Percent & Percentage

Percent & Percentage Exercise 7A

17 Evaluate :

i) 55% of $160 + 24\%$ of $50 - 36\%$ of 150

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

$= 11 \times 8 + 12 - 18 \times 3 = 88 + 12 - 54 = 46$

ii) 9.3% of $500 - 4.8\%$ of $250 - 2.5\%$ of 240

$\frac{9.3}{100} \times 500 - \frac{4.8}{100} \times 250 - \frac{2.5}{100} \times 240$

$9.3 \times 5 - 1.2 \times 10 - 0.5 \times 12$

$= 46.5 - 12 - 6 = 46.5 - 18 = 28.5$

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

Original value $= 125$, New value $= 150$

Increase $= 150 - 125 = 25$

Increase % $= \frac{25}{125} \times 100 = 20\%$

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

Original value $= 125$, New value $= 100$

Decrease $= 125 - 100 = 25$

Decrease % $= \frac{25}{125} \times 100 = 20\%$

31 i) 45 is what percent of 54

Let $45 = x\%$ of $54 = \frac{54 \times x}{100}$

$\Rightarrow x = \frac{45}{54} \times 100 = 5 \times \frac{100}{6} = \frac{500}{6} = \frac{250}{3} = 83\frac{1}{3}\%$

Req. percentage $\Rightarrow 83\frac{1}{3}\%$.

(ii)

Exercise 7A

(iii) 2·7 is what percent of 18

= Let 2·7 = x % of 18 = $\frac{18 \times x}{100}$

$x = \frac{2 \cdot 7 \times 100}{18} = \frac{270}{18} = \frac{30}{2} = 15\%$

number, find the