

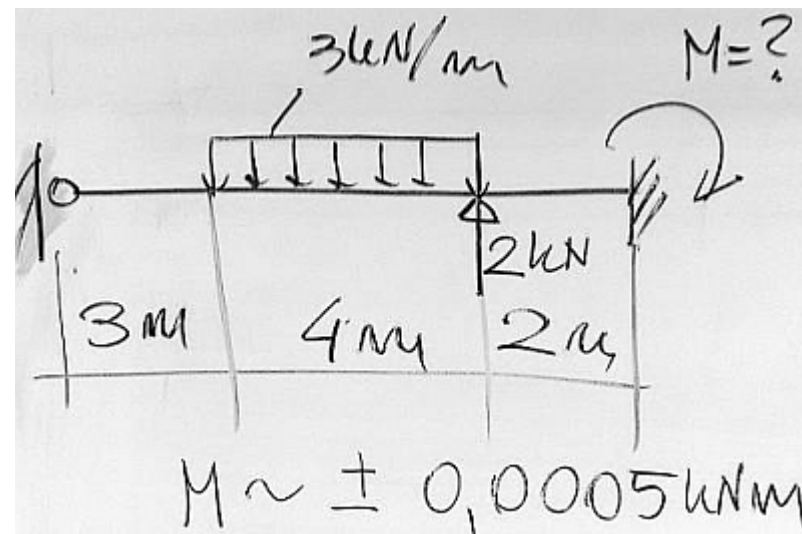
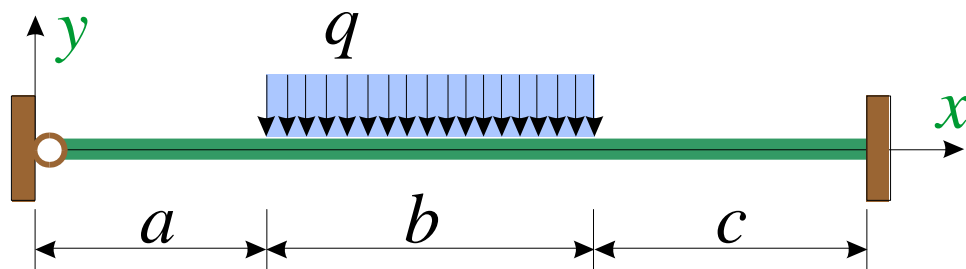
Grupa A

$$q := 3 \frac{\text{kN}}{\text{m}} \quad a := 3\text{m} \quad b := 4\text{m} \quad c := 2\text{m} \quad L := a + b + c$$

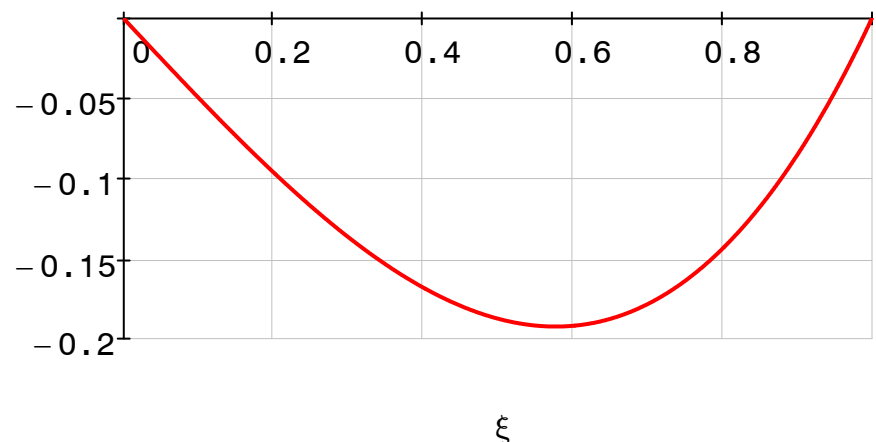
$$P := 2\text{kN}$$

$$\xi_1 := \frac{a}{L} = 0.333333$$

$$\xi_2 := \frac{a+b}{L} = 0.777778$$



$$K0001(\xi) := \frac{\xi}{2} \cdot (\xi^2 - 1)$$



$$M := -M_j = 16.593 \text{ kN} \cdot \text{m}$$

Równanie pracy wirtualnej

$$M_j \cdot 1 + P \cdot L \cdot K0001(\xi_1) - q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} K0001(\xi) d\xi = 0$$

$$M_j := -P \cdot L \cdot K0001(\xi_1) + q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} K0001(\xi) d\xi$$