

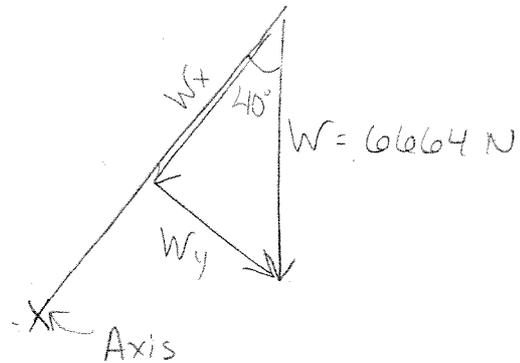
P #A

Ch 8 - Worksheet

$$W = m \cdot g = (680 \text{ kg})(9.8 \text{ m/s}^2) \\ = 6664 \text{ N}$$

$$r = 18.0 \text{ m}$$

$$\theta = 40^\circ$$



Resolve W into components:

W_x is parallel and not needed

$$W_y = W \cdot \sin \theta \\ = (6664 \text{ N}) \cdot \sin 40^\circ \\ = 4284 \text{ N}$$

Find τ :

$$\tau = F \cdot r \\ = (4284 \text{ N})(18 \text{ m})$$

$$\tau = 77,100 \text{ N}\cdot\text{m}$$