

Example 1: Change 55% into fraction.

Solution:

Here, 55%

$$= \frac{\quad}{100}$$

$$= \frac{11}{20} \quad [\text{canceling common factor}]$$

Example 2: Find 30 % of 500.

Solution:

Here, 30 % of 500

$$= \frac{30}{100} \times 500$$

$$= 150$$

$$\therefore 30 \% \text{ of } \dots\dots\dots = 150$$

Example 3: 20 % of what is 60?

Solution:

Let x be total amount.

According to question,

$$20 \% \text{ of } x = 60$$

$$\text{Or, } \frac{20}{100} \times x = 60$$

$$\text{Or, } x = \frac{60 \times \dots\dots\dots}{20}$$

Or, $x = \dots \dots \dots$

\therefore 20 % of 300 is 60.

Example 4: Out of 50 students in a class, 34 are boys. Find percent of girls in the class.

Solution:

Here total number of students = 50

Number of boys = 34

Percentage of girls = ?

We know,

$$\begin{aligned}\text{Number of girls} &= 50 - \dots\dots\dots \\ &= 16\end{aligned}$$

Now

$$\begin{aligned}\text{Percent of girls} &= \frac{\text{Number of girls}}{\text{Total students}} \times 100 \% \\ &= \frac{16}{50} \times 100 \% \\ &= 16 \times \dots\dots\dots \% \\ &= 32 \%\end{aligned}$$

\therefore There are 32 % girls in the class.

Example 5: Projwal secured 21 marks in 25 full marks and Nikes secured 41 in 50 full

marks. Compare their percentage marks.

Solution:

For Projwal

Full marks = 25

Marks obtained = 21

$$\text{Obtained percent} = \frac{\text{obtained marks}}{\text{full marks}} \times 100\%$$

$$= \frac{21}{25} \times 100\%$$

$$= 21 \times 4\%$$

$$= \dots\dots\dots \%$$

For Nikes

Full marks = 50

Marks obtained = 41

$$\text{Obtained percent} = \frac{\text{obtained marks}}{\text{full marks}} \times 100\%$$

$$= \frac{41}{50} \times 100\%$$

$$= \dots\dots\dots \times 2\%$$

$$= 82\%$$

∴ Projwal won Nikes by 2%.