

Fórmulas – Estatística Descritiva

$$\bar{x} = \frac{\sum_{i=1}^n x_i}{n} \quad \bar{x} = \frac{\sum_{i=1}^k x_i \cdot F_i}{n}$$

$$M_o = l_i + \frac{h \cdot (F_i - F_{i-1})}{(F_i - F_{i-1}) + (F_i - F_{i+1})}$$

$$M_d = x_{I_p} + F_p \cdot (x_{I_{p+1}} - x_{I_p})$$

$$M_d = l_i + \frac{h \cdot (p - F_{a_{i-1}})}{F_i}$$

$$S_k = x_{I_p} + F_p \cdot (x_{I_{p+1}} - x_{I_p})$$

$$S_k = l_i + \frac{h \cdot (p - F_{a_{i-1}})}{F_i}$$

Fórmulas – Regressão Linear

$$S_{xx} = \sum_{i=1}^n (x_i - \bar{x})^2 = n \left(\sum_{i=1}^n x_i^2 \right) - \left(\sum_{i=1}^n x_i \right)^2$$

$$S_{yy} = \sum_{i=1}^n (y_i - \bar{y})^2 = n \left(\sum_{i=1}^n y_i^2 \right) - \left(\sum_{i=1}^n y_i \right)^2$$

$$S_{xy} = \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y}) = n \left(\sum_{i=1}^n x_i \cdot y_i \right) - \left(\sum_{i=1}^n x_i \right) \left(\sum_{i=1}^n y_i \right)$$

$$r = \frac{S_{xy}}{\sqrt{S_{xx} \cdot S_{yy}}}$$

$$\alpha = \frac{\sum y_i - \beta \sum x_i}{n}$$

$$\beta = \frac{n(\sum x_i y_i) - (\sum x_i)(\sum y_i)}{n(\sum x_i^2) - (\sum x_i)^2}$$