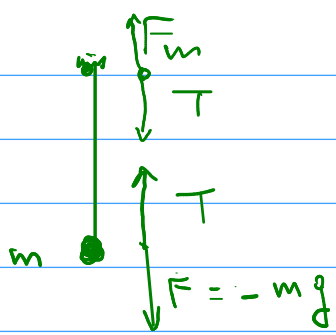




$$a = \frac{F}{m}$$



1) fermo! $a=0 \Rightarrow \underline{\underline{F_{tot}=0}}$

$$\underline{\underline{T + F_G = 0}} \quad \underline{\underline{T - mg = 0}}$$

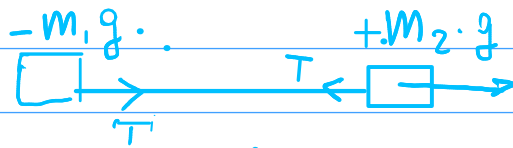
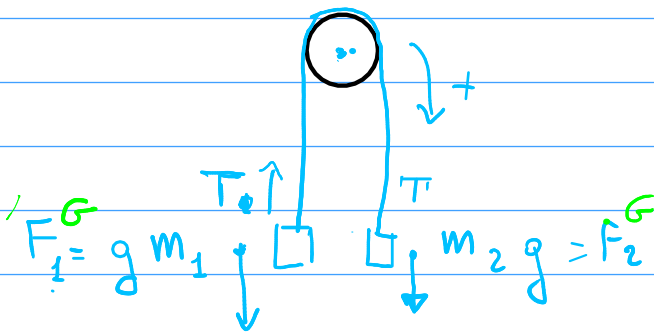
$$\boxed{T = mg}$$

$$\underline{\underline{T=0}}$$

2) $\downarrow \left[F_{tot} = -mg \right] = T - mg$

$$T = mg/2$$

3) $\uparrow F_{tot} = mg = T - mg \Rightarrow T = 2mg$



$$\begin{cases} F_1 = T - m_1 g \\ F_2 = m_2 g - T \end{cases}$$

$$a_1 = \frac{F_1}{m_1}$$

$$a_2 = \frac{F_2}{m_2}$$

corpi vincolati: $a_1 = a_2$

$$\frac{T}{m_1} - g = g - \frac{T}{m_2}$$

$$\frac{1}{m_1} + \frac{1}{m_2} = 2g$$

$$T \left(\frac{1}{m_1} + \frac{1}{m_2} \right) = 2g$$

$$T \left(\frac{m_1 + m_2}{m_1 \cdot m_2} \right) = 2g \rightarrow T = 2g \frac{m_1 \cdot m_2}{m_1 + m_2}$$

$m_1 = m_2$

$$m \Rightarrow T \left(\frac{2}{m} \right) = 2g \rightarrow \boxed{T = mg} \quad \checkmark$$

$$F_1 = T - mg$$

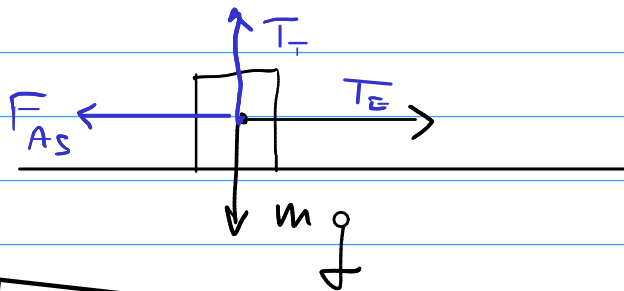
$$= \dots$$

$$a_1 = \frac{F_1}{m_1}$$

$$F_2 = \dots$$

$$a_2 = \frac{F_2}{m}$$

$$-mg + T = 0$$



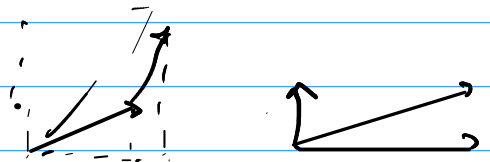
$$\vec{F}_A(B) = -\vec{F}_B(A)$$

\vec{F}_{As} e variable

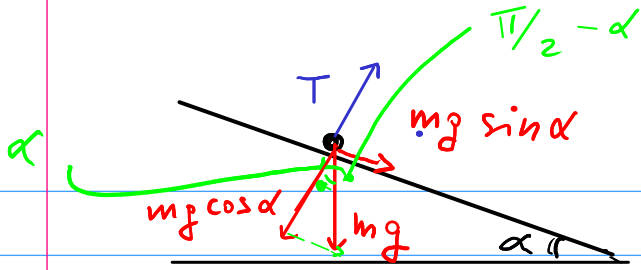
$$\vec{F}_{As}^{(max)} = -\mu_s F_N \hat{F}_{A \rightarrow B}$$

$$\vec{F}_{As} = -\mu_D F_N \hat{v}$$

$\vec{F}_{tot} = \sum_i \vec{F}_i$
 \Rightarrow si so numer
 e compunti

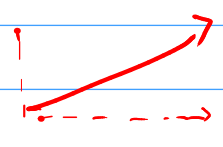


$$\mu_D < \mu_s$$



$\alpha = 0 \Rightarrow$ fern
 $\alpha = \frac{\pi}{2} \rightarrow$ caduta libera!

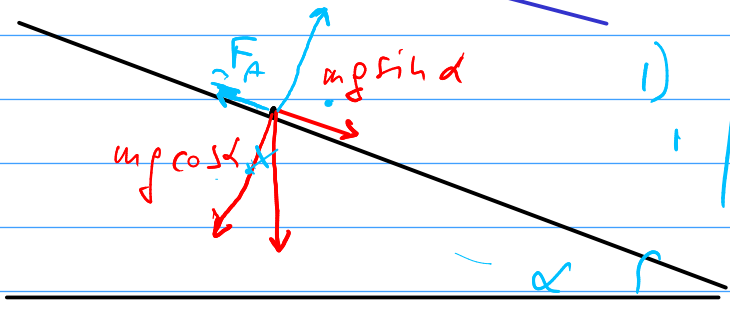
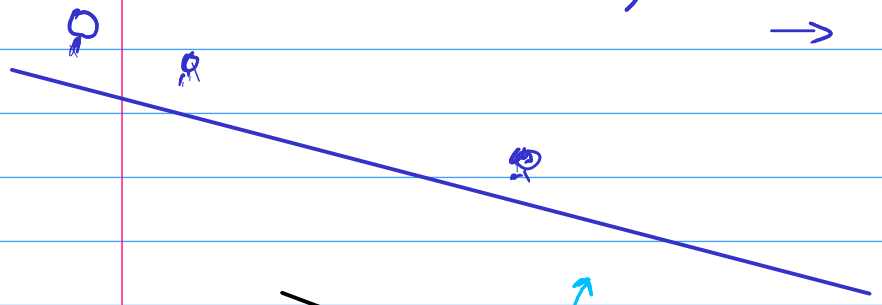
$$X = X_1 + X_2$$



1) No attrito

$$\rightarrow F = mg \sin \alpha$$

$$a = \frac{F}{m} = \underline{g \sin \alpha}$$



1) oggetto fermo
 $|F_A| = | -mg \sin \alpha |$

momento

$$F_{tot} = mg \sin \alpha - \mu_0 \underbrace{mg \cos \alpha}$$