

Solution:

The final inventory will have 200 units hence. Let's consider how the FIFO will be affected first.

Note that in FIFO, the earliest stock goes out first. So, the stock that enters the latest remains in the end stock itself.

These are, hence, the effects of the purchase on FIFO:

- Purchases increase by \$35,000 (since they are purchased.)
- End Inventory increase by \$35,000 (since they are latest stock so unsold.)

Thus, there is no net effect of these two on the cost of goods sold since they are equal and opposite. Thus, there is no change in the income and the taxes due to the purchase.

On the other hand, in LIFO, the latest stock goes out first. So, the stock that is the earliest remains in the end stock.

So, the effects of the purchase on LIFO are as follows:

- Purchases increase by \$35,000.
- End Inventory becomes $\$40,000 + \$50,000 = \$90,000$, an increase from \$65,000 by \$25,000.

Thus, we see that the effect of purchase is that the cost of goods sold increase by \$10,000 (since purchase is more than the end inventory valuation).

So, the income decreases by \$10,000, saving almost \$4,000 income taxes.