

$$\begin{aligned}
& \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y}) \\
& \left[\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2 \right]^{1/2} \\
R = & \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{[\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2]^{1/2}}
\end{aligned}$$

$$\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})$$

$$\left[\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2 \right]^{1/2}$$

$$R = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{[\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2]^{1/2}}$$

Satz des Pythagoras:

$$c = \sqrt{a^2 + b^2}$$

Seien $\mathbf{a}, \mathbf{b} \in \mathbb{R}$, dann gilt $(\mathbf{a} + \mathbf{b})^2 = \mathbf{a}^2 + 2\mathbf{a}\mathbf{b} + \mathbf{b}^2$