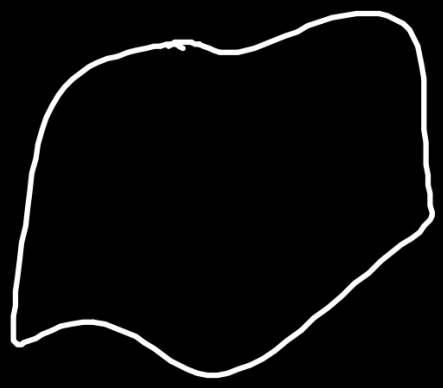
EQUILIBRIO DEI CORPI

C. PUNTIFORME

EQUIL. $\rightarrow \vec{F}_{RIS} = 0$

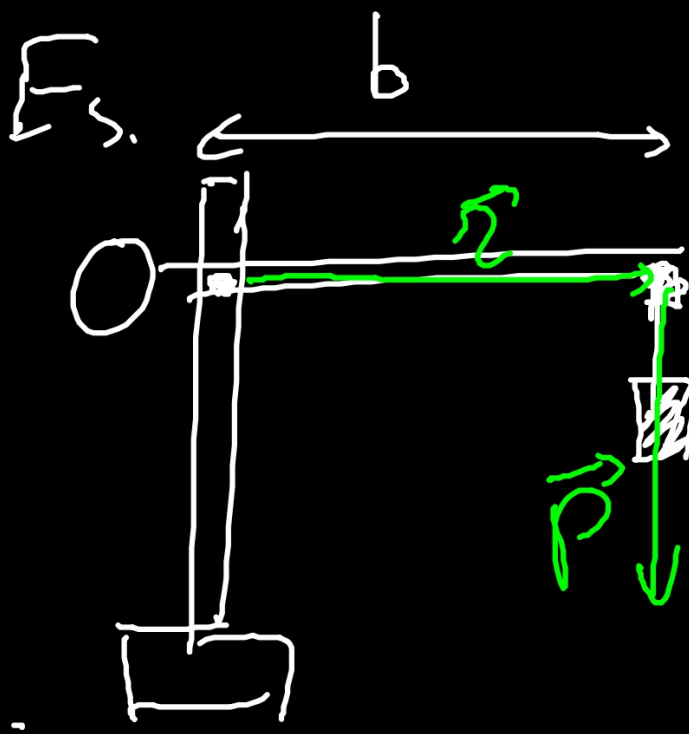
C. ESTÁTICA / RÍGIDO



$$\vec{F}_{RES} = 0$$

$$\vec{M}_{RES} = 0$$

Es.



