

$$\textcircled{6} \quad z = \frac{l}{2}, \quad z' = \frac{l}{2} \Rightarrow v^s = v^p, \quad \frac{dv}{dz} = - \frac{dv}{dz'} \quad \textcircled{2}$$

Per la  $\textcircled{1}$  :

$$-\frac{ql^4}{384EI} + C_1 \frac{l}{2} = -\frac{3ql^4}{384EI} + \frac{ql^4}{384EI} + C_3 \frac{l}{2}$$

$$C_1 = C_3 - \frac{ql^3}{192EI}$$

per la  $\textcircled{2}$  :

$$-\frac{ql^3}{64EI} + C_1 = \frac{3ql^3}{64EI} - \frac{ql^3}{48EI} - C_3 =$$

$$= -\frac{4ql^3}{192EI} + C_3 = \frac{5ql^3}{192EI} - C_3$$

$$2C_3 = \frac{9ql^3}{192EI} = \frac{3ql^3}{64EI} \quad \left| \quad C_3 = \frac{3ql^3}{128EI}$$

$$\left| \quad C_1 = \frac{3ql^3}{128EI} - \frac{ql^3}{192EI} = \frac{9ql^3 - 2ql^3}{384EI} = \frac{7ql^3}{384EI}$$

$$\text{per } z = \frac{l}{2} \quad \left| \quad v = -\frac{ql^4}{384EI} + \frac{7ql^4}{768EI} = \frac{5ql^4}{768EI}$$