

1)



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

$$\sum \vec{F}_{||} = m \vec{a}_{||} = 0$$

$$-T_{SF} + mg \sin 21 + mg \sin 21 = 0$$

2nd
answer

$$T_{SF} = 2mg \sin 21$$

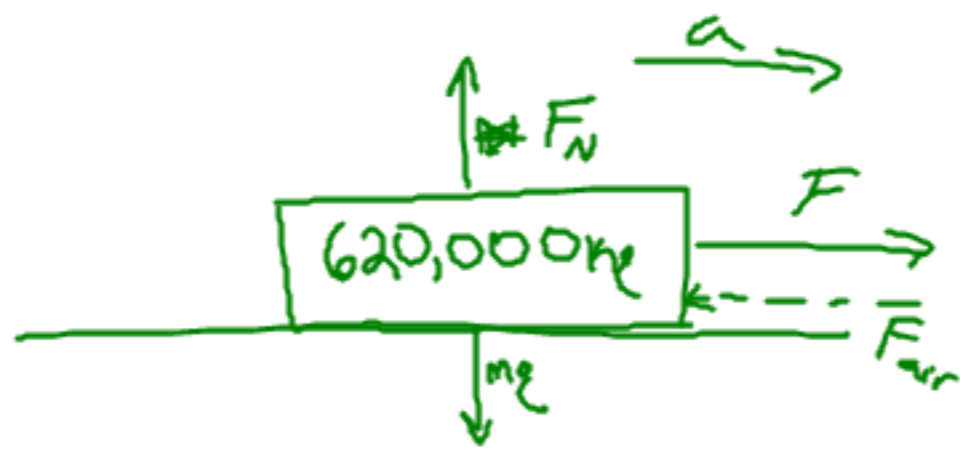
$$\sum \vec{F}_{||} = m \vec{a}_{||} = 0$$

1st
ans

$$-T_{LS} + mg \sin 21 = 0$$

$$T_{LS} = mg \sin 21$$

3)



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

$$F = ma$$

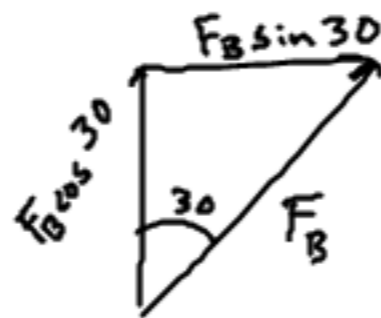
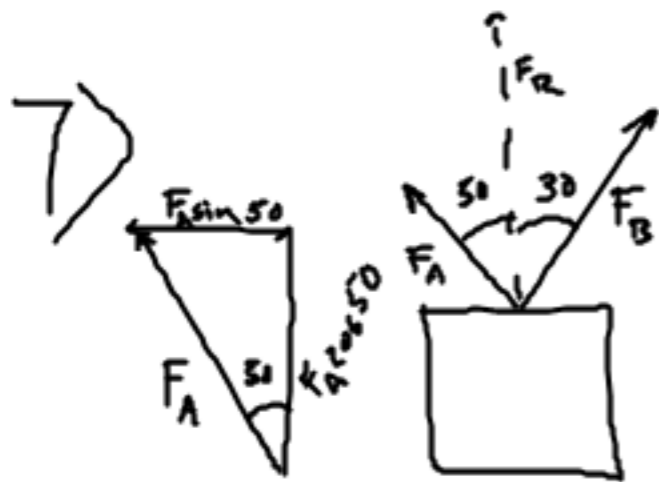
$$400 \times 10^3 = (620 \times 10^3) a$$

$$a =$$

$$b) \quad \Sigma \vec{F} = ma$$

$$F - F_{\text{air}} = 0$$

$$(120 \times 10^3) = F_{\text{air}}$$



$$\vec{F}_A + \vec{F}_B = \vec{F}_R$$

$$\vec{F}_{Rx} = 0 \therefore F_{Ax} = F_{Bx}$$

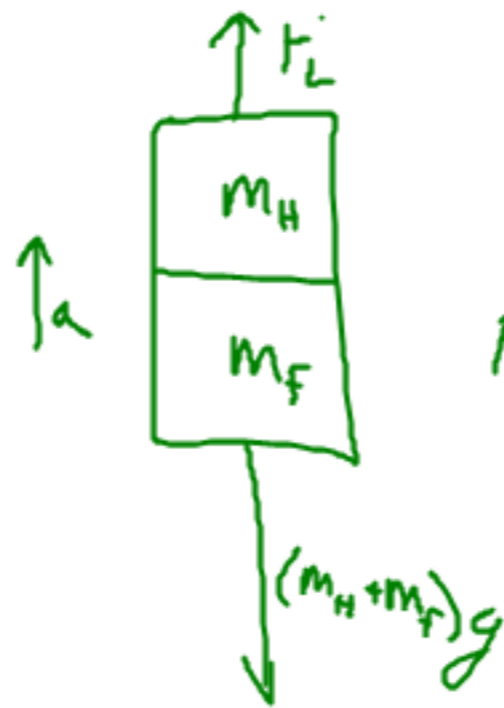
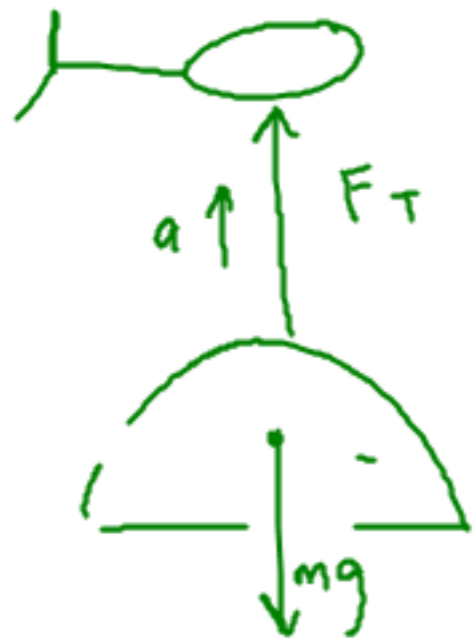
$$F_A \sin 50 = F_B \sin 30$$

$$F_B =$$

$$\vec{F}_A + \vec{F}_B = F_B \cos 30 + F_A \cos 50$$

$$\vec{F}_A + \vec{F}_B =$$

4)



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

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

$$F_L - (m_H + m_F)g = (m_H + m_F)a$$

$$F_L =$$



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

$$T - m_F g = m_F a$$

$$T = m_F a + m_F g$$

$$T =$$

