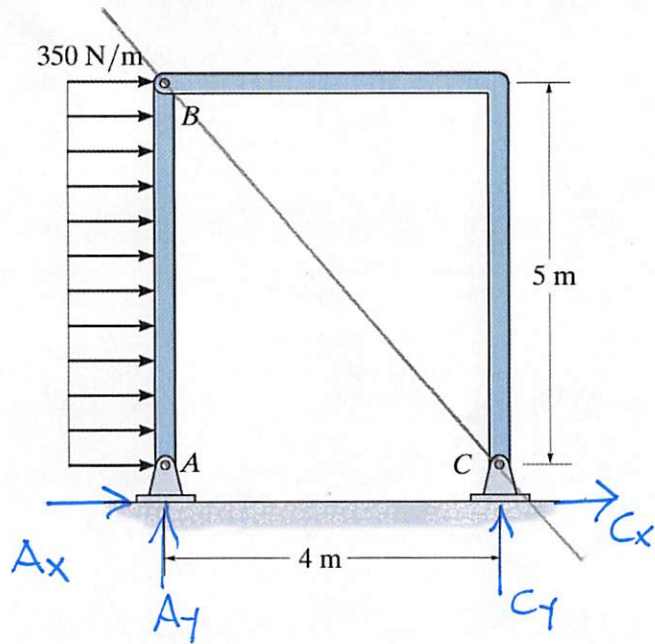
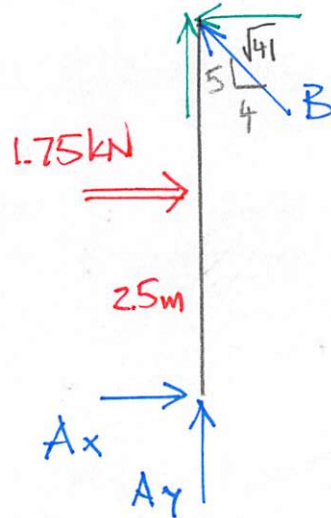


Problem 2a-4 - Determine the horizontal and vertical reactions at A and C of the two-member frame.



FBD AB



$$\sum M_A = 0 = -1.75 \text{ kN}(2.5 \text{ m}) + \frac{4}{\sqrt{41}} B(5 \text{ m})$$

$$\underline{\underline{B = 1.4 \text{ kN}}}$$

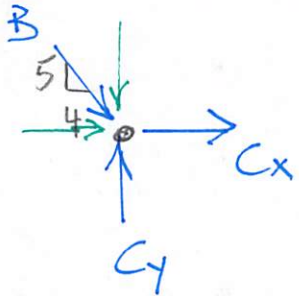
$$+\uparrow \sum F_y = 0 = A_y + \frac{5}{\sqrt{41}} B$$

$$\underline{\underline{A_y = -1.09 \text{ kN}}}$$

$$+\rightarrow \sum F_x = 0 = A_x - \frac{4}{\sqrt{41}} B + 1.75 \text{ kN}$$

$$\underline{\underline{A_x = -0.875 \text{ kN}}}$$

JOINT C



$$+\uparrow \sum F_y = 0 = C_y - \frac{5}{\sqrt{41}} B$$

$$\underline{\underline{C_y = 1.09 \text{ kN}}}$$

$$+\rightarrow \sum F_x = 0 = C_x + \frac{4}{\sqrt{41}} B$$

$$\underline{\underline{C_x = -0.875 \text{ kN}}}$$