

$$\text{Per } z=0 \quad \phi=0$$

$$\sigma = \frac{ql^4}{48EI}$$

$$\text{Per } z=l \quad \sigma=0$$

$$\pi = -\frac{ql^2}{2}$$

substituo $z=0$ in $\phi(z)$ & ottiene $C_3=0$

$z=0$ in $\sigma(z)$ & ottiene $C_4 = \frac{ql^4}{48}$

substituo $z=l$ in $\sigma(z)$ & ottiene

$$\frac{C_1 l^3}{6EI} + \frac{C_2 l^2}{2EI} + \frac{ql^4}{48EI} = 0 \quad \frac{C_1 l}{3} + C_2 + \frac{ql^2}{24} = 0$$

substituo $z=l$ in $\pi(z)$ & ottiene

$$C_1 l + C_2 = +\frac{ql^2}{2}$$

$$\begin{cases} C_1 l + C_2 = \frac{ql^2}{2} \\ C_1 l + 3C_2 = -\frac{ql^2}{8} \end{cases}$$

$$-2C_2 = +\frac{5}{8} ql^2$$

$$C_2 = -\frac{5}{16} ql^2$$

$$C_1 = \frac{13}{16} ql$$

$$C_1 = \frac{13}{16} ql$$

$$C_2 = -\frac{5}{16} ql^2$$

$$C_3 = 0$$

$$C_4 = \frac{ql^4}{48}$$