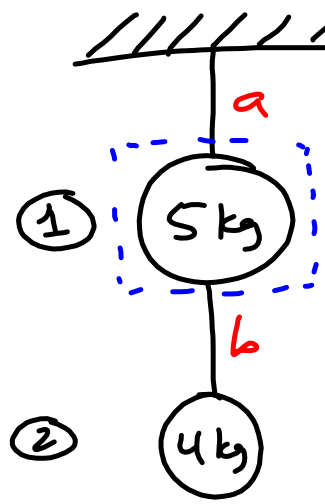
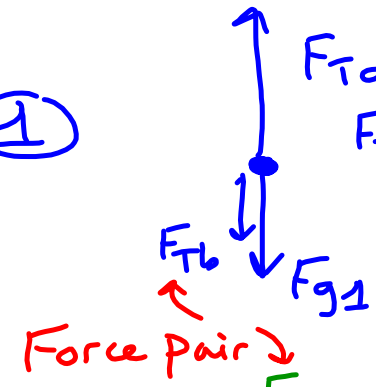
WORKSHEET 3

2)



(1)



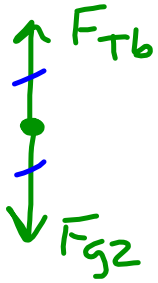
$F_{Ta} = F_{g1} + F_{Tb}$

$= (5\,kg)(9.8\,m/s^2) + 39.2\,N$

$= 88.2\,N$

Force pair

(2)

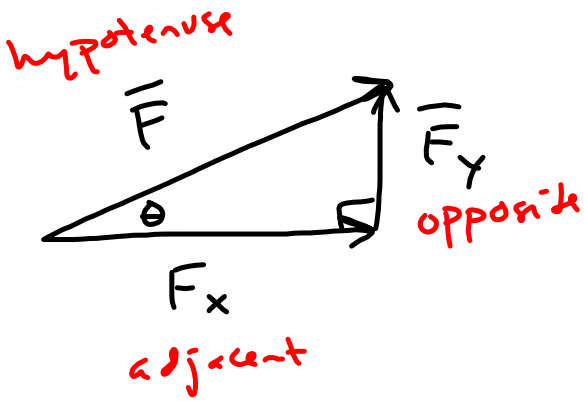


$F_{Tb} = F_{g2}$

$= m a_g$

$= (4\,kg)(9.8\,m/s^2)$

$= 39.2\,N$



$$\sin\theta = \frac{F_y}{F}$$

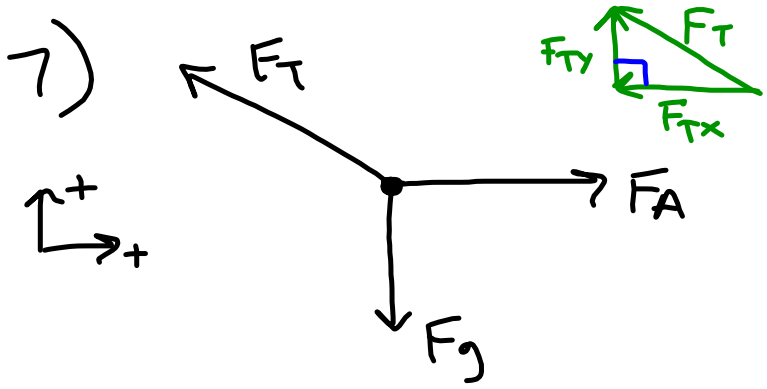
$$\cos\theta = \frac{F_x}{F}$$

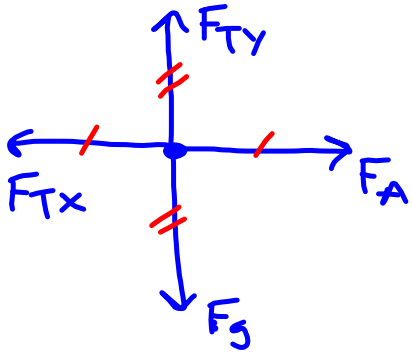
$$\tan\theta = \frac{F_y}{F_x}$$

$$F^2 = F_x^2 + F_y^2$$

$$F_g = ma_g$$

7)





(tells you how to write equations)

$$\Sigma F_x = \emptyset$$

$$F_A - F_{TX} = \emptyset$$

$$F_A = F_{TX}$$

$$\Sigma F_y = \emptyset$$

$$F_{TY} - F_g = \emptyset$$

$$F_{TY} = F_g$$