No.: HW Date:

excercise 1(A)

1. Evaluate:

(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.

$= \frac{9.3 \times 10}{100 \times 10} = \frac{93}{1000} - \frac{4.8 \times 10}{100 \times 10} = \frac{48}{1000} - \frac{2.5 \times 10 \times 240}{100 \times 10}$

$= \frac{25}{1000} \times 240^{6}$

$= \frac{93}{1000} \times 500 - \frac{48}{1000} \times 250 - \frac{25}{1000} \times 240$

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

$= \frac{93 \times 1}{2 \times 1} \quad \frac{18 \times 2}{1 \times 2} = \frac{36}{2} \qquad = 28.5$

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

= Orginal number = 125
New number = 150 (after increase)

∴ Percentage increase = $\frac{\text{Difference of number}}{\text{orginal number}} \times 100$

No.: Date:

So, 150 - 125 = 25

$= \frac{25}{125} \times 100 \; 20 = \underline{20\%}$ of increase

(ii) A number decreased from 125 to 100; find the percentage decrease.

= Orginal number = 125
New number = 100

Decrease percentage = $\frac{\text{Difference}}{\text{orginal number}} \times 100$

$= \frac{125 - 100}{125} \times 100$

$= \frac{25}{125} \times 100 \; 20$

$= \underline{20\%}$ of decrease.

3. Find:

(i) 45 is what percent of 54?

= Let 45 = x% of 54

$= \frac{45}{1} = \frac{x}{50} \times 54 \; 27 = \frac{27x}{50}$

$= 45 \times 50 = 27x$

$= \frac{45 \times 50}{27} = x \qquad x = \frac{250}{3} = 83.3\%$

No.: Date:

(11) 2.7 is what percent of 18?

let 2.7 = x% of 18

$\frac{2.7}{1} \times \frac{10}{10} = \frac{27}{10}$

$2.7 = \frac{x}{100} \times 18 \quad 9 = \frac{9x}{50}$

50

$2.7 \times 50 = 9x$

$= \frac{2.7 \times 50}{9} = \frac{135}{9}$

$x = 15\%$