Hlw

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Rev (Percent and percentage)

84 In Maths percent = $\frac{120}{150} \times 100 = 80\%$

In English " = $\frac{136}{200} \times 100 = 68\%$

" Science " = $\frac{108}{150} \times 100 = 72\%$

Total scored = 120 + 136 + 108 = 364

Maximum marks = 150 + 300 + 50 = 500

% = $\frac{364}{500} \times 100 = \frac{364}{5} = 72.8\%$

94 Let age of B = 100 yrs

Age of A = $100 + \frac{100 \times 25}{100} = 125$ yrs

Difference in age by which A is older than B

= 125 - 100 = 25 yrs

% by which B is younger than A =

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

10 (i) Increase : 180 by 25%.

New value : $180 + \frac{180 \times 25}{100}$

$= 180 + 45 = 225$

(ii) Decrease 140 by 18%.

New value $= 140 - \frac{140 \times 18}{100_5}$

$= 140 - \frac{126}{5}$

$= 140 - 25.2 = 114.8$

11) Total no. of votes polled

$= 29200 + 58800 + 72000 = 160000$

% of winning candidate.

$\frac{72000}{160000} \times 100 = 45\%$

12 (i) A number increased by 23%. becomes 861

Let the number $= x$

$x + 23\%$ of $x = 861$

$x + \frac{23}{100} x = 861$

$\therefore \frac{100u + 23u}{100} = 861$

$\therefore \frac{123u}{100} = \frac{861 \times 100}{125} = 700$

ii) A number decreased by 16% become 798

Let the no. = u

$u - 16\%$ of $u = 798$

$u - \frac{16u}{100} = 798$

$\therefore \frac{100u - 16u}{100} = 798$

$\therefore \frac{84u}{100} = 798$

$u = \frac{798 \times 100}{84} = \frac{1000}{7}$

$\begin{array}{r} 399 \\ 147 \\ 21 \\ 7 \end{array}$

13) Let the price of 4 in kg of sugar = ₹100

Increase price = 20%

New price = 100 + 20 = ₹120

₹120 ; sugar obtained = 4 kg

For ₹ 100, Sugar obtained = $\frac{4}{\cancel{20}\ 6} \times \cancel{100}$

$\frac{5u}{6}$ kg

Original consumption = 4kg

New consumption = $\cancel{5u}\ \frac{5u}{6}$ kg

decrease in ~~com~~ consumption = $4 - \frac{5u}{6} = \frac{u}{6}$

% decrease = $\frac{u}{6u} \times 100 = \frac{100^{50}}{\cancel{6}\ 3} = 16\frac{2}{3}\%$