

Day F01 (Principles of Accounting):**Chapter # 6**

- 1. (LO 2)** Englehart Company has the following inventory, purchases, and sales data for the month of March.

Inventory:	March 1	200 units @ \$4.00	\$ 800
Purchases:	March 10	500 units @ \$4.50	2,250
	March 20	400 units @ \$4.75	1,900
	March 30	300 units @ \$5.00	1,500
Sales:	March 15	500 units	
	March 25	400 units	

The physical inventory count on March 31 shows 500 units on hand.

Instructions

Under a **periodic inventory system**, determine the cost of inventory on hand at March 31 and the cost of goods sold for March under (a) FIFO, (b) LIFO, and (c) average-cost. (For average-cost, carry cost per unit to three decimal places.)

Cost of goods available for sale:

Particulars	Date	Details	Amount
Beg. Inventory	March 1	200 units @\$4.00	\$800
Purchase	March 10	500 units @\$4.50	2,250
	March 20	400 units @\$4.75	1,900
	March 30	300 units @\$5.00	1,500
Total units: 1,400 units Total Amount= \$6,450			

FIFO

Ending Inventory or inventory on hand

Date	units	Unit cost	Total cost
March 30	300	\$5.00	\$1,500
March 20	200	4.75	950
Total units: 500 units Total Amount: \$2,450			

COGS (Cost of goods sold): Cost of goods available for sale – Ending inventory

$$\text{COGS} = \$6,450 - \$2,450 = \$4,000$$

LIFO

Ending Inventory or inventory on hand

Date	Units	Unit Cost	Total Cost
March 1	200	\$4.00	\$800
March 10	300	4.50	1,350
Total Units: 500 Total Amount: \$2,150			

COGS (Cost of goods sold): Cost of goods available for sale – Ending inventory

$$\text{COGS} = \$6,450 - \$2,150 = \$4,300$$

Average Cost:

Cost of goods available for sale: \$6,450

Total available units: 1,400

Average unit cost = Cost of goods available for sale / Total available units

$$\text{Average unit Cost} = \$6,450 / 1,400 = \$4.607$$

$$\text{Cost of Ending Inventory} = 500 \text{ units} @ \$4.607 = \$2,303.500$$

$$\text{COGS} = \text{Cost of goods available for sale} - \text{Ending inventory} = \$6,450 - \$2,303.500 = \$4,146.500$$