

$$k = \frac{s_{xy}}{s_x^2}$$

$$r_{xy} = \frac{s_{xy}}{s_x s_y}$$

$$k * (s_x^2) = s_{xy}$$

$$r_{xy} * s_x s_y = s_{xy}$$

$$k * (s_x^2) = r_{xy} * s_x s_y$$

$$k = \frac{r_{xy} * s_x s_y}{s_x^2}$$