

Cheat Sheet

Average:

$$\text{Average of a list} = \frac{\text{sum of entries}}{\text{number of entries}}$$

Root Mean Square:

$$r.m.s. = \sqrt{\text{average of } (entries^2)}$$

Standard Deviation:

$$SD = \text{r.m.s. deviation from average}$$

Standard Units:

$$SU = \frac{\text{entry} - \text{average}}{SD}$$

Correlation coefficient:

$$r = \text{average of } (SUx \times SUy)$$

r.m.s. error for the regression line of y on x :

$$\sqrt{1 - r^2} \times SDy$$

Slope of regression line:

$$m = r \times \frac{SDy}{SDx}$$

Intercept of regression line:

$$b = \text{average of } y - \text{slope} \times \text{average of } x$$