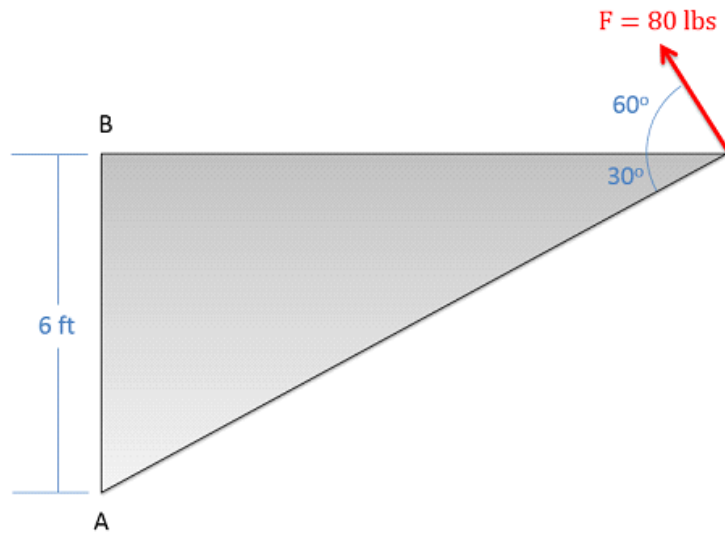
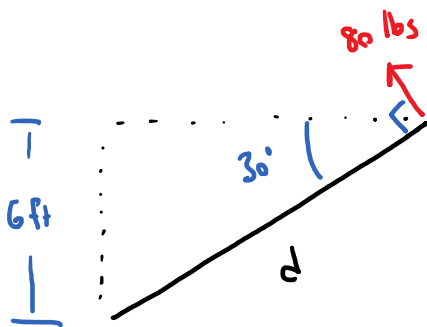


Problem 2

What is the moment that this force exerts about point A? What is the moment this force exerts about point B?



Point A

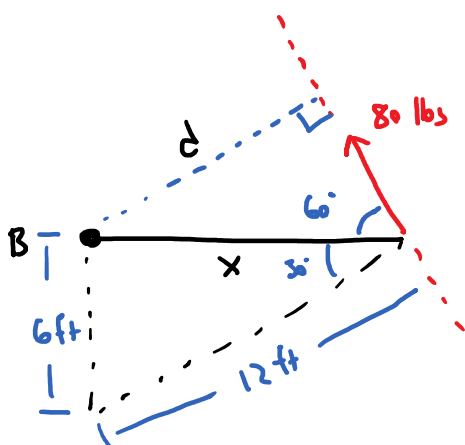


$$M_A = (F)(d) = (80 \text{ lbs})(12 \text{ ft}) \quad \curvearrowright \text{ counter clockwise is positive}$$

$$M_A = 960 \text{ ft lbs}$$

$$d = \frac{6}{\sin(30)} = 12 \text{ ft}$$

Point B



$$x = \frac{6}{\tan(30)}$$

$$d = x \sin(60)$$

$$d = 9 \text{ ft}$$

$$M_B = (F)(d)$$

$$= (80 \text{ lbs})(9 \text{ ft}) \quad \curvearrowright \text{ counter clockwise is positive}$$

$$M_B = 720 \text{ ft lbs}$$