

**Question:**

Hull Company's record of transactions concerning part X for the month of April was as follows.

Purchases Sales

April 1 (balance on hand) 100 @ \$5.00 April 5 300

4 400 @ 5.10 12 200

11 300 @ 5.30 27 800

18 200 @ 5.35 28 150

26 600 @ 5.60

30 200 @ 5.80

**Instructions**

(a) Compute the inventory at April 30 on each of the following bases. Assume that perpetual inventory records are kept in units only. Carry unit costs to the nearest cent.

(1) First-in, first-out (FIFO).

(2) Last-in, first-out (LIFO).

(3) Average-cost.

(b) If the perpetual inventory record is kept in dollars, and costs are computed at the time of each withdrawal, what amount would be shown as ending inventory in (1), (2), and (3) above? (Carry average unit costs to four decimal places.)

**Answer:**

(a)	Purchases		Sales	
	Total Units		Total Units	
	April 1 (balance on hand)	100	April 5	300
	April 4	400	April 12	200

April 11	300	April 27	800
April 18	200	April 28	<u>150</u>
April 26	600	Total units	<u>1,450</u>
April 30	<u>200</u>		
Total units	1,800		
Total units sold	<u>1,450</u>		
Total units (ending inventory)	<u>350</u>		

Assuming costs are not computed for each withdrawal:

1. First-in, first-out.

Date of Invoice	No. Units	Unit Cost	Total Cost
April 30	200	\$5.80	\$1,160
April 26	150	5.60	<u>840</u>
			<u>\$2,000</u>

2. Last-in, first-out.

Date of Invoice	No. Units	Unit Cost	Total Cost
April 1	100	\$5.00	\$ 500
April 4	250	5.10	<u>1,275</u>
			<u>\$1,775</u>

3. Average-cost.

Cost of Part X available.

Date of Invoice	No. Units	Unit Cost	Total Cost
April 1	100	\$5.00	\$ 500
April 4	400	5.10	2,040
April 11	300	5.30	1,590
April 18	200	5.35	1,070
April 26	600	5.60	3,360
April 30	<u>200</u>	5.80	<u>1,160</u>
Total Available	<u>1,800</u>		<u>\$9,720</u>

Average cost per unit =  $\$9,720 \div 1,800 = \$5.40$ .

Inventory, April 30 =  $350 \times \$5.40 = \$1,890$ .

(b) Assuming costs are computed for each withdrawal:

1. First-in, first out.

The inventory would be the same in amount as in part (a), \$2,000.

2.Last-in, first-out.

Date	Purchased		Sold		Balance*		
	No. of units	Unit cost	No. of units	Unit cost	No. of units	Unit cost	Amount
April 1	100	\$5.00			100	\$5.00	\$ 500
April 4	400	5.10			100	5.00	
					400	5.10	2,540
April 5			300	\$5.10	100	5.00	
					100	5.10	1,010
April 11	300	5.30			100	5.00	
					100	5.10	2,600
					300	5.30	
April 12			200	5.30	100	5.00	
					100	5.10	1,540
					100	5.30	
April 18	200	5.35			100	5.00	
					100	5.10	
					100	5.30	2,610
					200	5.35	
April 26	600	5.60			100	5.00	
					100	5.10	
					100	5.30	5,970
					200	5.35	

					600	5.60	
April 27			600 @	5.60			
			800	200 @	5.35		
					100	5.00	
					100	5.10	1,540
					100	5.30	
April 28			100 @	5.30	100	5.00	
			150	50 @	5.10	50	755
April 30	200	5.80			100	5.00	
					50	5.10	1,915
					200	5.80	

Inventory, April 30 is \$1,915.

\*The balance on hand is listed in detail after each transaction.

3. Average-cost.

Date	Purchased		Sold		Balance		
	No. of units	Unit cost	No. of units	Unit cost	No. of units	Unit cost*	Amount
April 1	100	\$5.00			100	\$5.0000	\$ 500.00
April 4	400	5.10			500	5.0800	2,540.00
April 5			300	\$5.0800	200	5.0800	1,016.00
April 11	300	5.30			500	5.2120	2,606.00
April 12			200	5.2120	300	5.2120	1,563.60
April 18	200	5.35			500	5.2672	2,633.60
April 26	600	5.60			1,100	5.4487	5,993.57
April 27			800	5.4487	300	5.4487	1,634.61
April 28			150	5.4487	150	5.4487	817.30
April 30	200	5.80			350	5.6494	1,977.30

Inventory, April 30 is \$1,977.33

\*Four decimal places are used to minimize rounding errors.

