

- If two quantities are related in such a way that an increase in one quantity leads a corresponding increase in the other and vice versa, then this is a case of direct proportion.

$$\frac{x_1}{y_1} = \frac{x_2}{y_2}.$$

- If two quantities are related in such a way that an increase in one quantity leads a corresponding decrease in the other and vice versa, then this is a case of inverse proportion.

$$\frac{x_1}{x_2} = \frac{y_1}{y_2}.$$

