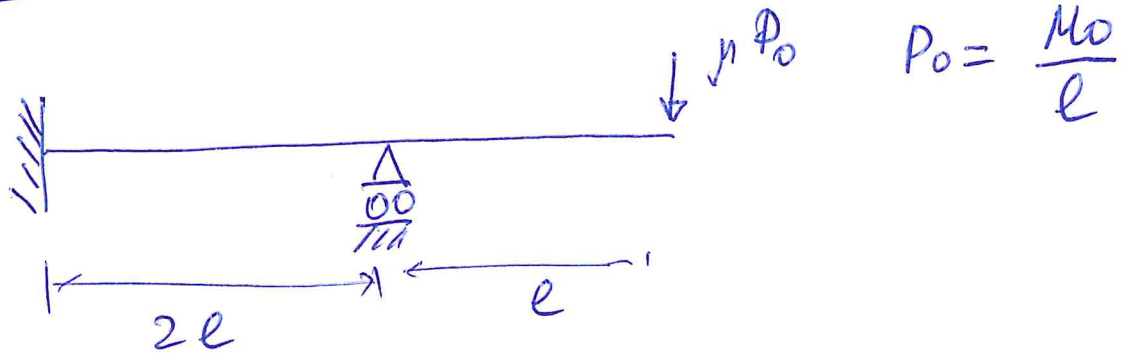
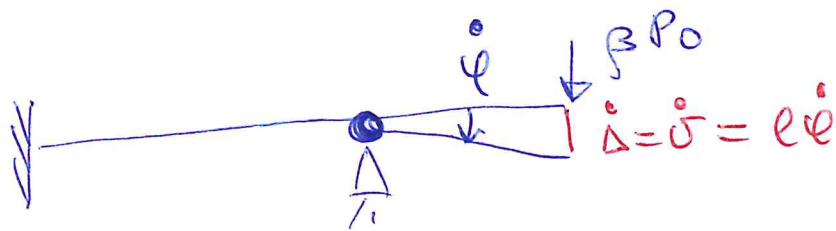


Problema 3



$$S \int P_0 \delta dx = \sum_k M_{0k} \dot{\psi}_k$$



~~$\beta P_0 e \dot{\psi}$~~ $\beta P_0 \delta = M_0 \dot{\psi}$?

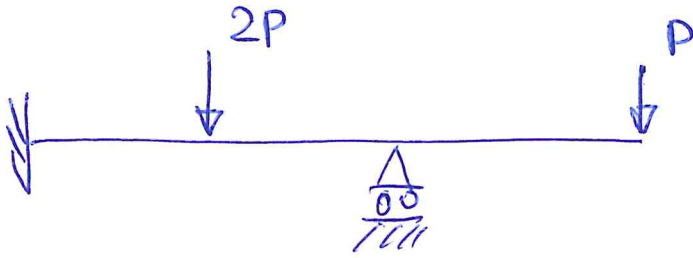
$$\beta P_0 e \dot{\psi} = M_0 \dot{\psi}$$

$$\beta \frac{M_0}{e} e \dot{\psi} = M_0 \dot{\psi}$$

$$\boxed{\beta = 1}$$

$$\boxed{S \leq \beta = 1}$$

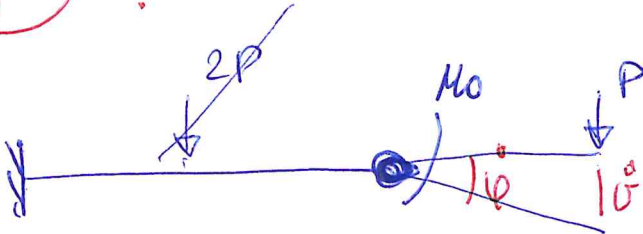
31



$$P = \mu P_0$$

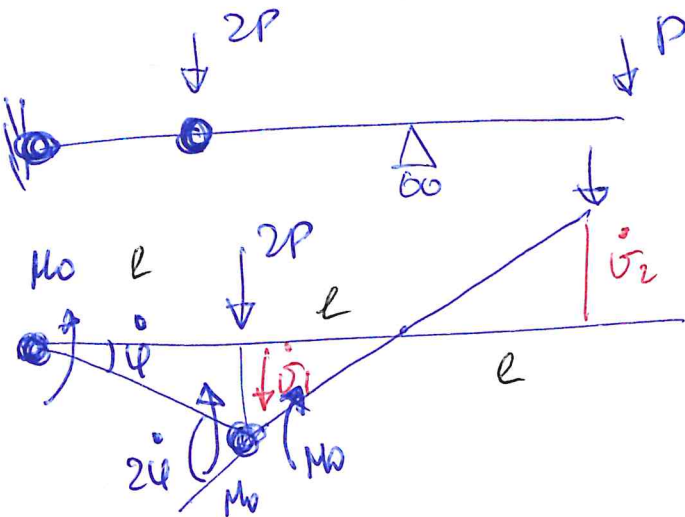
$$P_0 = \frac{M_0}{l}$$

β - ?



$$\beta P_0 \dot{v} = M_0 \dot{\psi}$$

$$\beta = 1$$



$$\beta 2P_0 \dot{v}_1 - \beta P_0 \dot{v}_2 = M_0 \dot{\psi}_1 + 2M_0 \dot{\psi}_2$$

$$\dot{v}_1 = l \dot{\psi}_1, \quad \dot{v}_2 = l \dot{\psi}_2$$

$$\beta 2P_0 l \dot{\psi}_1 - \beta P_0 l \dot{\psi}_2 = 3.5 M_0 \dot{\psi}_2$$

②

$$\beta P_0 e \dot{\varphi} = 5 M_0 \dot{\varphi}$$

$$\beta \frac{M_0}{e} \dot{\varphi} = 5 M_0 \dot{\varphi}$$

$$\boxed{\beta = 5}$$

$$\begin{cases} \beta_1 = 1 \\ \beta_2 = 5 \end{cases}$$

$$\beta \geq 5$$

$$\Rightarrow \underline{\beta_1 = 1} \approx 5$$

③