

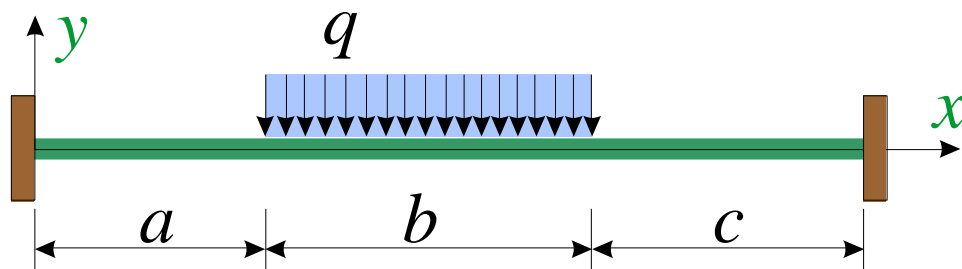
Grupa B1

Zad. 3

$$q := 2 \frac{\text{kN}}{\text{m}} \quad a := 1\text{m} \quad b := 7\text{m} \quad c := 3\text{m} \quad L := a + b + c$$

$$\xi_1 := \frac{a}{L} = 0.090909$$

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



$$H0001(\xi) := -\xi^2 \cdot (1 - \xi)$$

Równanie pracy wirtualnej

$$M_j \cdot 1 - q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} H0001(\xi) d\xi = 0$$

$$M_j := q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} H0001(\xi) d\xi = -14.0482 \text{ m} \cdot \text{kN}$$

$$M := -M_j = 14.05 \cdot \text{kN} \cdot \text{m}$$

Dokładność $\pm 0.005 \text{ kNm}$

