

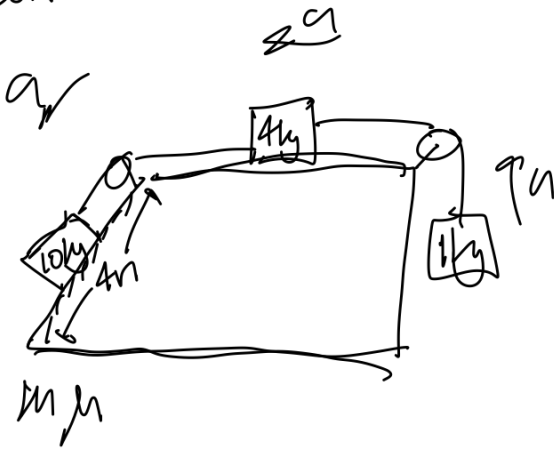
# Physic

Reynolds number



$\Sigma F_x = m a$   
 $F - (9)(3.33)$   
 $F = 29.97$   
 $F = 30 \text{ N}$

$a: v = u + at$   
 $10 = 0 + a(3)$   
 $a = 3.33$

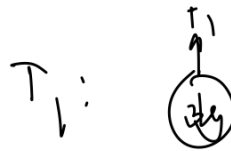


$\Sigma F_x = m a$

$m g \sin \theta - m g \cos \theta = (10)(a)$

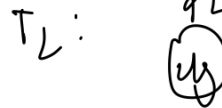
$(100)\left(\frac{3}{4}\right) - M(100)\left(\frac{4}{5}\right) = 10(a)$

$50 - 20\sqrt{3} = 10(a)$



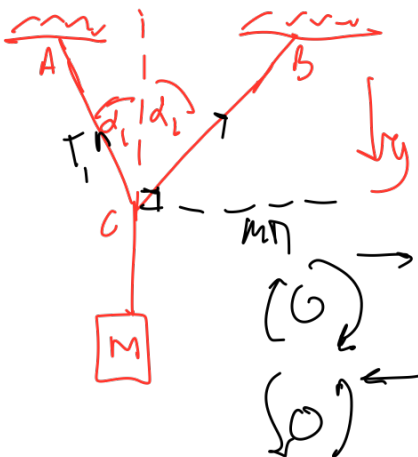
$\Sigma F_x = m a$   
 $T - 20 = (3)(a)$

$T_1 = 20$



$\Sigma F_x = m a$   
 $T - 20 = (2)(a)$

$T = 24$

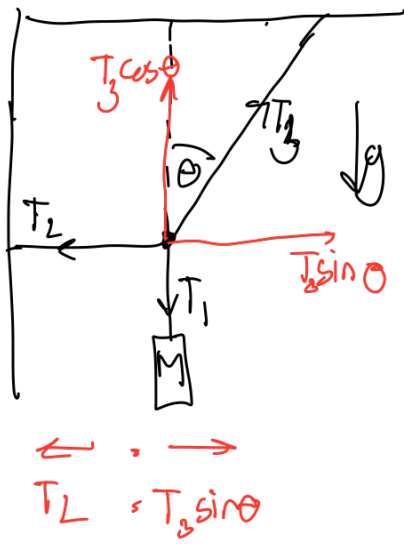


$\lambda = \frac{v}{f}$

$\lambda = \frac{0.5}{50}$

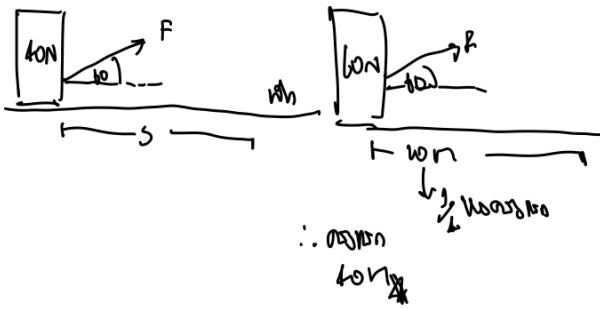
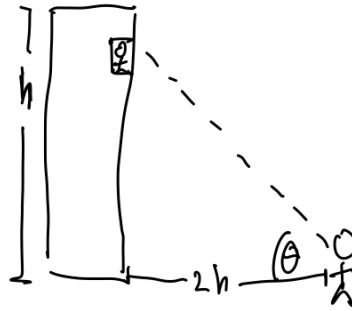
$\lambda = 0.01$

$\frac{v}{\lambda} = \frac{5}{0.01} = 500$



$$Q = mc \Delta T$$

$$Q = (100)(333)(10)$$



$$F \rightarrow [M] a = 10 \text{ m/s}^2$$

$$F \rightarrow [M] a = 24 \text{ m/s}^2$$

$\Sigma F_x$

$\Sigma F_y$

$$R = (m_1)(a) \text{ --- (1)}$$

$$F \cdot (r_2)(L) \text{ --- (2)}$$

$$(M_2)(L) = (r_1)(L)$$

$$\frac{M_2}{M_1} = 2.4 \text{ m/s}$$

$$F \cdot \frac{GM_1 M_2}{R^2}$$

