |  |  | $743 |

LIFO

Cost of goods available for sale $1,095

Less: Ending inventory (32 X $7) 224

Cost of goods sold $ 871

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Proof | | | | | | |
|  |  |  |  |  |  |  |
| Date |  | Units |  | Unit Cost |  | Total Cost |
| 5/24 |  | 45 |  | $11 |  | $495 |
| 5/15 |  | 32 |  | 10 |  | 320 |
| 5/1 |  | 8 |  | 7 |  | 56 |
|  |  |  |  |  |  | $871 |

EXERCISE 6-6B

(a) FIFO

Beginning inventory (250 X $7) $1,750

Purchases

June 12 (325 X $8) $2,600

June 23 (475 X $9) 4,275 6,875

Cost of goods available for sale 8,625

Less: Ending inventory (130 X $9)    1,170

Cost of goods sold $7,455

LIFO

Cost of goods available for sale $8,625

Less: Ending inventory (130 X $7) 910

Cost of goods sold $7,715

Average Cost

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Cost of Goods  Available for Sale  $8,625 | ÷ | Total Units  Available for Sale  1,050 | = | Weighted Average  Unit Cost  $8.2143 |

Ending inventory (130 X $8.2143) $1,068

Cost of goods sold (920 X $8.2143) $7,557

EXERCISE 6-6B (Continued)

(b) The FIFO method will produce the higher ending inventory because costs have been rising. Under this method, the earliest costs are assigned to cost of goods sold and the latest costs remain in ending inventory. For Tevis Company, the ending inventory under FIFO is $1,170 or (130 X $9) compared to $910 or (130 X $7) under LIFO and $1,068 or (130 x 8.2143) under average-cost.

(c) The LIFO method will produce the higher cost of goods sold for Tevis Company. Under LIFO the most recent costs are charged to cost of goods sold and the earliest costs are included in the ending inventory. The cost of goods sold is $7,715 or [$8,625 – (130 X $7)] compared to $7,455 or ($8,625 – $1,170) under FIFO or $7,557 or (920 X 8.2143) under average-cost.

(d) The average-cost method uses a weighted-average unit cost, not a simple average of unit costs.

EXERCISE 6-7B

(a) 1. FIFO

Beginning inventory $ 8,000

Purchases   33,000

Cost of goods available for sale 41,000

Less: Ending inventory (80 X $110) (8,800)

Cost of goods sold $32,200

2. LIFO

Beginning inventory $ 8,000

Purchases   33,000

Cost of goods available for sale 41,000

Less: Ending inventory (80 X $80)    (6,400)

Cost of goods sold $34,600

3. AVERAGE

Beginning inventory $ 8,000

Purchases   33,000

Cost of goods available for sale 41,000

Less: Ending inventory (80 X $102.50)   (8,200)

Cost of goods sold $32,800

(b) The use of FIFO would result in the highest net income since the earlier lower costs are matched with revenues.

EXERCISE 6-7B (Continued)

(c) The use of FIFO would result in inventories approximating current cost in the balance sheet, since the more recent units are assumed to be on hand.

(d) The use of LIFO would result in Eaton paying the least taxes in the first year since income will be lower.

EXERCISE 6-8B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | 2022 |  | 2021 |
|  |  |  |  |  |

Beginning inventory $ 41,000 $ 40,000

Cost of goods purchased 200,000   235,000

Cost of goods available for sale 241,000 275,000

Less: Corrected ending inventory 49,000a 41,000b

Cost of goods sold $192,000 $234,000

a$40,000 + $9,000 = $49,000. b$45,000 - $4,000 = $41,000.

EXERCISE 6-9B

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| (a) |  |  | 2022 |  | 2021 |

Sales revenue $300,000 $350,000

Cost of goods sold

Beginning inventory 48,000 40,000

Cost of goods purchased   186,000   217,000

Cost of goods available for sale 234,000 257,000

Ending inventory ($55,000 – $7,000)     34,000 48,000

Cost of goods sold 200,000 209,000

Gross profit $ 100,000 $ 141,000

(b) The cumulative effect on total gross profit for the two years is zero as shown below:

Incorrect gross profits: $148,000 + $93,000 = $241,000

Correct gross profits: $141,000 + $100,000 = 241,000

Difference $ 0

EXERCISE 6-9B (Continued)

(c) Dear Mr./Ms. President:

Because your ending inventory of December 31, 2021 was overstated by $7,000, your net income for 2021 was overstated by $7,000. For 2022 net income was understated by $7,000.

