Ex - 7(A)

1) Evaulate :

i) 55% of 160 + 24% of 50 − 36% of 150.

→ $\frac{55}{100} \times 160 + \frac{24}{100} \times 50 - \frac{36}{100} \times 150$

$= 88 + 12 - 54$

$= 100 - 54 = 46.$

ii) 9.3% of 500 − 4.8% of 250 − 2.5% of 240.

→ $\frac{93}{100 \times 10} \times 500 - \frac{48}{100 \times 10} \times 250 - \frac{25}{100 \times 10} \times 240$

$= \frac{93}{3} - 12 - 6 = \frac{93}{2} - \frac{18}{1} = \frac{93 - 36}{2} = \frac{57}{2}$

$= 28.5.$

(3) (i) A number is increased from 125 to 150; find the percentage increase.

→ Original number = 125

= Increased number = 150.

= Decrease in quantity = 150 - 125 = 25

$$= \frac{\text{Increase in quantity}}{\text{Original quantity}} \times 100$$

$$= \frac{25^{1}}{125_{5}} \times 100^{20} = 20\%.$$

(ii) A number is decreased from 135 to 100; find the percentage decrease.

= Original quantity = 135

= decreased number ~~or quantity~~ = 100

= decreased quantity = 135 - 100

= 125

$$= \frac{\text{Decrease in quantity}}{\text{Original quantity}} \times 100$$

$$= \frac{25^{1}}{125_{5}} \times 100^{20} = 20\%.$$

(3) Find;

(i) 45 is what percent of 54?

→ Let 45 = x% of 54.

$$= \frac{45}{1} = \frac{x}{100_{50}} \times 54^{27} = \frac{27x}{50}$$

$$= 45 \times 50 = 27x$$

$= x = \frac{45 \times 50}{27}$

So, $x = \frac{250}{3} = 83.3\%$.

(ii) 2.7 is what percent of 18?

= Let $2.7 = x\%$ of 18.

$= \frac{27}{10} = \frac{x}{100} \times 18 = \frac{9x}{50}$

$= 50 \times 27 = 10 \times 9x$

$= 50 \times 27 = 90x$

$= x = \frac{50 \times 27}{90} = \frac{1350}{90} = 15\%$.