

Percentages

A percentage is a fraction of 100, used to express ratios or comparisons. It is denoted by the symbol %.

Key Formulae :-

1. Finding Percentage of a Number.

$$P\% \text{ of } x = \frac{P}{100} \times x$$

2. Converting Fraction to Percentage

$$\frac{a}{b} \times 100$$

3. Percentage Change :-

$$\frac{\text{New Value} - \text{Old Value}}{\text{Old Value}} \times 100 \Rightarrow \text{Increase}$$

$$\frac{\text{Old Value} - \text{New Value}}{\text{Old Value}} \times 100$$

Problem 1:-

Find 25% of 640

$$\begin{aligned}
 \text{Solution :- } 25\% \text{ of } 640 &= \frac{25}{100} \times 640 \\
 &= 0.25 \times 640 \\
 &= 160
 \end{aligned}$$

Ans = 160

Problem 2:-

The price of a product increases from ₹800 to ₹960
find the percentage increase.

$$\begin{aligned}
 &= \frac{960 - 800}{800} \times 100 \\
 &= \frac{160}{800} \times 100 \\
 &= \frac{160}{8} \\
 &= 20\%
 \end{aligned}$$

Answer:- 20%