In a periodic system, the cost of goods sold is calculated by deducting the cost of ending inventory from the total cost of goods you have available for sale in the period. Therefore, if this ending inventory figure is overstated, as it was in December 2021, then the cost of goods sold is understated and therefore net income will be overstated by that amount. Consequently, this overstated ending inventory figure goes on to become the next period’s beginning inventory amount and is a part of the total cost of goods available for sale. Therefore, the mistake repeats itself in the reverse.

The error also affects the balance sheet at the end of 2021. The inven­tory reported in the balance sheet is overstated; therefore, total assets are overstated. The overstatement of the 2021 net income results in the Retained Earnings account balance being overstated. The balance sheet at the end of 2022 is correct because the overstatement of the Retained Earnings account at the end of 2021 is offset by the understatement of the 2022 net income and the inventory at the end of 2022 is correct.

Thank you for allowing me to bring this to your attention. If you have any questions, please contact me at your convenience.

Sincerely,

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| EXERCISE 6-10B |  | Cost |  | NRV |  | Lower of Cost or NRV |
| Cameras |  |  |  |  |  |  |
| Minolta |  | $ 900 |  | $1,000 |  | $ 900 |
| Canon |  | 960 |  | 930 |  | 930 |
| Total |  | 1,860 |  | 1,930 |  |  |
|  |  |  |  |  |  |  |
| Light meters |  |  |  |  |  |  |
| Vivitar |  | 1,320 |  | 1,440 |  | 1,320 |
| Kodak |  | 1,820 |  | 1,610 |  | 1,610 |
| Total |  | 3,140 |  | 3,050 |  |  |
| Total inventory |  | $5,000 |  | $4,980 |  | $4,760 |

EXERCISE 6-11B

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Cost |  | NRV |  | Lower  of Cost  or NRV: |
| Cameras |  | $11,000 |  | $10,000 |  | 10,000 |
| DVD players |  | 21,000 |  | 19,500 |  | 19,500 |
| iPods |  | 22,500 |  | 24,000 |  | 22,500 |
| Total inventory |  | $54,500 |  | $53,500 |  | $52,000 |

EXERCISE 6-12B

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 2020 | | |  | 2021 | | | |  | 2022 | | |
|  |  |  | | |  |  | | | |  |  | | |
| Inventory  turnover |  | $1,400,000 | | |  | $1,440,000 | | | |  | $1,740,000 | | |
| ($120,000 + $280,000) ÷ 2 | | | ($280,000 + $200,000) ÷ 2 | | | | ($200,000 + $400,000) ÷ 2 | | |
|  |  |  | | |  |  | | | |  |  | | |
|  |  | $1,400,000 | = 7.0 times | |  | $1,440,000 | | = 6.0 times | |  | $1,740,000 | = 5.8 times | |
| $200,000 | $240,000 | | $300,000 |
|  |  |  | | |  |  | | | |  |  | | |
| Days in  inventory |  | 365 | = 52.1 days | |  | 365 | = 60.8 days | | |  | 365 | = 62.9 days | |
| 7.0 | 6.0 | 5.8 |
|  |  |  | | |  |  | | | |  |  | | |
| Gross  profit rate |  | $2,000,000 – $1,400,000 | | = .30 |  | $2,400,000 – $1,440,000 | | | = .40 |  | $3,000,000 – $1,740,000 | | = .42 |
| $2,000,000 | | $2,400,000 | | | $3,000,000 | |

The inventory turnover ratio decreased by approximately 17% from 2020 to 2022 while the days in inventory increased by almost 21% over the same time period. Both of these changes would be considered negative since it’s better to have a higher inventory turnover with a correspondingly lower days in inventory. However, Megan’s Photoshop’s gross profit rate increased by 40% from 2020 to 2022, which is a positive sign.

EXERCISE 6-13B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| (a) |  | Brady Company |  | Perez Company |
| Inventory Turnover |  | $280,000 |  | $394,000 |
|  |  | ($55,000 + $75,000)/2 = 4.31 times |  | ($82,000 + $88,000)/2 = 4.64 times |
|  |  |  |  |  |
| Days in Inventory |  | 365/4.31 = 85 days |  | 365/4.64 = 79 days |

(b) Perez Company is moving its inventory more quickly, since its inventory turnover is higher, and its days in inventory is lower.

