

4.10) 252 is 35% of a certain number, find the number.

Ans-

Let the number be  $x$ .

By the given conditions,

$$252 = \frac{x \times 35}{100} = \frac{x \times 7}{20}$$

$$x = \frac{252 \times 20}{7} = 36 \times 20 = 720$$

(ii) If 14% of a number is 315; find the number.

Let the no be  $x$

By the given condition,

$$315 = \frac{x \times 14}{100}$$

$$x = \frac{315 \times 100}{14} = \frac{45 \times 50 \times 100}{2} = 45 \times 50 = 2250$$

Hence required no = 2250

5. Find the percentage change, when a no is changed from:

(i) 80 to 100

Original number = 80

New number = 100.

$$\text{Change} = (100 - 80) = 20$$

Percentage change (increase)

$$= \frac{20}{80} \times 100 = 25\%$$

(ii) 100 to 80

Ans

Original number = 100

New number = ~~100~~ 80

$$\begin{aligned}\text{Change} &= 100 - 80 \\ &= 20\end{aligned}$$

$$\begin{aligned}\text{Percentage change (decrease)} &= \frac{20}{100} \times 100 \\ &= 20\%\end{aligned}$$

(iii) 6.25 to 7.50

Ans

Original no = 6.25

New no = 7.50

$$\begin{aligned}\text{change} &= 7.50 - 6.25 \\ &= 1.25\end{aligned}$$

$$\text{Percentage change (Increase)} = \frac{1.25}{6.25} \times 100$$

$$= \frac{125}{100} \times \frac{100}{6.25} \times 100$$

20

$$= \frac{5}{100} \times \frac{100}{\frac{625}{25}} \times \frac{20}{5}$$

$$= 20\%$$

6. An Auctioneer charges 8% for selling a house. If the house is sold for ₹ 2,30,500. Find the charges of the auctioneer.

Ans- Selling price of house = ₹ 2,30,500

Rate of charges of the auctioneer

= 8% of the selling price

$$= \frac{8}{100} \times 2,30,500$$

$$= 18,440$$

7. Out of 800 oranges, 50 are found rotten. Find the percentage of good oranges.

Ans- Rotten oranges = 50

$$\begin{aligned} \text{No of good oranges} &= 800 - 50 \\ &= 750 \end{aligned}$$

$$\text{Percentage of good oranges} = \frac{750}{800} \times 100$$

$$= \frac{750}{8} \times \frac{100}{100} = \frac{750 \times 25}{4} = \frac{18750}{4} = 4687.5\%$$

A cistern contains 5 thousand litres of water. If 6% water is leaked, find how many litres of water would be left in the cistern.

$$\text{Water in the cistern} = 5000 \text{ l}$$

$$\text{Quantity of water leaked} = \frac{6}{100} \times 5000$$

$$= 300 \text{ l}$$

Quantity of water left in the cistern

$$= (5000 - 300) \text{ l}$$

$$= 4700 \text{ l}$$

1. A man spends 87% of his salary. If he saves ₹ 325; find his salary.

Let salary be  $x$ .

$$\text{Expenditure} = \frac{87}{100} \times x$$

$$= ₹ \frac{87x}{100}$$

$$\text{Saving} = ₹ 325$$

$$\therefore x - \frac{87x}{100} = 325$$

$$\Rightarrow \frac{100x - 87x}{100} = 325$$

$$\Rightarrow \frac{13x}{100} = 325$$

$$\Rightarrow x = \frac{325 \times 100}{13}$$

$$\Rightarrow x = \frac{32500}{13}$$

$$\Rightarrow x = 2500$$

$$\therefore \text{Salary} = ₹ 2500$$