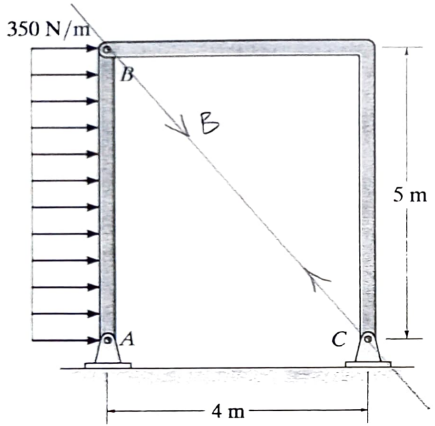
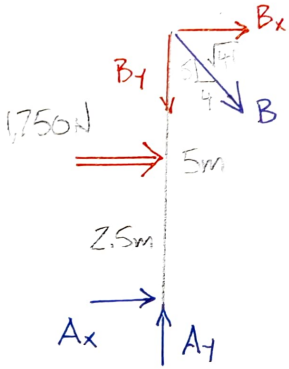
Problem 2a-4 - Determine the horizontal and vertical reactions at *A* and *C* of the two-member frame.



FBD AB



$\circlearrowleft \sum M_A = 0 = -1{,}750\text{N}(2.5\text{m}) - \underbrace{\frac{4}{\sqrt{41}}B}_{B_x}(5\text{m})$

$B = -1{,}400.7\text{ N}$

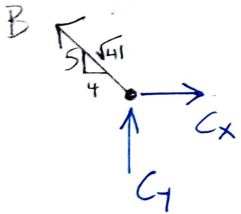
$+\uparrow \sum F_y = 0 = A_y - \frac{5}{\sqrt{41}}B$

$A_y = -1{,}093.7\text{ N}$

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

$A_x = -875\text{N}$

JOINT C



$+\uparrow \sum F_y = 0$

$= C_y + \frac{5}{\sqrt{41}}B$

$C_y = 1{,}093.7\text{N}$

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

$C_x = -875\text{N}$