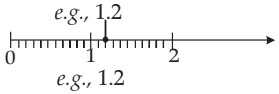
MIND MAP : LEARNING MADE SIMPLE CHAPTER-8

Decimals

Representing decimals on number line



1 + 2 tenths.

Take 2 parts after 1

Decimals place value

Thousands	Hundreds	Tens	Ones	Tenths	Hundred
1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$
2	7	5	6	0	9

e.g., 2756.09

Comparing decimals

- Like decimals
  - *e.g.*, 23.56 > 1.29
- Unlike decimals
  - 17.345, 8.7
  - *e.g.*, 17.345 > 8.700 (change to like)

Addition of decimals

e.g. 2.35 + 16.9

$$\begin{array}{r} 2.35 \\ +16.90 \\ \hline 19.25 \end{array}$$

Subtraction of decimals

e.g. 2.35 from 16.9

$$\begin{array}{r} 16.90 \\ -2.35 \\ \hline 14.55 \end{array}$$

Use of decimals in different units of measurement

- Money
  - 100 p = ₹ 1
  - 1 p = ₹ $\frac{1}{100}$
  - 1 p =₹ 0.01
  - 105 p = ₹ 1 + 5 p
    = ₹ 1 + ₹ $\frac{5}{100}$
    = ₹1+₹0.05
    = ₹1.05
- Weight
  - 1000g = 1 kg
  - 1 g = $\frac{1}{1000}$ kg
    = 0.001 kg
  - 25g = $\frac{25}{1000}$ =0.025kg
- Length
  - 10 mm = 1 cm
  - 1 mm = $\frac{1}{10}$ =0.1 cm
  - 100 cm = 1 m
  - 1 cm = $\frac{1}{100}$ =0.01 m
  - 1000m =1 km
  - 1 m = $\frac{1}{1000}$ =0.001 km

Decimals fractions

- Meaning
  - Fraction with denominator as 10, 100, 1000 *etc.*
- Example
  - $\frac{7}{10}, \frac{5}{100}, \frac{13}{1000}$, *etc*

Decimal has 2 parts

- Whole Number part *e.g.*,(25)
- Decimal part *e.g.*, (632)