

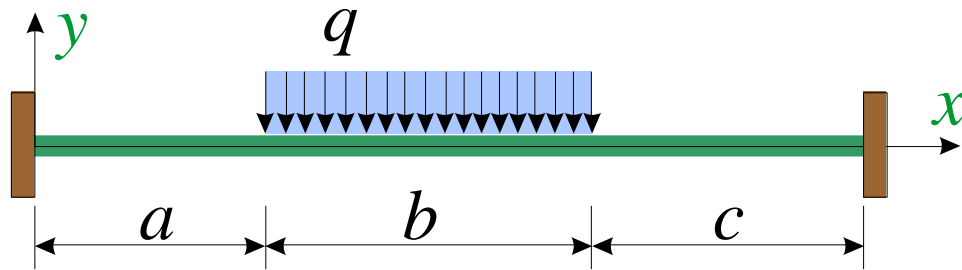
### Zad. 3

$$q := 5 \frac{\text{kN}}{\text{m}} \quad a := 2\text{m} \quad b := 6\text{m} \quad \underline{c} := 3\text{m} \quad \underline{L} := a + b + c$$

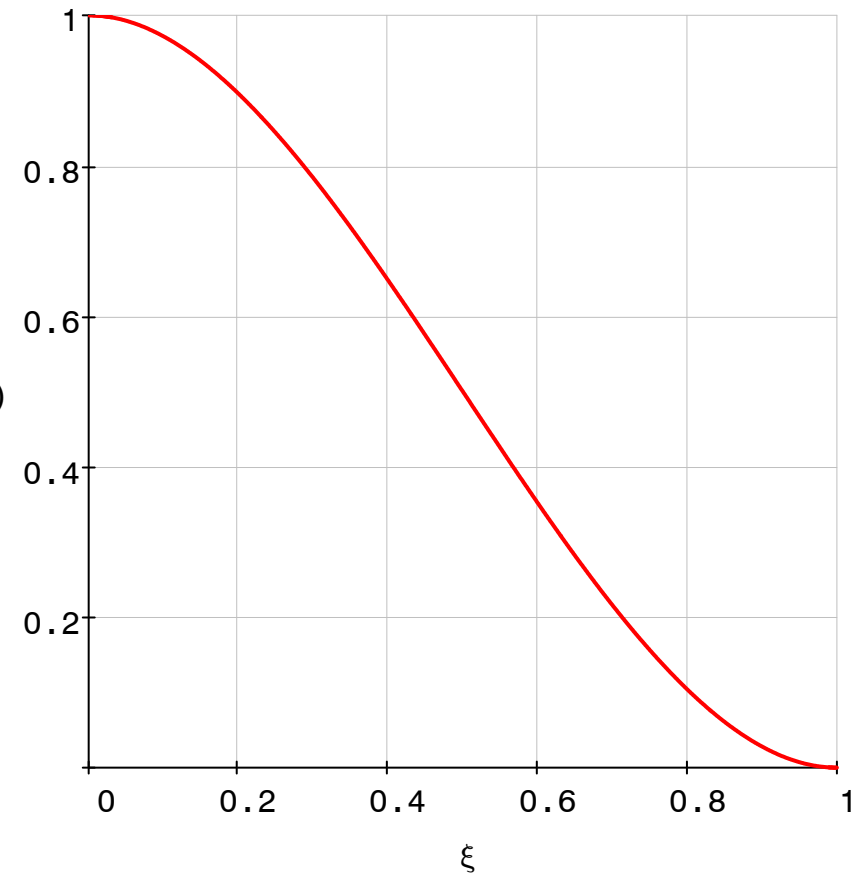
$$\xi_1 := \frac{a}{L} = 0.181818$$

$$\xi_2 := \frac{a+b}{L} = 0.727273$$

$$H1000(\xi) := 1 - 3 \cdot \xi^2 + 2 \cdot \xi^3$$



H1000(ξ)



### Równanie pracy wirtualnej

$$R_i \cdot 1 - q \cdot L \cdot \int_{\xi_1}^{\xi_2} H1000(\xi) d\xi = 0$$

$$R_i := q \cdot L \cdot \int_{\xi_1}^{\xi_2} H1000(\xi) d\xi = 16.836965 \cdot \text{kN}$$