

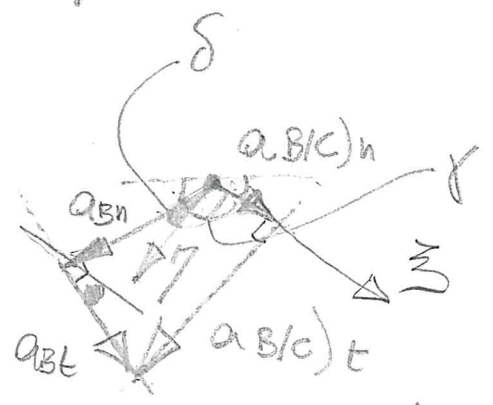


$$\bar{a}_B = \bar{a}_{Bm} + \bar{a}_{Bt} = \bar{a}_c + \bar{a}_{B/c)u} + \bar{a}_{B/c)t}$$

$\omega_1^2 ?$ 1 m/s <sup>2</sup>	$\omega_1^2 ?$	0	$\omega_2^2 32$ 0.33 m/s <sup>2</sup>	$\omega_2^2 32 ?$	M
// AB	⊥ AB	✓	// BC	⊥ BC	D
B → A	?	✓	B → C	?	✓

$$\sum) a_{B/c)u} - a_{Bt} \cos \delta + a_{Bu} \sin \delta = 0$$

$$\sum) a_{B/c)t} - a_{Bt} \sin \delta - a_{Bu} \cos \delta = 0$$



$$\gamma = 180 - (30 + 30) = 120$$

$$\delta = \gamma - 90^\circ = 30^\circ$$

$$a_{Bt} = \frac{a_{B/c)u} + a_{Bu} \sin \delta}{\cos \delta}$$

$$a_{B/c)t} = a_{Bt} \sin \delta + a_{Bu} \cos \delta$$

$$a_{Bt} = \frac{0.33 + 1 \cdot \sin 30^\circ}{\cos 30^\circ} = 0.96 \text{ m/s}^2$$

$$a_{B/c)t} = 0.96 \cdot \sin 30^\circ + 1 \cdot \cos 30^\circ = 1.024 \text{ m/s}^2$$

$M_1 = M_2 = 100 \text{ kg}$

$t=0$   
FERMO

RUOLO OMOGENEO

$r_1 = 0,1 \text{ m}$

$r_p = 1 \text{ cm}$

$f_p = 0,5$

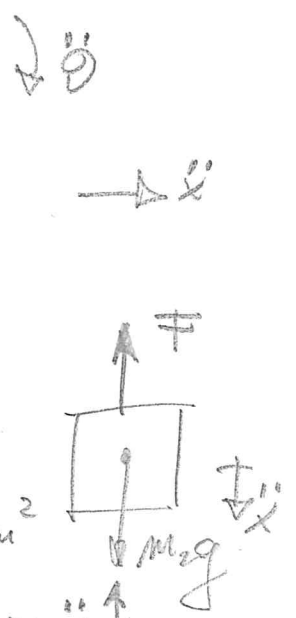
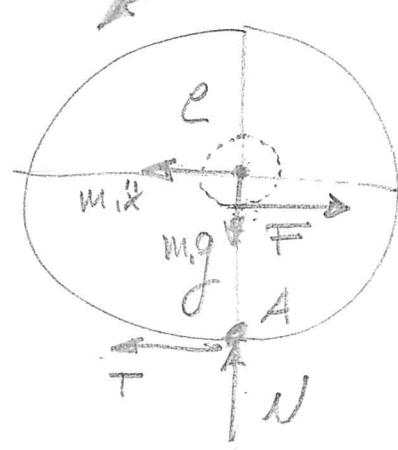
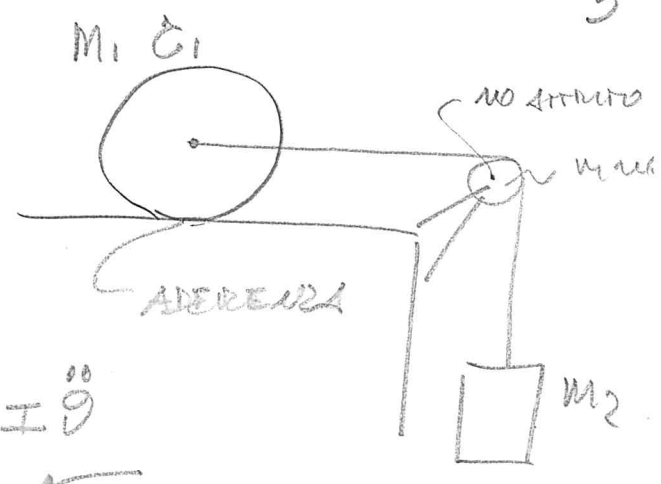
$\ddot{x} \quad \ddot{\theta}$

$F - m_2 g + m_2 \ddot{x} = 0$

$F - T - m_1 \ddot{x} = 0$

$N - m_1 g = 0$

A)  $m_1 \ddot{x} r_1 - F (r_1 - e) + I \ddot{\theta} = 0$   
 $\ddot{x} = \ddot{\theta} r_1$



$I = \frac{M_1 r_1^2}{2} = 0,5 \text{ kg m}^2$

$e = r_p \sin \varphi$   
 $\varphi = \arctan f_p = 26,56^\circ$   
 $e = 0,44 \cdot 10^{-2} \text{ m}$

$\ddot{x} = \frac{m_2 g (r_1 - e)}{m_2 (r_1 - e) + m_1 r_1 + \frac{I}{r_1}} =$

$= \frac{100 \cdot 9,81 (0,1 - 0,44 \cdot 10^{-2})}{100 (0,1 - 0,44 \cdot 10^{-2}) + 100 \cdot 0,1 + \frac{0,5}{0,1}} = \frac{93,78}{24,56} =$

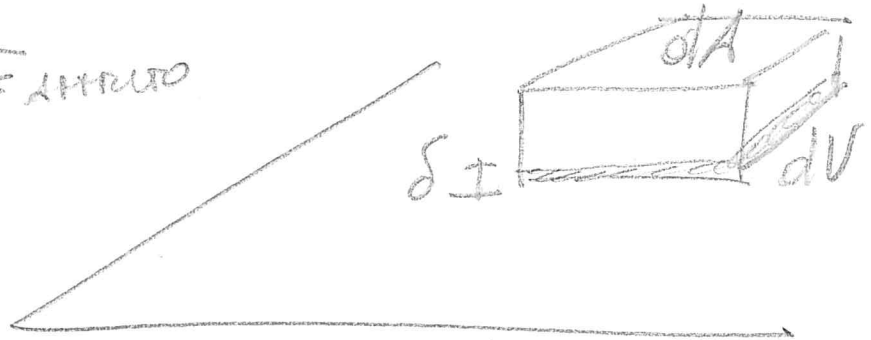
$= 3,82 \text{ m/s}^2$

$\ddot{\theta} = 38,2 \text{ rad/s}^2$

FRENI

EN CIN  $\longrightarrow$  CALORE  
 ATTIVO

$$dV = \int dA \propto L_{\text{ATTIVO}}$$



$$dV = K P dA f v_{c.1}$$

$$\delta dA = K f P dA v_{c.1}$$

$\underbrace{\hspace{2em}}_T$   
 $\underbrace{\hspace{2em}}_{v_{c.1}}$   
 $\underbrace{\hspace{2em}}_L$

