# Formulário

## Estatística Descritiva

**1. Média Aritmética**

$$\overline{X} = \frac{\sum_{i=1}^{n} F_i X_i}{n} \qquad \overline{X} = \frac{\sum_{i=1}^{n} F_i C_i}{n}$$

**2. Mediana**

n ímpar: $Me = X_{\frac{n+1}{2}}$ n par: $Me = \frac{X_{\frac{n}{2}} + X_{\frac{n+2}{2}}}{2}$

$$Me = li_{Me} + \frac{n/2 - cumF_{Me-1}}{F_{Me}} \times a_{Me}$$

**3. Moda**

$$Mo = li_{Mo} + \frac{F_{Mo+1}}{F_{Mo+1} + F_{Mo-1}} \times a_{Mo}$$

**4. Quartis/Decis /Percentis**

n ímpar: $Q_1 = X_{\frac{n+1}{4}}$ , $Q_3 = X_{3\left(\frac{n+1}{4}\right)}$ n par: $Q_1 = X_{\frac{n+2}{4}}$ , $Q_3 = X_{\frac{3n+2}{4}}$

$$Q_i/D_i/P_i = lc_i + \frac{n_i - cumF_{i-1}}{F_i} \times a_{ci}$$

**5. Variância**

$$S^2 = \frac{\sum_{i=1}^{n} F_i\left(X_i - \overline{X}\right)^2}{n} \qquad S^2 = \frac{\sum_{i=1}^{n} F_i\left(C_i - \overline{X}\right)^2}{n}$$

**6. Coeficiente de Variação**

$$CV = \frac{S}{\overline{X}} \times 100$$

**7. Coeficiente de Assimetria e Coeficiente de Achatamento**

$$G = \frac{\overline{X} - Mo}{S} \qquad K = \frac{Q_3 - Q_1}{2(P_{90} - P_{10})}$$