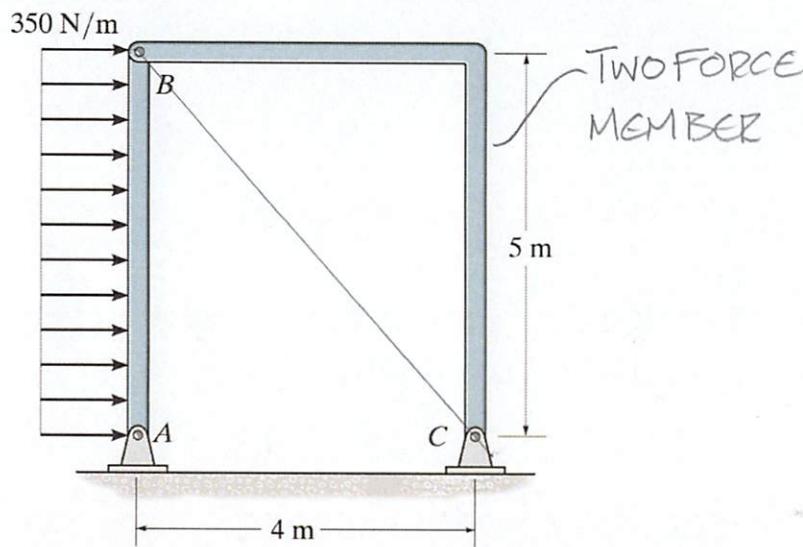


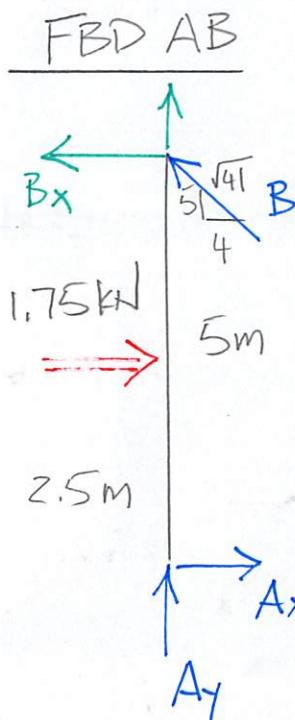
Problem 2a-4 - Determine the horizontal and vertical reactions at A and C of the two-member frame.



Joint C

$$+ \sum F_x = 0 \\ = C_x + \frac{4}{\sqrt{41}} B \\ C_x = -0.875 \text{ kN}$$

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



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

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

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

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

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

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