\*EXERCISE 6-14B

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (1) | FIFO | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Date |  | Purchases | | |  | Cost of Goods Sold | | |  | Balance | | |
|  | Jan. 1 |  |  | | |  |  | | |  | (3 @ $500) $1,500 | | |
|  | 8 |  |  | | |  | (2 @ $500) $1,000 | | |  | (1 @ $500) 500 | | |
|  | 10 |  | (6 @ $640) $3,840 | | |  |  | | |  | (1 @ $500) | | |
|  |  |  |  | | |  |  | | |  | (6 @ $640) 4,340 | | |
|  | 15 |  |  | | |  | (1 @ $500) | | |  |  | | |
|  |  |  |  | | |  | (3 @ $640) $2,420 | | |  | (3 @ $640) 1,920 | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (2) | LIFO | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Date |  | Purchases | | |  | Cost of Goods Sold | | |  | Balance | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Jan. 1 |  |  | | |  |  | | |  | (3 @ $500) $1,500 | | |
|  | 8 |  |  | | |  | (2 @ $500) $1,000 | | |  | (1 @ $500) 500 | | |
|  | 10 |  | (6 @ $640) $3,840 | | |  |  | | |  | (1 @ $500) | | |
|  |  |  |  | | |  |  | | |  | (6 @ $640) 4,340 | | |
|  | 15 |  |  | | |  | (4 @ $640) $2,560 | | |  | (1 @ $500) | | |
|  |  |  |  | | |  |  | | |  | (2 @ $640) 1,780 | | |

\*EXERCISE 6-15B (Continued)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (3) | AVERAGE-COST | | | | | | |
|  | Date |  | Purchases |  | Cost of Goods Sold |  | Balance |
|  | Jan. 1 |  |  |  |  |  | (3 @ $500) $1,500 |
|  | 8 |  |  |  | (2 @ $500) $1,000 |  | (1 @ $500) 500 |
|  | 10 |  | (6 @ $640) $3,840 |  |  |  | (7 @ $620)\* 4,340 |
|  | 15 |  |  |  | (4 @ $620) $2,480 |  | (3 @ $620) 1,860 |

\*Average-cost = ($500 + $3,840) ÷ 7 = $620

\*EXERCISE 6-15B

(a) The cost of goods available for sale is:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| June 1 Inventory |  | 250 @ $7 |  | $1,750 |
| June 12 Purchase |  | 325 @ $8 |  | 2,600 |
| June 23 Purchase |  | 475 @ $9 |  | 4,275 |
| Total cost of goods available for sale | | |  | $8,625 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| FIFO | | | | | | | | | |
| Date |  | Purchases |  | Cost of Goods Sold | |  | Balance | | |
| June 1 |  |  |  |  |  |  | (250 @ $7) |  | $1,750 |
| June 12 |  | (325 @ $8) $2,600 |  |  |  |  | (250 @ $7) | } | $4,350 |
|  |  |  |  |  |  |  | (325 @ $8) |
| June 15 |  |  |  | (250 @ $7) | $1,750 |  |  |  |  |
|  |  |  |  | (175 @ $8) | 1,400 |  | (150 @ $8) |  | $1,200 |
|  |  |  |  |  |  |  | (150 @ $8) | } | $5,475 |
| June 23 |  | (475 @ $9) $4,275 |  |  |  |  | (475 @ $9) |
|  |  |  |  |  |  |  |  |  |  |
| June 27 |  |  |  | (150 @ $8) | 1,200 |  | (130 @ $9) |  | $1,170 |
|  |  |  |  | (345 @ $9) | 3,105 |  |  |  |  |
|  |  |  |  |  | $7,455 |  |  |  |  |

Ending inventory: $1,170. Cost of goods sold: $8,625 – $1,170 = $7,455.

