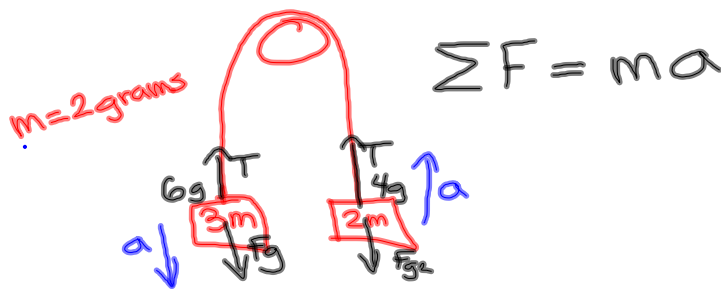


$$\sum F = 0$$

$$T + F_g = 0 \quad T = -F_g$$

$$T - F_g = 0 \quad T = -(-)$$

$$T = F_g$$



$$\sum F = ma$$

heavy $T + F_{g1} = m_1 a$

$$T + 0.006(9.8) = 0.006 a$$

light $T + F_{g2} = m_2 a$

$$T + 0.004(9.8) = 0.004 a$$

$$T - 0.0392 = 0.004 a$$

$$T = 0.004 a + 0.0392$$

$$0.004 a + 0.0392 - 0.0588 = 0.006 a$$

$$0.004 a - 0.0196 = 0.006 a$$

$$-0.0196 = 0.002 a$$

$$\underline{\quad\quad\quad}$$

$$0.002$$

$$a = -9.8$$

