

3) PODATKI

STAROST	12.5	17.5	22.5	30	40	50	60	70	80
GLEBANJE TV	142	120	109	96	105	123	138	150	148

DOLOČIMO

$$R_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \cdot \sum (y_i - \bar{y})^2}} = \frac{S_{xy}}{\sqrt{S_x^2 \cdot S_y^2}} = \frac{S_{xy}}{S_x S_y} = 0.55496$$

$$\bar{x} = 42.5$$

$$\bar{y} = 125.67$$

$$n = 9$$

H_0 : SPREMENLJIVKI NISTA LINEARNO POVEZANI

H_1 : SPREMENLJIVKI STA LINEARNO POVEZANI

$$T = \frac{R_{xy} \sqrt{n-2}}{\sqrt{1-R_{xy}^2}} = 1.765$$

$\alpha = 5\%$, KRITICNO OBMOČJE: $(-\infty, -t_{1-\alpha/2})$ in $(t_{1-\alpha/2}, \infty)$

$$t_{1-\alpha/2, n-2} = t_{0.975, 7} = 2.365$$

KER T NI VEČI OD 2.365, H_0 NE MOREMO ZAVRNITI.

SPREMENLJIVKI NISTA STATISTIČNO ZNAČILNO LINEARNO ODVISNI.