

Formulaire ESTAT

Moyenne arithmétique

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

$$\bar{X} = \frac{\sum_{j=1}^k n_j \times x_j}{n}$$

$$\bar{X} = \sum_{j=1}^k f_j \times x_j$$

Mesures de dispersion

$$\text{étendue} = \max(X_i) - \min(X_i)$$

$$EIQ = Q_3 - Q_1$$

$$EMA = \frac{\sum_{i=1}^n |X_i - \bar{X}|}{n}$$

$$S_X^2 = \frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n}$$

$$S_X = \sqrt{S_X^2}$$

Mesures de covariance

$$S_{XY} = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{n}$$

Mesures de corrélation

$$r_{XY} = \frac{S_{XY}}{S_X S_Y} = \frac{[(X - \bar{X})(Y - \bar{Y})]/n}{S_X S_Y}$$