

## **Solution:**

(1)

The company uses LIFO. Let us try to understand the effect of buying the stock on the overall statement of Yokohama:

- Purchases increases by  $\$70 \times 15,000 = \$1,050,000$ .
- The ending inventory increases, but not proportionally. There will be  $4,500 + 15,000 = 19,500$  units in inventory. As per the principle of LIFO, the composition is expected as follows:
  - Layer One: 4,500 units @ \$40 (initial)
  - Layer Two: 2,500 units @ \$50
  - Layer Three: 12,500 units @ \$60
- This leads to around \$1,055,000 as ending inventory. Originally, it was just  $4,500 \times \$40 = \$180,000$ , leading to around \$875,000 increase in the ending inventory.

These two changes lead to increase of \$175,000 in the cost of goods sold, leading to \$175,000 decrease in the income.

Since tax is 45%, there will be a savings of  $0.45 \times \$175,000 = \$78,750$  from taxes.

Thus, almost \$80,000 is saved in taxes.

(2)

The stock should be kept and not to the seller back after the use. There are no ethical issues as the LIFO is considered legal in US.