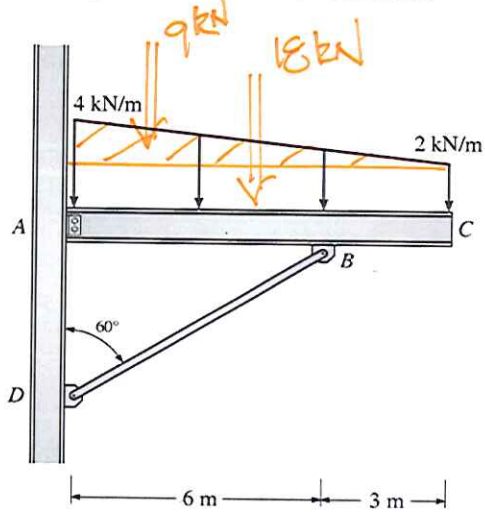
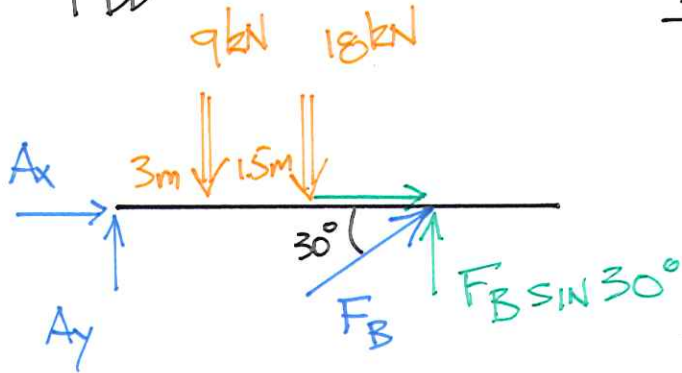


Example 2-3: Find the reactions



FBD



$$\sum M_A = 0 = -9 \text{ kN}(3 \text{ m}) - 18 \text{ kN}(4.5 \text{ m}) + F_B \sin 30^\circ (6 \text{ m})$$

$$\underline{F_B = 36 \text{ kN}}$$

$$\sum F_x = 0 = A_x + F_B \cos 30^\circ$$

$$\underline{A_x = -31.2 \text{ kN}}$$

$$\sum F_y = 0 = A_y + F_B \sin 30^\circ - 9 \text{ kN} - 18 \text{ kN}$$

$$\underline{A_y = 9 \text{ kN}}$$

