

Question 1.

Find the value of:

(i) 18% of ₹450 (ii) 14% of $16\frac{2}{3}$ kg

(iii) $27\frac{3}{4}$ % of ₹1200 (iv) $\frac{5}{8}$ % of 600 m

(v) $6\frac{1}{6}$ % of 1 hour 20 minutes

(vi) 0.6% of 5 km

Solution:

(i) 18% of ₹450

$$\begin{aligned} &= ₹\left(\frac{18}{100} \times 450\right) = ₹\left(\frac{8}{5} \times 45\right) \\ &= ₹(8 \times 9) = ₹81 \end{aligned}$$

(ii) 14% of $16\frac{2}{3}$ kg

$$= \text{kg}\left(\frac{14}{100} \times \frac{50}{3}\right) = \frac{7}{3} = 2\frac{1}{3} \text{ kg}$$

(iii) $27\frac{3}{4}$ % of ₹1200

$$= ₹\left(\frac{111}{4 \times 100} \times 1200\right) = \frac{133200}{400} = ₹333$$

(iv) $\frac{5}{8}\%$ of 600 m

$$= m \left(\frac{5}{8 \times 100} \times 600 \right) = \frac{3000}{800} = 3.75 \text{ m}$$

(v) $6\frac{1}{6}\%$ of 1 hour 20 minutes

1 hour 20 minutes = 80 minutes

$$= \left(\frac{37}{6 \times 100} \times 80 \right) \text{ min.} = 5 \text{ minutes}$$

(vi) 0.6% of 5 km

5 km = 5000 metres

$$= \left(\frac{6}{10 \times 100} \times 5000 \right) \text{ metres} = 30 \text{ metres}$$

Question 2.

In a class of 60 student, 45% are girls. Find the number of boys in the class.

Solution:

Total student = 60

% of girls = 45%

No. of boys = ?

No. of girls = $60 \times \frac{45}{100} = \frac{6 \times 45}{10} = 27$ girls

No. of boys = Total students – No. of girls = $60 - 27$
= 33 boys

Question 3.

Mr. Malkani saves 22% of his salary every month. If his salary is ₹ 12750 per month, what is his expenditure?

Solution:

Total salary = ₹ 12750

Saving = 22%

∴ Total savings = 22% of ₹ 12750

$$= ₹ 12750 \times \frac{22}{100} = ₹ 2805$$

∴ Total expenditure = ₹ 12750 – ₹ 2805 = ₹ 9945

Question 4.

On a rainy day, 94% of the students were present in a school, if the number of students absent on that day was 174, find the total strength of the school.

Solution:

Total % age of students = 100

Student present = 94%

Students absent = (100 – 94) = 6%

Let, the total number of students in school = x

$$6\% \text{ of } x = 174 \Rightarrow \frac{6}{100} \times x = 174$$

$$\Rightarrow x = 174 \times \frac{100}{6} \Rightarrow x = 29 \times 100 = 2900$$

∴ Total strength of the school = 2900