

### ENDS 231: Practice Quiz 3

Clearly show your work and answer.

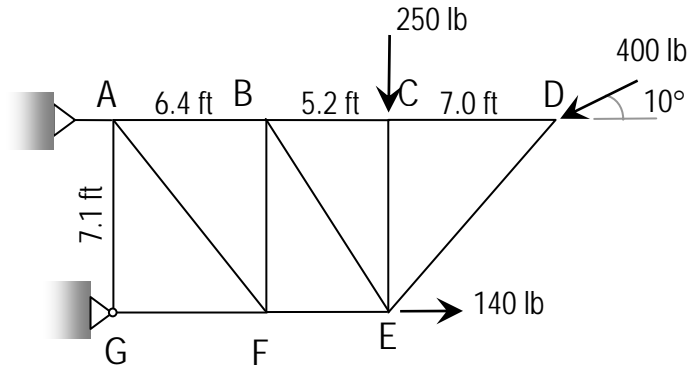
---

The truss shown has the following support reactions:

$$\text{link A} = 196.5 \text{ lb (T)}, G_x = 450.4 \text{ lb}, G_y = 319.5 \text{ lb}$$

Using the method of joints only, find:

- a) the member forces at joint X.  
(having 2 unknowns)
- b) the remaining force at the adjacent joint Y. if the member force in CE is 250 lb (C) or AB is 91.5 lb (C) or AF is 430.1 lb (T) or BF is 319.5 lb (C) or BE is 396 lb (T)



- c) [some short question from the text material]

Answers:

- a)  $CD = 325.4 \text{ lb (C)}$ ,  $DE = 97.5 \text{ lb (C)}$ ,  
or  $AG = 319.5 \text{ lb (C)}$ ,  $GF = 450.4 \text{ lb (C)}$
- b) *all other forces*:  $FE = 162.4 \text{ lb (C)}$ ,  $BC = 325.4 \text{ lb (C)}$

**Disclaimer: Answers have NOT been painstakingly researched.**