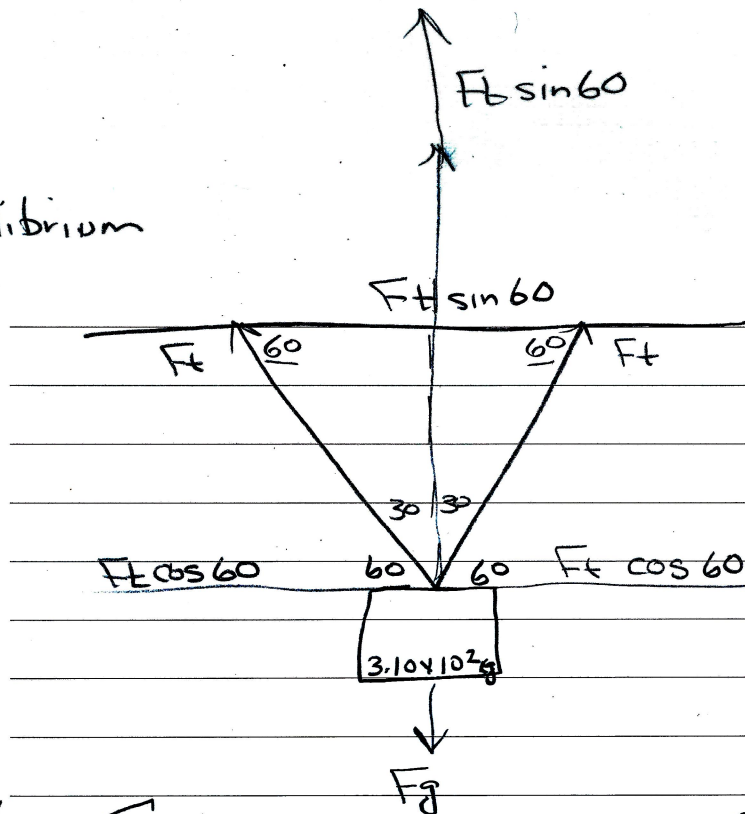
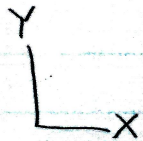


Static Equilibrium



Left/Right $\sum F_x = 0$

Up/down $\sum F_y = 0$

$$F_g = mg$$

$$2 F_t \sin 60 = F_g$$

$$m = 3.10 \times 10^2$$

$$g = 9.81 \text{ m/s}^2$$

$$F_g = (3.10 \times 10^2)(9.81)$$

$$F_g = 3041.1 \text{ N}$$

$$2 F_t \sin 60 = F_g$$

$$2 F_t (.866) = 3041.1$$

$$F_t = \frac{3041.1}{(2) \sin 60} \quad F_t = \frac{3041.1}{1.732}$$

$$F_t = 17.5583 \times 10^2$$