



Percentage Ex 12.2 Q25

Answer :

Let Shalu's income be Rs x .

$$\therefore \text{Shikha's income} = \text{Rs} \left(x + \frac{60x}{100} \right) = \text{Rs} \frac{160x}{100} = \text{Rs} \frac{16x}{10}$$

$$\text{Difference in the incomes of Shikha and Shalu} = \frac{16x}{10} - x = \frac{16x - 10x}{10} = \text{Rs} \frac{6x}{10}$$

Percentage of the difference in the incomes of Shikha and Shalu to that of

$$\text{Shikha's income} = \frac{\frac{6x}{10}}{\frac{16x}{10}} \times 100 = \frac{600}{16} = 37.5\%$$

\therefore The income of Shalu is less than that of Shikha by 37.5%.

Percentage Ex 12.2 Q26

Answer :

Let x , y and z be the amounts received by the first, second and the third person, respectively.

We have :

$$x = 50\% \text{ of } y$$

$$= \frac{50}{100} y = \frac{1}{2} y$$

$$\therefore y = 2x$$

Again, $y = 50\% \text{ of } z$

$$= \frac{1}{2} z$$

$$\therefore z = 2y$$

$$= 2(2x)$$

$$= 4x$$

$$\text{Also, } x + y + z = 3500$$

Substituting the values of z and y , we get :

$$x + 2x + 4x = 3500$$

$$\Rightarrow 7x = 3500$$

$$\Rightarrow x = 500$$

$$\therefore y = 2x = 2(500)$$

$$= 1000$$

$$\therefore z = 4x = 4(500)$$

$$= 2000$$

Thus, the amounts received by the first, second and the third person are Rs 500, Rs 1000 and Rs 2000, respectively.

Percentage Ex 12.2 Q27

Answer :

Let the original price of the object be Rs x .

According to the question, we have

$$20\% \text{ of } x + x = 2000$$

$$\Rightarrow \frac{20x}{100} + x = 2000$$

$$\Rightarrow \frac{120}{100} x = 2000$$

$$\Rightarrow x = \frac{200000}{120}$$

$$\Rightarrow x = 1666.67$$

*****END*****