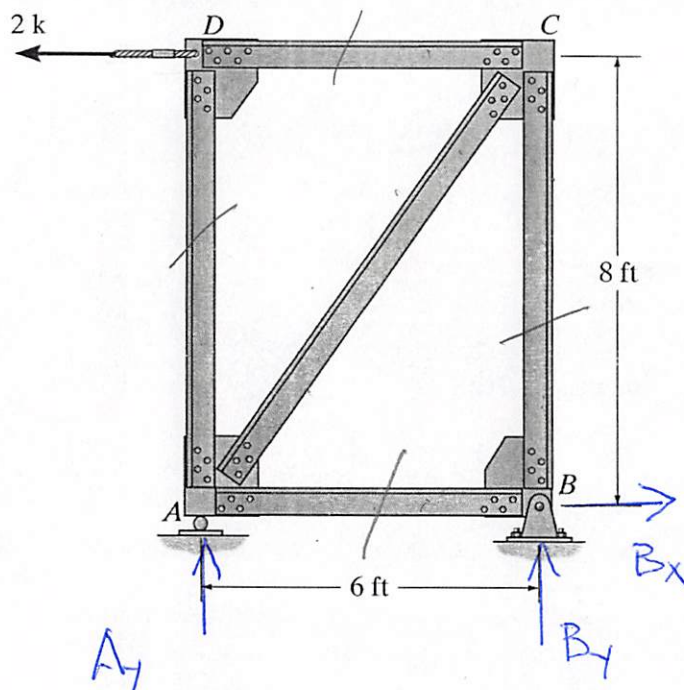


Example 3b-2. Determine all the forces in the following truss.



$$\circlearrowleft \sum M_B = 0 = 2k(8ft) - A_y(6ft)$$

$$\underline{A_y = 2.67k}$$

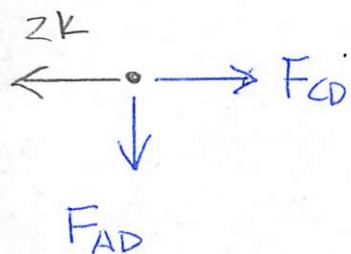
$$+\uparrow \sum F_y = 0 = A_y + B_y$$

$$\underline{B_y = -2.67k}$$

$$+\rightarrow \sum F_x = 0 = B_x - 2k$$

$$\underline{B_x = 2k}$$

JOINT D



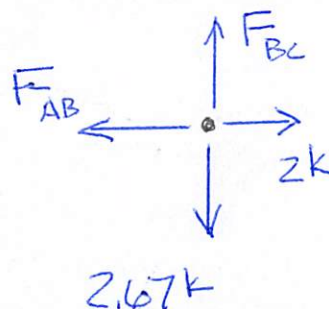
$$+\rightarrow \sum F_x = 0$$

$$= F_{CD} - 2k$$

$$\underline{F_{CD} = 2k}$$

$$+\uparrow \sum F_y = 0 = -F_{AD}$$

JOINT B



$$+\uparrow \sum F_y = 0$$

$$= F_{BC} - 2.67k$$

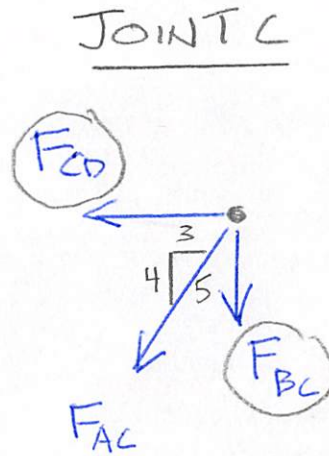
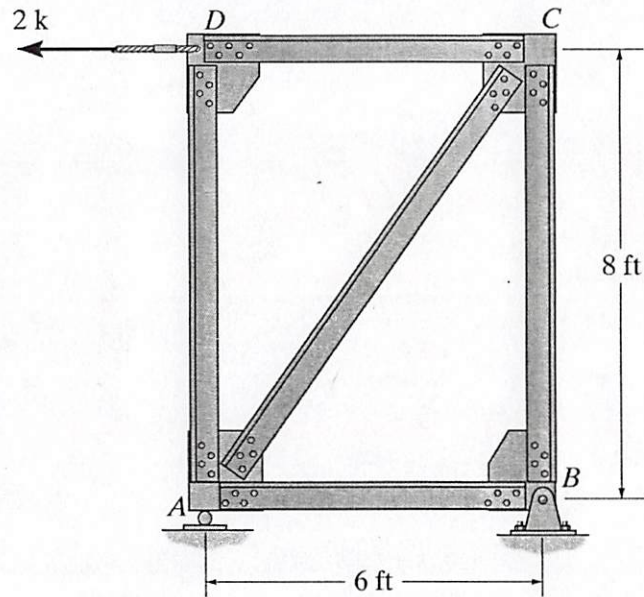
$$\underline{F_{BC} = 2.67k}$$

$$+\rightarrow \sum F_x = 0$$

$$= -F_{AB} + 2k$$

$$\underline{F_{AB} = 2k}$$

Example 3b-2. Determine all the forces in the following truss.



$$+\uparrow \sum F_y = 0$$

$$= -F_{BC} - \frac{4}{5}F_{AC}$$

$$\underline{F_{AC} = -3.33 \text{ k}}$$