

a)



$$\sum \vec{F} = m\vec{a}$$

$$T_1 + T_2 - mg = (55)(0)$$

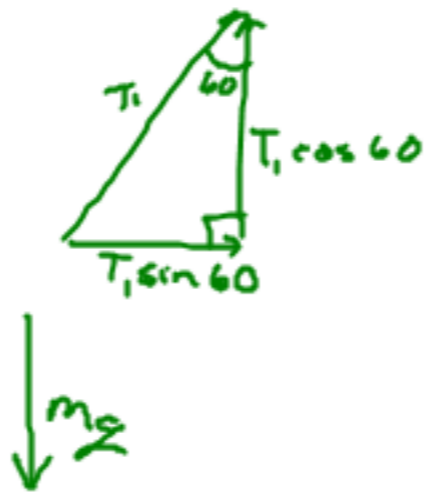
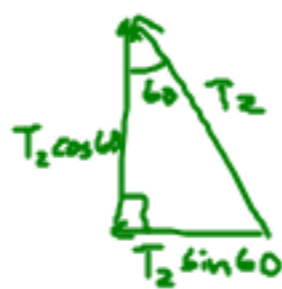
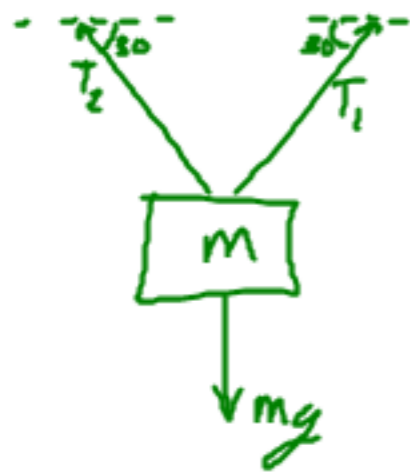
$$2T = mg$$

$$2T = (55)(9.8)$$

$$T =$$

b)

b)



$$\sum \vec{F}_x = m \vec{a}_x$$

$$-T_2 \sin 60 + T_1 \sin 60 = 0$$

$$T_1 = T_2$$

$$\sum \vec{F} = m \vec{a}$$

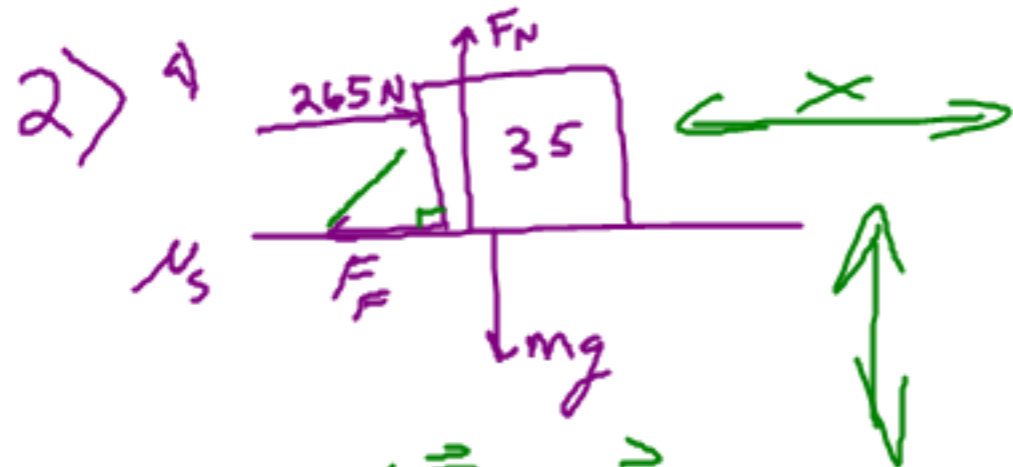
$$\sum \vec{F}_y = m \vec{a}_y$$

$$T_2 \cos 60 + T_1 \cos 60 - mg = 0$$

$$2T_1 \cos 60 - mg = 0$$

$$2T_1 \cos 60 = mg$$

$$T_1 = \frac{mg}{2 \cos 60}$$



$$\sum \vec{F} = m \vec{a}$$

$$\sum \vec{F}_x = m \vec{a}_x$$

$$265 \text{ N} + F_f = 0$$

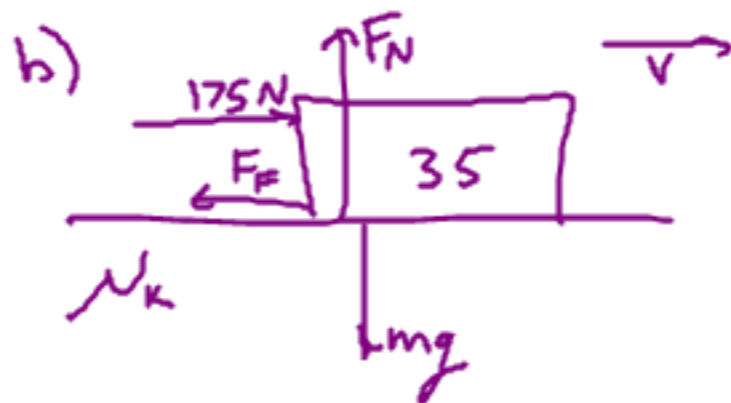
~~$$265 - F_f = 0$$~~

$$265 = \mu F_N$$

$$\sum \vec{F}_y = m \vec{a}_y$$

$$F_N - mg = 0$$

$$F_N = mg$$



$$\sum \vec{F} = m \vec{a}$$

$$\sum \vec{F}_x = m \vec{a}_x$$

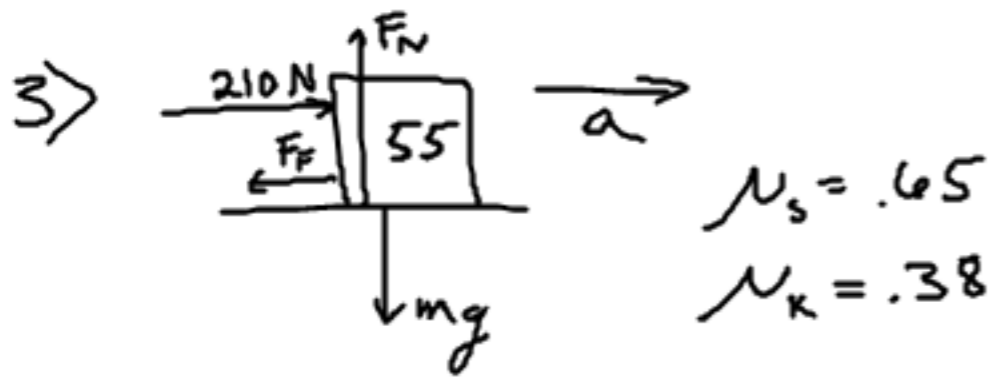
~~$$v + 175 - F_f = N_f$$~~

$$175 - F_f = 0$$

$$\sum \vec{F}_y = m \vec{a}_y$$

$$F_N - Mg = 0$$

$$F_f = \mu F_N$$



$$\Sigma \vec{F} = m\vec{a}$$

$$\Sigma \vec{F}_x = m\vec{a}_x$$

$$210 - F_f = m\vec{a}$$

$$\Sigma \vec{F}_y = m\vec{a}_y$$

$$F_N - mg = 0$$

