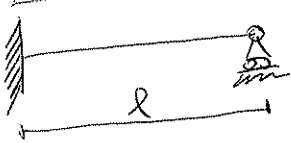


VERIFICARE I BORDI



$$v(0) = 0 \quad v(l) = 0$$

$$\frac{dv}{ds}(0) = 0$$

$$v(0) = c_4 = 0 \quad v(l) = -\frac{p_2}{EI} \cdot \frac{l^4}{24} + \frac{c_1 l^3}{6} + \frac{c_2 l^2}{2} = 0$$

$$\frac{dv}{ds}(0) = c_3 = 0$$

CI TROVIAMO CI IN FUNZIONE DI C2

$$c_1 = -\frac{3c_2}{l} + \frac{p_2 l}{4EI}$$

SAPENDO CHE

$$M = EI \chi = 0$$

$$EI \frac{d^2 p}{ds^2} = 0 \quad p = \frac{dv}{ds}$$

$$EI \frac{d^2 v}{ds^2} = 0$$

$$\hookrightarrow EI \left(-\frac{p_2}{EI} \frac{l^2}{2} + c_1 l + c_2 \right) = 0$$

SOSTITUISCO C1

$$\left(-\frac{p_2}{EI} \frac{l^2}{2} + \frac{p_2 l^2}{EI 4} - \frac{3c_2 l}{l} + c_2 \right) EI = 0$$

$$\left(-\frac{p_2}{EI} \frac{l^2}{2} + \frac{p_2 l^2}{EI 4} - 2c_2 \right) EI = 0$$

$$-\frac{p_2 l^2}{2} + \frac{p_2 l^2}{4} - 2c_2 EI = 0$$

$$+ 2c_2 EI = -\frac{p_2 l^2}{2} + \frac{p_2 l^2}{4} = -\frac{p_2 l^2}{4} \Rightarrow \left[c_2 = -\frac{p_2 l^2}{8EI} \right]$$

$$c_1 = \frac{p_2 l}{EI 4} + \frac{3p_2 l^2}{l 8EI} = \frac{2p_2 l}{8EI} + \frac{3p_2 l}{8EI} \Rightarrow c_1 = \left[\frac{5p_2 l}{8EI} \right]$$