

EQUILIBRIUM:

$$\curvearrowright + \sum M_{\text{AT GROUND}} = 0$$

$$M_{10} + 250 \text{ lb ft} - 44.7 \text{ lb} \cdot (8' - 3') - 89.4 \text{ lb} \cdot 10' = 0$$

$$M_{10} = 867.5 \text{ # ft} \text{ or } 867.5 \text{ lb ft} \curvearrowright$$

$$\rightarrow \sum F_x = 0$$

$$F_1 - 44.7 \text{ #} = 0$$

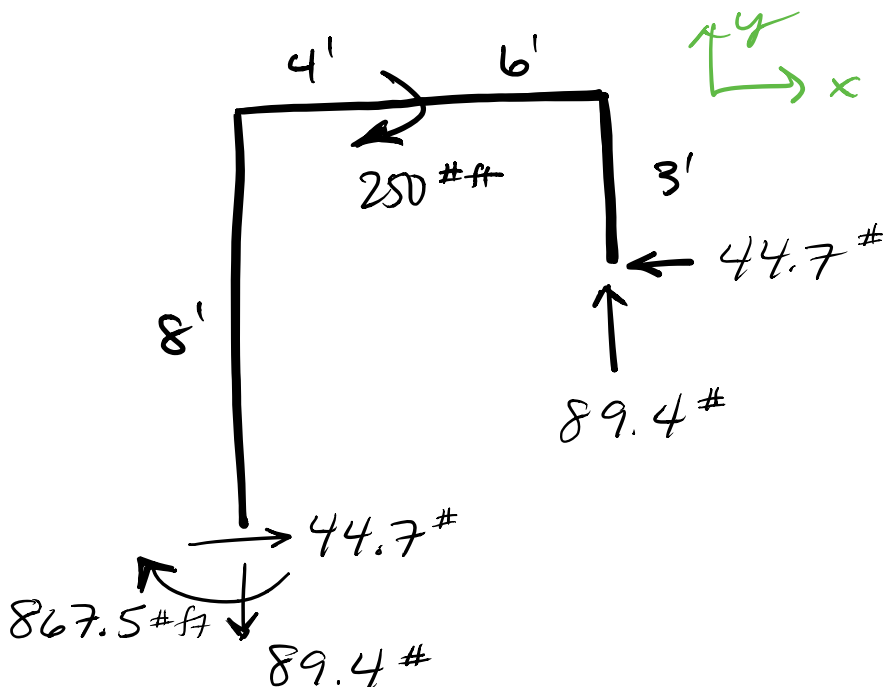
$$F_1 = 44.7 \text{ #}$$

$$+\downarrow \sum F_y = 0$$

$$- F_2 - 89.4 \text{ #} = 0$$

$$F_2 = -89.4 \text{ #} \text{ or } 89.4 \text{ #} \downarrow$$

SOLVED FBD



INDEP. CHECK:

$$\curvearrowright + \Sigma M_{\text{upper kt. corner}} = 0$$

$$867.5 \text{ \#ft} - 89.4 \text{ \#} \cdot 10' + 250 \text{ lbft}$$

$$+ 44.7 \text{ \#} (3') - 44.7 \text{ \#} (8') = 0$$

$$0 \approx 0 \quad \checkmark \checkmark$$