

Grupa B2

Zad. 3

$$q := 5 \frac{\text{kN}}{\text{m}}$$

$$a := 2\text{m}$$

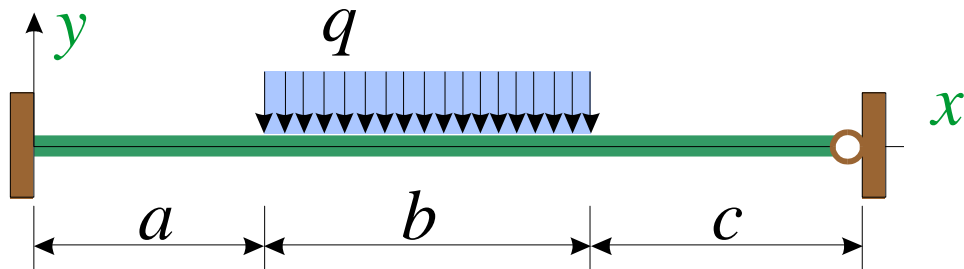
$$b := 5\text{m}$$

$$c := 1\text{m}$$

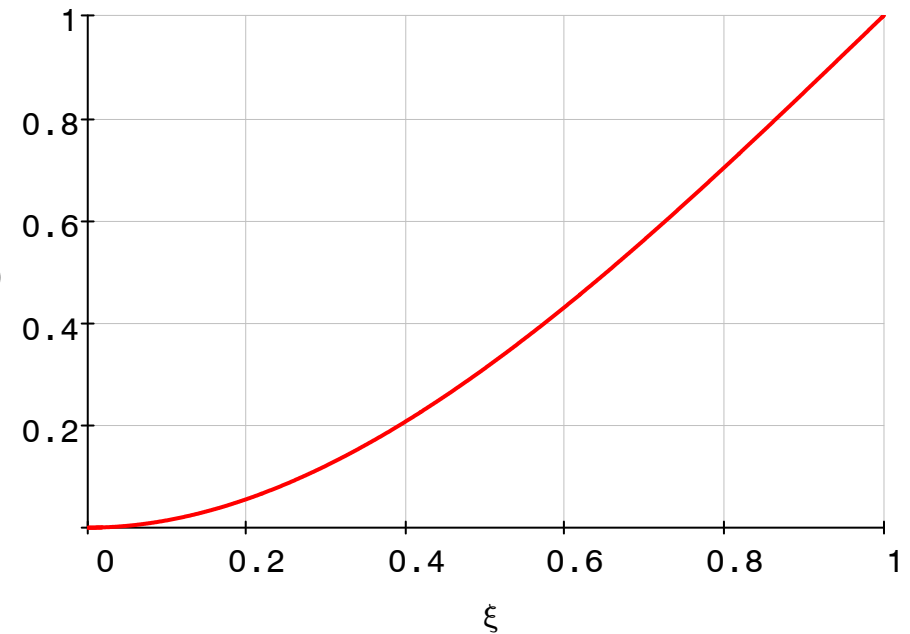
$$L := a + b + c$$

$$\xi_1 := \frac{a}{L} = 0.25$$

$$\xi_2 := \frac{a + b}{L} = 0.875$$



$$G0010(\xi) := \frac{\xi^2}{2} \cdot (3 - \xi)$$



Równanie pracy wirtualnej

$$R_j \cdot 1 - q \cdot L \cdot \int_{\xi_1}^{\xi_2} G0010(\xi) d\xi = 0$$

$$R_j := q \cdot L \cdot \int_{\xi_1}^{\xi_2} G0010(\xi) d\xi = 10.17 \cdot \text{kN}$$