• 
$$F_1 = 10N$$

• 
$$F_2 = 12N$$

$$\quad \alpha = 45^\circ$$

$$\theta = 30^\circ$$

• 
$$F_{1x} = F_1 \cdot \cos \alpha = 10N \cdot \cos(45^\circ) = -7,07N$$

• 
$$F_{1y} = F_1 \cdot \sin \alpha = 10N \cdot \sin(45^\circ) = 7,07N$$

• 
$$F_{2x} = F_2 \cdot \cos \theta = 12N \cdot \cos(30^\circ) = 10{,}39N$$

• 
$$F_{2y} = F_2 \cdot \sin \theta = 12N \cdot \sin(30^\circ) = 6N$$

• 
$$F_{rx} = F_{1x} + F_{2x} = -7,07N + 10,39N = 3,32N$$

• 
$$F_{ry} = F_{1y} + F_{2y} = 7.07N + 6N = 13.07N$$

• 
$$F_r = \sqrt{(F_{rx})^2 + (F_{ry})^2} = \sqrt{(3,32N)^2 + (13,07N)^2} = 13,48N$$