Chapter : 8

Comparing Quantities

NOTES:

Comparing Quantities

1. Ratio – a : b = $\frac{a}{b}$
   e.g – 3 : 7 = $\frac{a}{b}$
   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. $\frac{5}{10}$ $\frac{1}{2}$ and $\frac{4}{8}$ $\frac{1}{2}$ [$\because \frac{1}{2} = \frac{1}{2}$]
   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 = $\frac{amount\ change}{original\ amount} \times 100$

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

  Here, P= Principal or Sum borrowed

  R = Interest Rate

  T = Time
