



মহাশিক্ষা বিভাগ (সি)
DEPARTMENT OF EDUCATION (S)

Government of Manipur

Chapter : 8

Comparing Quantities

NOTES:

Comparing Quantities

1. Ratio – $a : b = \frac{a}{b}$

e.g – $3 : 7 = \frac{3}{7}$

$8 : 1 = \frac{8}{1}$

And $3 : 9 = \frac{3}{9} = \frac{1}{3}$

$1 : 3 = \frac{1}{3}$

2. Equivalent Ratio : $\frac{5}{10}$ and $\frac{4}{8}$ are equivalent rational no. $\frac{5}{10} \times \frac{1}{2} = \frac{5}{20}$ and $\frac{4}{8} \times \frac{1}{2} = \frac{4}{16}$ [$\therefore \frac{1}{2} = \frac{1}{2}$]
i.e 5 : 10 and 4 : 8 are equivalent ratios.

PERCENTAGE

Percentage are numerators of fraction with denominator 100

Percent is derived from Latin words 'per centum' meaning 'per hundred'.

Percent is represented by the symbol % and means hundredths too, That is 1 % means 1 out of hundred or one hundredth.

It can be written as $1 \% = \frac{1}{100} = 0.01$

Increase or Decrease as per cent

Percentage increase or decrease = $\frac{\text{amount change}}{\text{original amount}} \times 100$

Cost price – The buying price of any item is known as its cost price. It is written in short as CP.

Selling Price – The price at which we sell is known as the selling price or in short SP.

Profit = SP – CP

Loss = CP – SP

- Profit percent = $\frac{\text{Profit}}{\text{CP}} \times 100$ * Profit = Profit % \times CP
- Loss percent = $\frac{\text{Loss}}{\text{CP}} \times 100$
- Amount = Principal + Interest
- Simple Interest = $\frac{PRT}{100}$

Here, P= Principal or Sum borrowed

R = Interest Rate

T = Time



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