

3)



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

$$-mg + F_{T4} = 0$$

$$F_{T4} = mg$$

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

$$F_{T2} + F_{T1} - F_{T4} = 0$$

$$F_{T2} + F_{T1} = mg$$

$$F_{T2} = \frac{1}{2}mg$$

$$F_{T1} = \frac{1}{2}mg$$

$$F = F_{T1} = F_{T2}$$

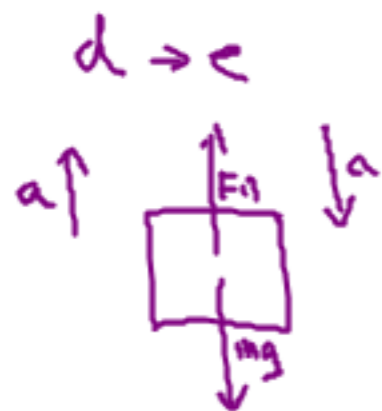
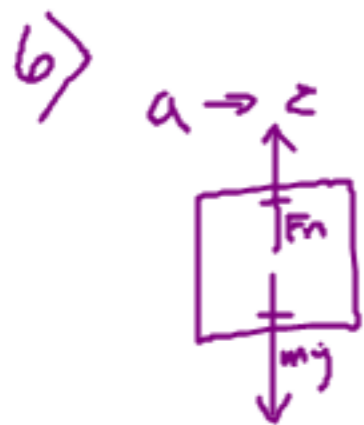
$$F = \frac{1}{2}mg$$

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

$$F_{T3} - F_{T2} - F_{T1} - F = 0$$

$$F_{T3} = F_{T2} + F_{T1} + F$$

$$F_{T3} = \frac{3}{2}mg$$



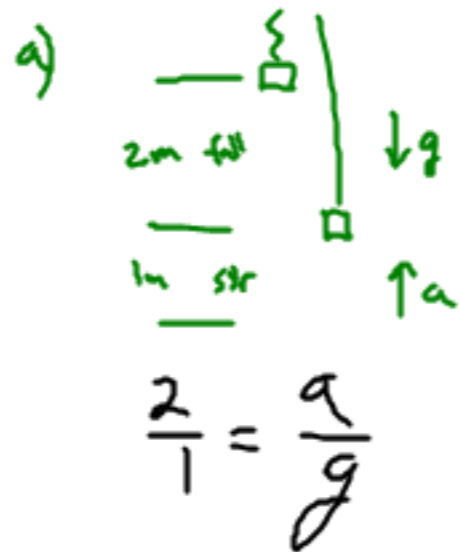
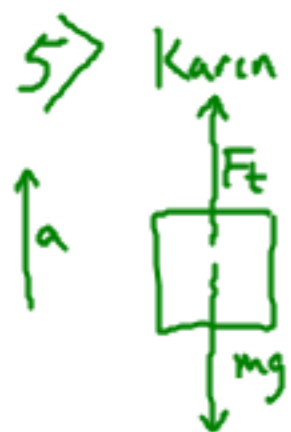
a)  $\sum \vec{F} = m\vec{a}$   
 $F_n - mg = 0$   
 $F_n = mg \rightsquigarrow \frac{F_n}{g}$

d)  $\sum \vec{F} = m\vec{a}$   
 $F_n - mg = m(4)$   
 $F_n = m(4) + mg$   
 $F_n = (75)(4 + 9.8)$   
 $\frac{F_n}{g} =$

b)  $\sum \vec{F} = m\vec{a}$   
 $F_n - mg = 0$   
 $F_n = mg \quad \frac{F_n}{g}$

c)

e)  $\sum \vec{F} = m\vec{a}$   
 $F_n - mg = m(4)$   
 $F_n = mg - m(4)$   
 $F_n = (75)(9.8 - 4)$   
 $\frac{F_n}{g} =$



$$a = 2g$$

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

$$-mg + F_t = m(2g)$$

$$F_T = 3mg$$

b)



$$\frac{2}{1} = \frac{a}{g}$$

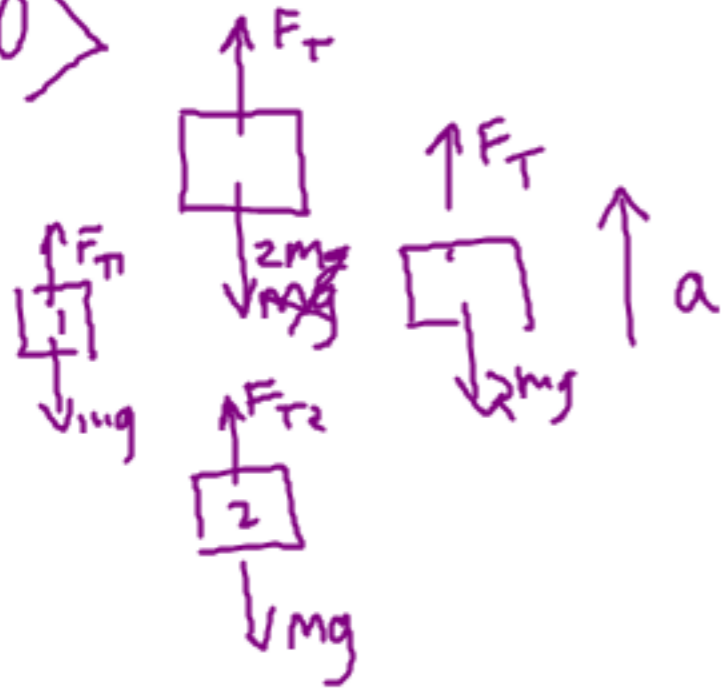
$$a = 10g$$

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

$$-mg + F_T = m(10g)$$

$$F_T = 11mg$$

10



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

$$F_{T2} - mg = 0$$

$$F_{T2} = mg$$

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

$$F_T - 2mg = 0$$

$$F_T = 2mg$$

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

$$F_{T1} - mg = ma$$

$$F_{T1} = m(1.7) + m(9.8)$$

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

$$F_{T1} - 2mg = ma$$

$$F_{T1} = m(1.7) + 2m(9.8)$$

$$= m(1.7 + 2(9.8))$$