

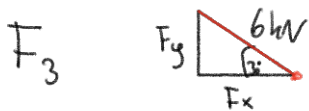
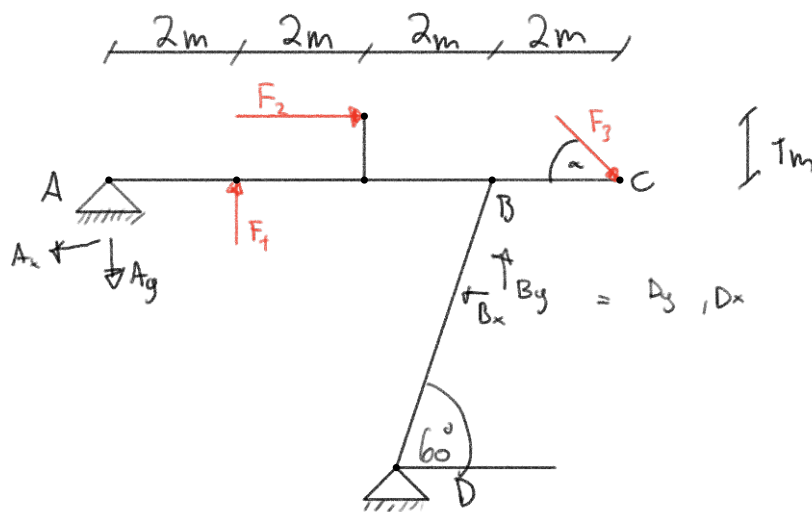
$$a = 1\text{m}$$

$$\alpha = 30^\circ$$

$$F_1 = 5\text{ kN}$$

$$F_2 = 8\text{ kN}$$

$$F_3 = 6\text{ kN}$$



$$\cos(30^\circ) = \frac{F_x}{6\text{ kN}} \Rightarrow F_x = \cos(30^\circ) \cdot 6\text{ kN}$$

$$F_x \approx 5.2\text{ kN}$$

$$\sin(30^\circ) = \frac{F_y}{6\text{ kN}} \Rightarrow F_y = \sin(30^\circ) \cdot 6\text{ kN}$$

$$F_y = 3\text{ kN}$$

$$\overset{\circ}{M}_B = 0$$

$$-A_y \cdot 6m + F_1 \cdot 4m + F_2 \cdot 1m + F_y \cdot 2m = 0$$

$$-A_y \cdot 6m + 5kN \cdot 4m + 8kN \cdot 1m + 3kN \cdot 2m = 0$$

$$-A_y \cdot 6m + 20kNm + 8kNm + 6kNm = 0$$

$$34kNm = A_y \cdot 6m$$

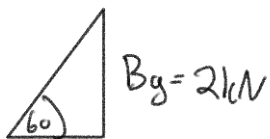
$$4kN = A_y$$

$$\uparrow \sum F_y = 0$$

$$-A_y + F_1 - F_{3y} + B_y$$

$$-4kN + 5kN - 3kN + B_y = 0$$

$$B_y = 2kN$$



$$\tan(60) = \frac{2kN}{B_x} \Rightarrow B_x = \frac{2kN}{\tan(60)} \approx 1.15kN$$

$$\sum \vec{F}_x = 0$$

$$-A_x + F_{2x} - B_x + F_{3x} = 0$$

$$-A_x + 8kN - 1.15kN + 5.2kN = 0$$

$$A_x \approx -12kN$$

Summary

$$A_x \approx 12kN, A_y \approx 4kN$$

$$B_x \approx 1.15kN, B_y \approx 2kN$$