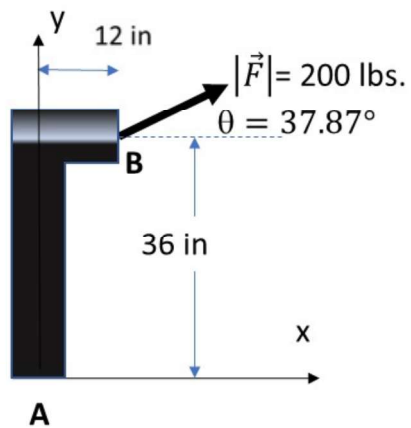


### Homework H6.A

**Given:** Bar AB is loaded as shown.

**Find:**

- Determine the angle  $\theta$  that maximizes the moment about point A in the CW direction.
- Determine the angle  $\theta$  that minimizes the moment about point B.
- For the angle shown, what is the moment of the force about A.



### Homework H6.B

**Given:** Bar OA has a tension of  $T_{AB}$  applied by cable AB.

**Find:**

- Use  $\vec{r}_{OA}$  to determine the moment about point O due to the tension in AB.
- Use  $\vec{r}_{OB}$  to determine the moment about point O due to the tension in AB.

Use the following parameter values in your work:  $T_{AB} = 50$  lb,  $h = 12$  ft,  $L = 6$  ft,  $b = 5$  ft and  $d = 4$  ft.

