

Here are several formulas you might find helpful:

$$\text{slope} = \frac{r \times \text{SD of } y}{\text{SD of } x}$$

$$\text{intercept} = \text{average of } y - (\text{average of } x \times \text{slope})$$

$$\text{r.m.s. error of regression} = \sqrt{1 - r^2} \times \text{SD of } y$$

$$\text{expected value} = (\text{average of box})$$

$$\text{SE} = \frac{(\text{SD of box})}{\sqrt{(\text{number of draws})}}$$

$$\text{SD for a big-small list} = (\text{big} - \text{small}) \times \sqrt{\text{fraction big} \times \text{fraction small}}$$

$$\text{SD for a 0-1 list} = \sqrt{\text{fraction 1s} \times \text{fraction 0s}}$$

$$z = \frac{\text{observed} - \text{expected}}{\text{SE}}$$