$b = 25\,m$

$m = 50\,kg$

$n = 340\,kg$

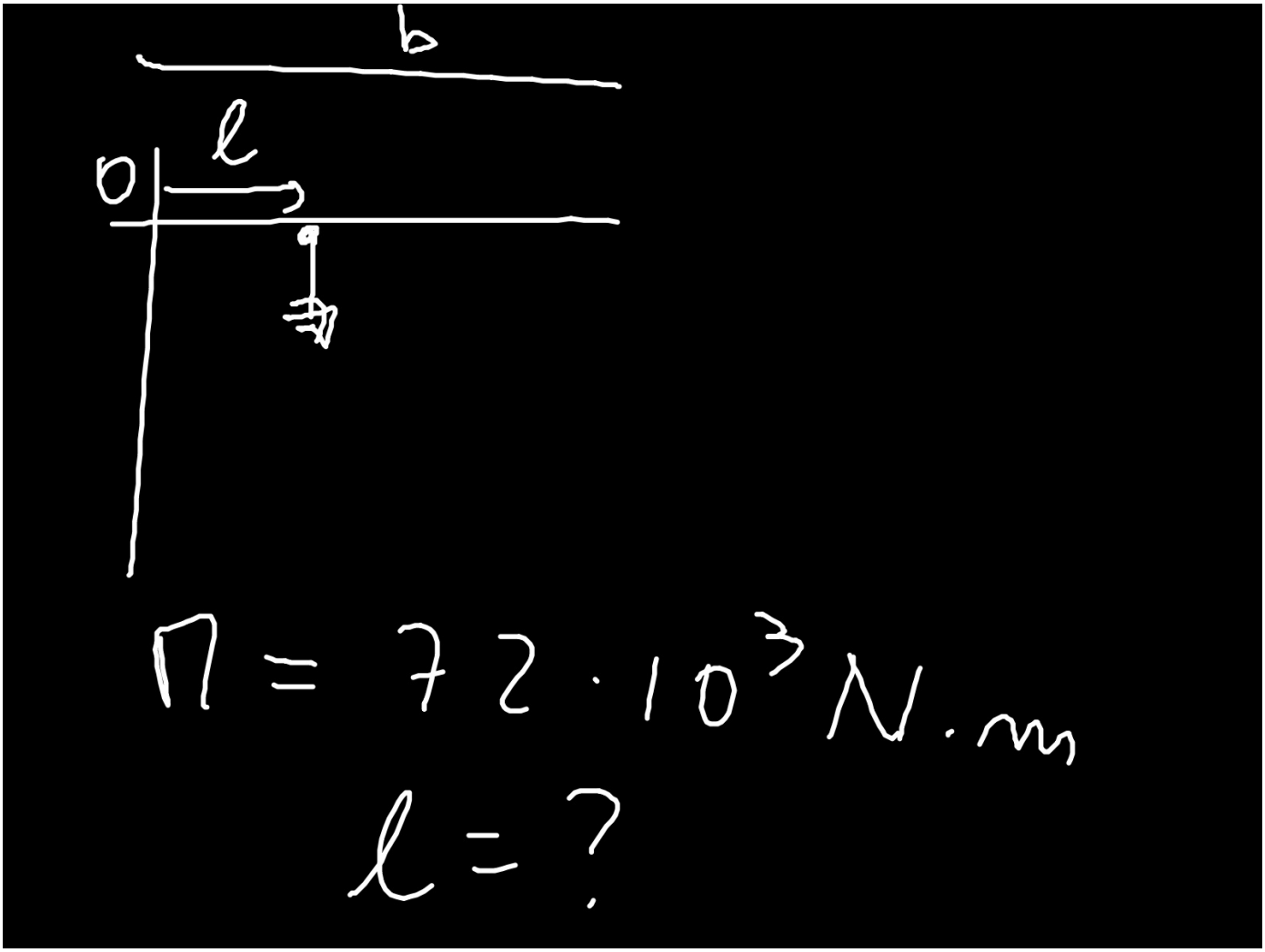
$$P = (m+n)g = 3826\,N$$

$$M_0 = b \cdot P \cdot \underbrace{\operatorname{sen} a}_{1}$$

$$= b \cdot P$$

$$= 25\,m \cdot 3826\,N$$

$$= 95647{,}5\,N \cdot m$$



$$M = 72 \cdot 10^3 \, N \cdot m$$

$$l = ?$$

$$\Pi = l \cdot P$$

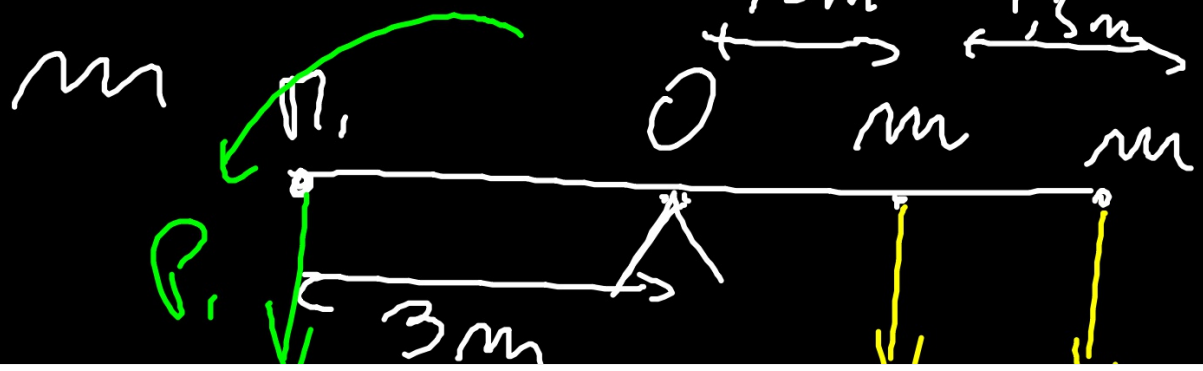
$$l = \Pi / P$$

$$l = \frac{72 \cdot 10^3 \, Nl \cdot m}{3826 \, N}$$

$$= 18.8 \, m$$

Es. (C. Laurea Arch. Tell 2007/08)

$m_1 = 60\ kg$



$$M_1 \cdot g \cdot l - mg \cdot \frac{l}{2} - mgl = 0$$

$$M_1 - \frac{m}{2} - m = 0$$

$$M_1 = \frac{m}{2} + m$$

$$M_1 = \frac{3}{2} m \qquad m = \frac{2}{3} M_1$$

$$= 40\,kg.$$