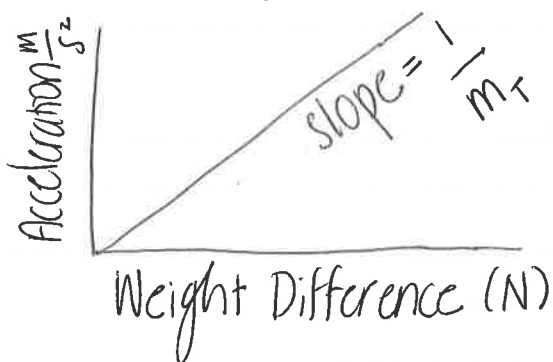


# Atwood's Lab

$$\vec{a} = \frac{\Sigma F}{m_T} = g \frac{(m_1 - m_2)}{m_1 + m_2}$$

Graph # 1) How  $\vec{a}$  varies with Force.

Include Title, x, y labels + units.

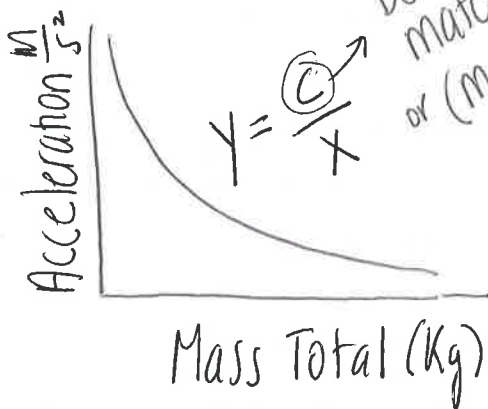


$$\frac{\vec{a}}{F} = \frac{1}{m_T}$$

$$m_T = \frac{1}{\text{slope}}$$

(compare) mass total with  $\frac{1}{\text{slope}}$  value

Graph # 2)



$$\vec{a} = \left( \frac{1}{m_T} \right) (m_1 - m_2) g$$

$$\begin{matrix} \uparrow & \uparrow \\ \left( \frac{1}{X} \right) & \left( "c" \right) \end{matrix}$$

In Logger Pro: "c" = A

compare "c" with  $g(m_1 - m_2)$  weight difference