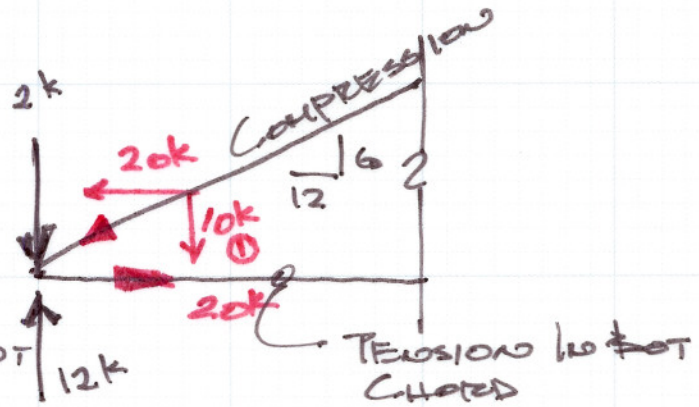
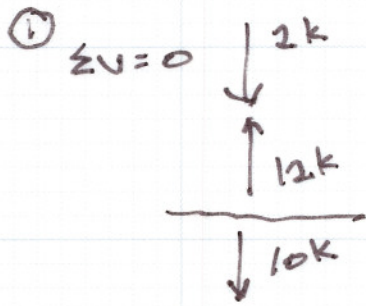


IN THE DIAGRAM SHOWN, WHICH OF THE FOLLOWING CORRECTLY IDENTIFIES THE FORCE WITHIN THE BOTTOM CHORD BASED ON THE LOADS INDICATED?



② - SINCE YOU HAVE ONE COMPONENT OF A DIAGONAL MEMBER, THE OTHER COMPONENT CAN BE SOLVED BY USING THE TRIGONOMETRIC FUNCTIONS OR SIMILAR TRIANGLES

⇒ USE SIMILAR TRIANGLES TO SOLVE FOR THE HORIZONTAL COMPONENT OF THE DIAGONAL MEMBER

$$\frac{6}{10k} = \frac{12}{x}$$

$$6x = 120k$$

$$x = 20k$$

③ Finally $\rightarrow \Sigma x = 0$

$20k \leftarrow$ SO TO BALANCE WE NEED

$\therefore 20k$ TENSION

$20k \rightarrow$

Project: NCARR #29

Address:

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Date: 4/2/08

Drawn By: HAN

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