# MIND MAP : LEARNING MADE SIMPLE

## CHAPTER-12

### Ratio and Proportion

**Proportion** — Equation stating two ratios are equal.

Means

a : b : : c : d

Extremes

Product of extremes = product of means.

ad = bc

**Ratio** — Comparing size of two quantities

By finding difference

Sachin's age = 8 years

His sister age = 4 years

Difference = 8 – 4 = 4 years

We can say Sachin is 4 years older than his sister.

By using division

$$\frac{\text{Sachin's age}}{\text{His sister age}} = \frac{8}{4} = \frac{2}{1}$$

Ratio is 2 : 1

: → is to

2 → antecedent

1 → consequent.

**Equivalent ratios**

*e.g.,* given ratio 2 : 3

Equivalent ratios $\frac{2\times2}{3\times2} = \frac{4}{6}$

$\frac{2\times3}{3\times3} = \frac{6}{9}$

**Unitary Method**

(i)Find the value of one unit

(ii)Then find the value of required number of units.

Simple rule used :

→ To get more — multiply

→ To get less — divide.