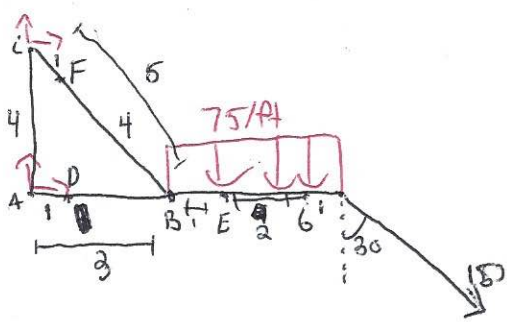


Mar 23, 2020



$$\sum M_A = 0, \frac{4}{5} F_{BC} 3 - 75(4)(3+2) - 150 \cos 30(7)$$

$$F_{BC} = 1003.89 \text{ lb}$$

$$\sum F_{yA \rightarrow} = 0, \frac{4}{5}(1003.89) - 75(4) - 150(\cos 30) + F_{Ay}$$

$$F_{Ay} = -373.205, 373.205 \downarrow$$

$$\sum F_{xA \rightarrow} = 0, 150 \sin 30 - 1003.89(3/5) + F_{Ax}$$

$$F_{Ax} = 527.33$$

Cut @ D



$$\therefore F_{xD} = -527.33$$

$$V_D = -373.205$$

$$\sum M_D = 0, M_D + 373.205(1) = 0$$

$$M_D = -373.205$$

Cut @ E



$$\sum F_x = 0, 527.33 - \frac{3}{5}(1003.89) + F_{Ex}$$

$$F_{Ex} = +75.004 \rightarrow$$

$$\sum M_E = 0, 373.205(4) - \frac{4}{5}(1003.205)(1) + M_E + 75(0.5)$$

$$M = -727.211$$

$$V = -373.205 + 1003.205(4/5) - 75(1)$$

$$= 429.359 \downarrow$$