\*EXERCISE 6-16B (Continued)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LIFO | | | | | | | | | |
| Date |  | Purchases |  | Cost of Goods Sold | |  | Balance | | |
| June 1 |  |  |  |  |  |  | (250 @ $7) |  | $1,750 |
| June 12 |  | (325 @ $8) $2,600 |  |  |  |  | (250 @ $7) | } | $4,350 |
|  |  |  |  |  |  |  | (325 @ $8) |
| June 15 |  |  |  | (325 @ $8) | $2,600 |  |  |  |  |
|  |  |  |  | (100 @ $7) | $ 700 |  | (150 @ $7) |  | $1,050 |
|  |  |  |  |  |  |  | (150 @ $7) | } | $5,325 |
| June 23 |  | (475 @ $9) $4,275 |  |  |  |  | (475 @ $9) |
|  |  |  |  | ( 20 @ $7) | 140 |  | (130 @ $7) | } | $ 910 |
| June 27 |  |  |  | (475 @ $9) | $4,275 |  |
|  |  |  |  |  | $7,715 |  |  |  |  |

Ending inventory: $910. Cost of goods sold: $8,625 – $910 = $7,715.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Moving-Average | | | | | | | |
| Date |  | Purchases |  | Cost of Goods Sold | |  | Balance |
| June 1 |  |  |  |  |  |  | (250 @ $7) $1,750 |
| June 12 |  | (325 @ $8) $2,600 |  |  |  |  | (575 @ $7.57) $4,350 |
| June 15 |  |  |  | (425 @ $7.57) | $3,217 |  | (150 @ $7.57) $1,133 |
| June 23 |  | (475 @ $9) $4,275 |  |  |  |  | (625 @ $8.65) $5,408 |
| June 27 |  |  |  | (495 @ $8.65) | $4,282 |  | (130 @ $8.65) $1,126 |
|  |  |  |  |  | $7,499 |  |  |

Ending inventory: $1,126. Cost of goods sold: $8,625 – $1,126 = $7,499.

(b) FIFO gives the same ending inventory and cost of goods sold values under both the periodic and perpetual inventory system. LIFO and average usually give different ending inventory and cost of goods sold values under the periodic and perpetual inventory systems, due to   
the Last-in, First-out assumption being applied to a different pool of costs.

(c) The simple average would be [($7 + $8 + $9) ÷ 3)] or $8. However, the average-cost method uses a weighted-average unit cost that changes each time a purchase is made rather than a simple average.

\*EXERCISE 6-16B

(a)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| FIFO | | | | | | | |
| Date |  | Purchases |  | Cost of Goods Sold | |  | Balance |
| 7/1 |  |  |  |  | |  | (20 @ $120) $2,400 |
| 7/5 |  |  |  | (10 @ $120) $1,200 | |  | (10 @ $120) $1,200 |
| 7/12 |  | (35 @ $125) $4,375 |  |  | |  | (10 @ $120) |
|  |  |  |  |  |  |  | (35 @ $125) $5,575 |
| 7/16 |  |  |  | (10 @ $120) | |  |  |
|  |  |  |  | (30 @ $125) $4,950 | |  | ( 5 @ $125) $ 625 |
| 7/19 |  | (15 @ $128) $1,920 |  |  |  |  | ( 5 @ $125) |
|  |  |  |  |  |  |  | (15 @ $128) $2,545 |
| 7/26 |  | (40 @ $130) $5,200 |  |  |  |  | ( 5 @ $125) |
|  |  |  |  |  |  |  | (15 @ $128) |
|  |  |  |  |  |  |  | (40 @ $130) $7,745 |
| 7/29 |  |  |  | ( 5 @ $125) |  |  |  |
|  |  |  |  | (15 @ $128) |  |  |  |
|  |  |  |  | (18 @ $130) $4,885 | |  | (22 @ $130) $2,860 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| LIFO | | | | | | | |
| Date |  | Purchases |  | Cost of Goods Sold | |  | Balance |
| 7/1 |  |  |  |  | | (20 @ $120) $2,400 | | |
| 7/5 |  |  |  | (10 @ $120) $1,200 | | (10 @ $120) $1,200 | | |
| 7/12 |  | (35 @ $125) $4,375 |  |  | | (10 @ $120) | | |
|  |  |  |  |  |  | (35 @ $125) $5,575 | | |
| 7/16 |  |  |  | (35 @ $125) | |  |  |
|  |  |  |  | ( 5 @ $120) $4,975 | | ( 5 @ $120) $ 600 | |
| 7/19 |  | (15 @ $128) $1,920 |  |  |  | ( 5 @ $120) | |
|  |  |  |  |  |  | (15 @ $128) $2,520 | |
| 7/26 |  | (40 @ $130) $5,200 |  |  |  | ( 5 @ $120) | |
|  |  |  |  |  |  | (15 @ $128) | |
|  |  |  |  |  |  | (40 @ $130) $7,720 | |
| 7/29 |  |  |  | (38 @ $130) | $4,940 | ( 5 @ $120) | |
|  |  |  |  |  | | (15 @ $128) $2,780 | |

