

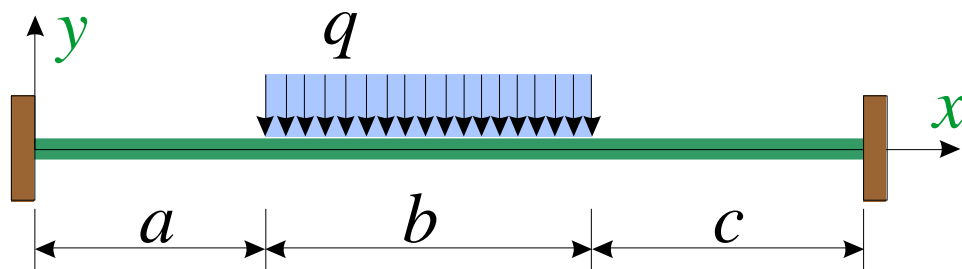
Grupa B2

Zad. 3

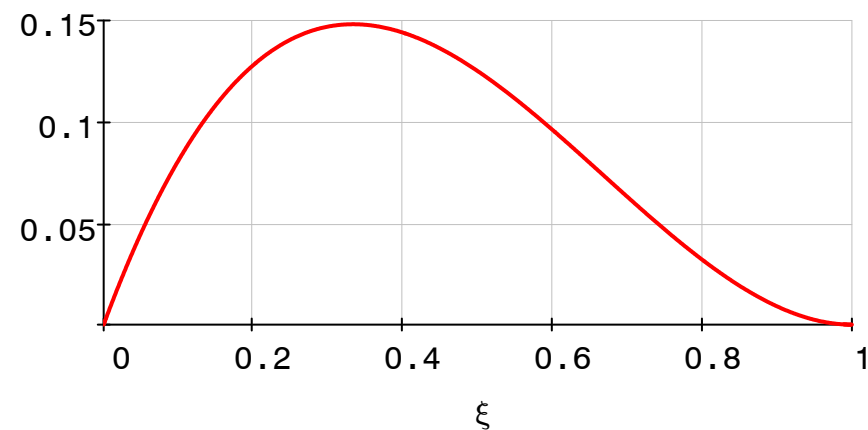
$$q := 8 \frac{\text{kN}}{\text{m}} \quad a := 3\text{m} \quad b := 5\text{m} \quad c := 2\text{m} \quad L := a + b + c$$

$$\xi_1 := \frac{a}{L} = 0.3$$

$$\xi_2 := \frac{a + b}{L} = 0.8$$



$$H_{0100}(\xi) := \xi \cdot (1 - 2 \cdot \xi + \xi^2)$$



Równanie pracy wirtualnej

$$M_i \cdot 1 - q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} H_{0100}(\xi) d\xi = 0$$

$$M_i := q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} H_{0100}(\xi) d\xi = 41.633 \text{ m} \cdot \text{kN}$$