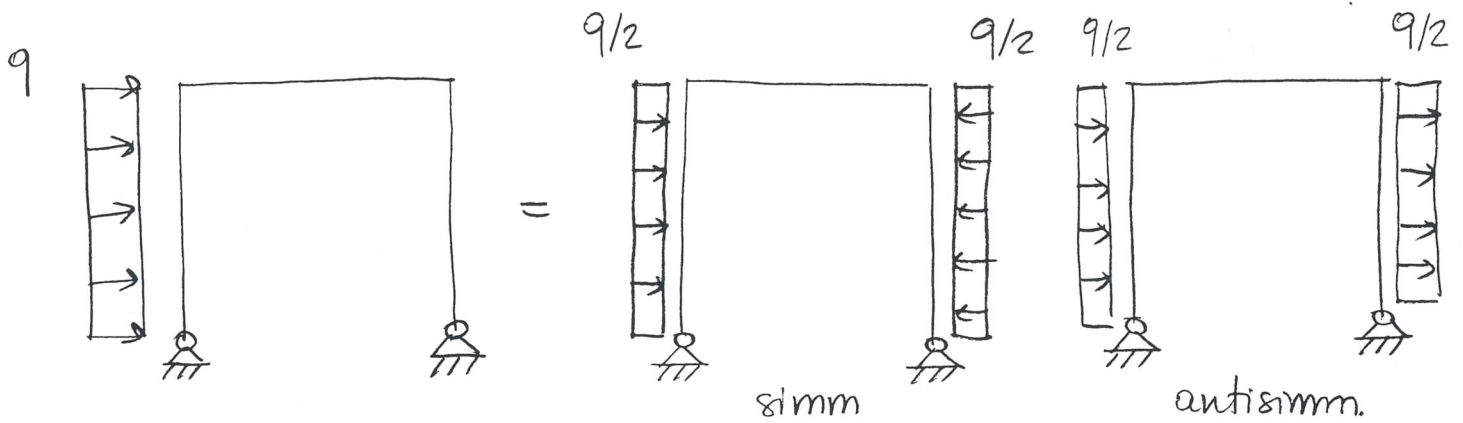
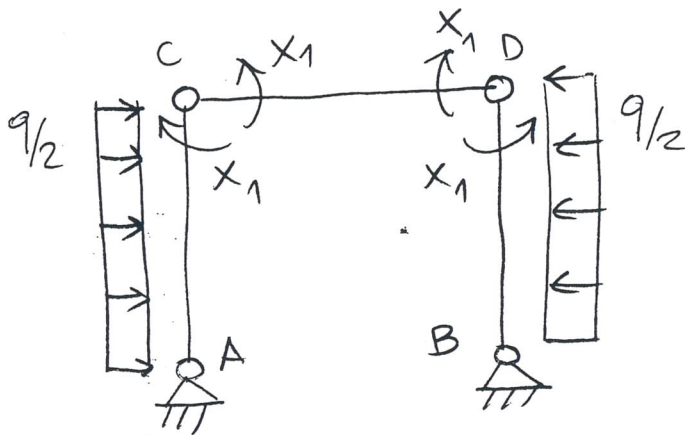




1) carico simmetrico (modi fissi)



$\varphi_{C'} = \varphi_{C''}$ (condizione di congruenza)

$$\varphi_{C'} = \frac{\frac{q}{2} l^3}{24EI} - \frac{x_1 l}{3EI}$$

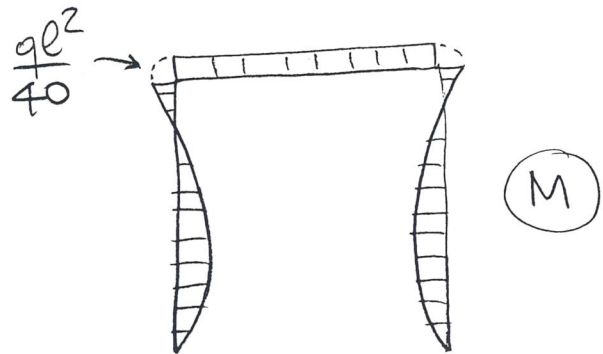
$$\varphi_{C''} = \frac{x_1 l}{3EI} + \frac{x_1 l}{6EI} = \frac{x_1 l}{2EI}$$

Pertanto:

$$\frac{q l^3}{48EI} = \frac{5}{6} \frac{x_1 l}{EI}$$

da cui

$$x_1 = \frac{q l^2}{40}$$



2) carico antisimmetrico (struttura isostatica)

