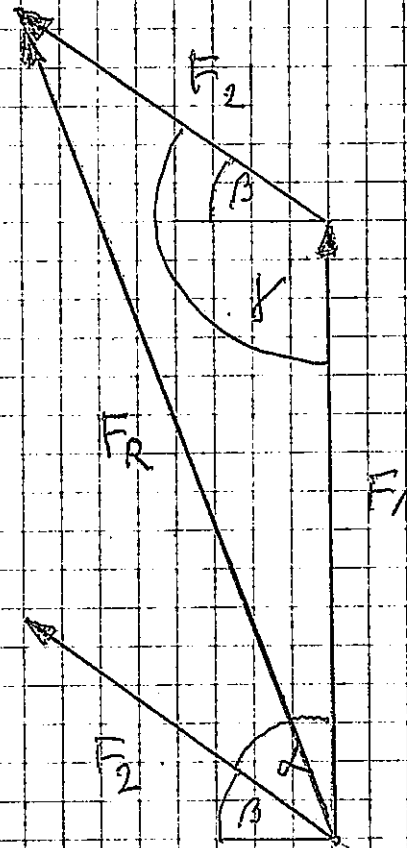


$$F_1 = 80 \text{ N}; F_2 = 50 \text{ N}; \alpha = 55^\circ$$

$$\beta = 35^\circ; \gamma = 125^\circ$$

$$F_R = 116 \text{ cos}$$

$$\underline{F_R = 116 \text{ N}}$$



COSINUS - SATZ

$$F_R = \sqrt{F_1^2 + F_2^2 + |2 F_1 \cdot F_2 \cdot \cos \gamma|}$$

$$\underline{F_R = 116,14 \text{ N}}$$

RESULTIERENDE KRÄFTE:

$$F_R = \sqrt{F_{Rx}^2 + F_{Ry}^2}$$

$$F_{Rx} = F_{1x} + F_{2x} = 0 + F_2 \cdot \cos \beta$$

$$F_{Ry} = F_{1y} + F_{2y} = F_1 + F_2 \cdot \sin \beta$$

$$F_R = \sqrt{(F_2 \cdot \cos \beta)^2 + (F_1 + F_2 \cdot \sin \beta)^2}$$

$$\underline{F_R = 116,14 \text{ N}}$$