Solution:

(1)

In any case, we note the following:

There is a purchase of 300 units worth $21,200, which is the net purchase.

The beginning inventory was 110 units worth $5,500.

Now we have sold 260 units for $26,200 and want to estimate the final inventory value of these 150 units.

Since we are using a periodic inventory system, we do not know what items were sold and when. Thus, we need to remove the appropriate inventory.

(a) Using LIFO, we consider the latest stock be sold. Thus, the earliest stock will be left and thus, the ending inventory valuation becomes:
a. 110 units of $50, and
b. 40 units of $60

(b) Using FIFO, we consider the earliest stock to be sold, which means that the latest stock will be remaining for sale and thus, the ending inventory valuation becomes:
a. 100 units of $80, and
b. 50 units of $70

(c) Using the weighted average method, we need to estimate the average cost of the goods. The cost of goods available for sale is given by $21,200 + $5,500 = $26,700 and the units available for sale are 410. Thus, the average value comes out to be

$$Average\ value\ of\ items = \frac{\$26{,}700}{410} = \$65.13$$

Thus, the ending inventory valuation becomes 150 units of $65.13 each.

So, by using these ending inventory valuation methods for each of the three methods, we can easily arrive at the gross profit statement for each of these methods.

The comparative statement is provided on the next page:

COMPARATIVE STATEMENT OF GROSS PROFIT
(Amounts are in $)

Particulars	FIFO		LIFO		Weighted Average	
Net Sales		26,200		26,200		26,200
Cost of Goods Sold:						
Purchase of Inventory	21,200		21,200		21,200	
Beginning Inventory	5,500		5,500		5,500	
Cost of Goods for Sale	26,700		26,700		26,700	
Deduct: End Inventory	(11,500)		(7,900)		(9,768.3)	
Net Cost of Goods Sold		15,200		18,800		16,931.7
Gross Profit		**11,000**		**7,400**		**9,268.3**

(2)

If we assume no other operating expenses, and no other income, then the total income will be equal to gross profit before taxes.

Thus, for LIFO it is $7,400 and for FIFO, it is $11,000.

There is a 40% tax rate on both, meaning that the savings on income tax using LIFO over FIFO will be:

$$Savings = 0.4 \times \$(11{,}000 - 7{,}400) = \$1{,}440$$

This is a significant savings in terms of income taxes!