Revision

Chapter-13 Direct and Inverse Proportion

1) Ratios : Mean comparing quantities

2) Proportion : When two ratios $\left(\frac{a}{b} = \frac{c}{d}\right)$ are equal. then quantities a, b, c & d are said to be in proportion.

3) Direct Proportion :

Two quantities x & y are said to be in direct proportion if they increase or decrease together in such a manner that the ratio of their corresponding values remain constant.

$$\frac{x}{y} = k \text{ (constant)}$$

$$\therefore \boxed{\frac{x_1}{y_1} = \frac{x_2}{y_2}} = \frac{x_3}{y_3} = \frac{x_4}{y_4} \cdots$$

4) Inverse Proportion :

Two quantities x & y are said to be in inverse proportion if an increase in x causes a proportional decrease in y (and vice-versa) in such a manner that the product of their corresponding values remain constant.

i.e. $x \times y = k$ (constant)

$$\boxed{x_1 y_1 = x_2 y_2} = x_3 y_3 = x_4 y_4 \cdots$$