Formulario de Estadística Descriptiva

Datos no agrupados

$$\bar{x} = \frac{\sum_{i=1}^{n} X_i}{n} \quad s^2 = \frac{\sum_{i=1}^{n}\left(X_i - \bar{X}\right)^2}{n-1} \quad q_i = X_{\left(\frac{i(n+1)}{4}\right)} \quad p_i = X_{\left(\frac{i(n+1)}{100}\right)}$$

Datos agrupados

$$\bar{x} = \frac{\sum_{i=1}^{n} X_i}{n} \quad mediana = L_i + \frac{\left(\frac{n}{2}\right) - F_{i-1}}{f_i} * l \quad \mod a = L_i + \frac{\left(f_i - f_{i-1}\right)}{\left(f_i - f_{i-1}\right) + \left(f_i - f_{i+1}\right)} * l$$

$$s^2 = \frac{\sum_{i=1}^{n} f_i m_i^2 - \frac{\left(\sum_{i=1}^{n} f_i m_i\right)^2}{n}}{n-1}$$

$$q_i = L_i + \frac{i\left(\frac{n}{4}\right) - F_{i-1}}{f_i} * l \qquad p_i = L + \frac{i\left(\frac{n}{100}\right) - F_{i-1}}{f_i} * l$$