( 2 @ $130)

\*EXERCISE 6-17B (Continued)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Average-Cost | | | | | | | |
| Date |  | Purchases |  | Cost of  Goods Sold | |  | Balance |
| 7/1 |  |  |  |  | |  | (20 @ $120) $2,400 |
| 7/5 |  |  |  | (10 @ $120) $1,200 | |  | (10 @ $120) $1,200 |
| 7/12 |  | (35 @ $125) $4,375 |  |  | |  | (45 @ $123.889\*) $5,575 |
| 7/16 |  |  |  | (40 @ $123.889) $4,956\* | |  | ( 5 @ $123.889\*) $ 619 |
| 7/19 |  | (15 @ $128) $1,920 |  |  |  |  | (20 @ $126.95) $2,539 |
| 7/26 |  | (40 @ $130) $5,200 |  |  |  |  | (60 @ $128.983\*) $7,739 |
| 7/29 |  |  |  | (38 @ $128.983) $4,901\* | |  | (22 @ $128.983) $2,838 |

\*Rounded

(b)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Periodic |  | Perpetual |
| Ending Inventory FIFO |  | $2,860 |  | $2,860 |
| Ending Inventory LIFO |  | $2,650 |  | $2,780 |

(c) FIFO yields the same ending inventory value under both the periodic and perpetual inventory system.

LIFO yields different ending inventory values when using the periodic versus perpetual inventory system.

\*EXERCISE 6-17B

(a) Sales revenue $1,000,000

Cost of goods sold

Inventory, November 1 $140,000

Cost of goods purchased 600,000

Cost of goods available for sale 740,000

Inventory, December 31 (120,000)

Cost of goods sold 620,000

Gross profit $ 380,000

Gross profit rate $380,000/$1,000,000 = 38%

\*EXERCISE 6-17B (Continued)

(b) Sales revenue $1,200,000

Less: Estimated gross profit (38% X $1,200,000) 456,000

Estimated cost of goods sold $ 744,000

Beginning inventory $ 120,000

Cost of goods purchased 700,000

Cost of goods available for sale 820,000

Less: Estimated cost of goods sold 744,000

Estimated cost of ending inventory $ 76,000

\*EXERCISE 6-18B

(a) Net sales ($105,000 – $5,000) $100,000

Less: Estimated gross profit (40% X $100,000) 40,000

Estimated cost of goods sold $ 60,000

Beginning inventory $ 30,000

Cost of goods purchased ($62,000 – $1,000 + $2,000) 63,000

Cost of goods available for sale 93,000

Less: Estimated cost of goods sold 60,000

Estimated cost of merchandise lost $ 33,000

(b) Net sales $100,000

Less: Estimated gross profit (30% X $100,000) 30,000

Estimated cost of goods sold $ 70,000

Beginning inventory $ 35,000

Cost of goods purchased 63,000

Cost of goods available for sale 98,000

Less: Estimated cost of goods sold 70,000

Estimated cost of merchandise lost $ 28,000

\*EXERCISE 6-19B

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Adult’s  Department | | |  | Kid’s  Department | | |
|  |  |  |  |  |  |  |  |  |
|  |  | Cost |  | Retail |  | Cost |  | Retail |
| Beginning inventory |  | $ 40,000 |  | $ 57,000 |  | $ 50,000 |  | $ 77,000 |
| Goods purchased |  | 100,000 |  | 143,000 |  | 145,000 |  | 223,000 |
| Goods available for sale |  | $140,000 |  | 200,000 |  | $195,000 |  | 300,000 |
| Net sales |  |  |  | 160,000 |  |  |  | 230,000 |
| Ending inventory at retail |  |  |  | $ 40,000 |  |  |  | $ 70,000 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Cost/retail ratio |  | $140,000 | = 70% |  | $195,000 | = 65% |
|  | $200,000 |  | $300,000 |

Estimated cost of ending

inventory $40,000 X 70% = $28,000 $70,000 X 65% = $45,500