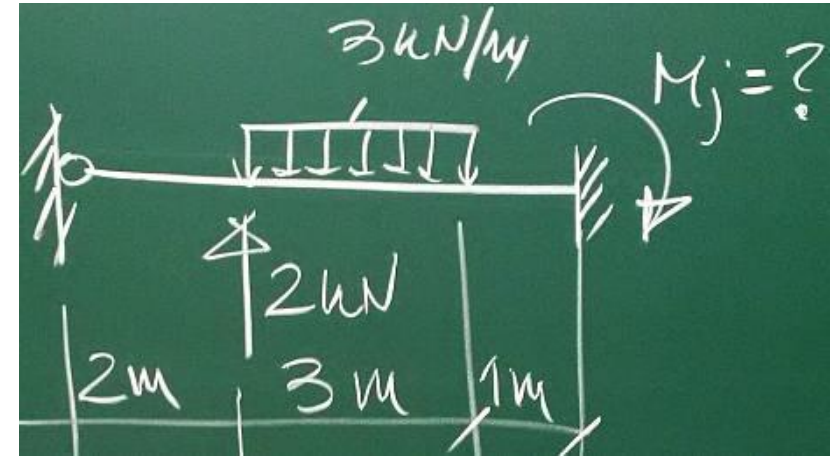
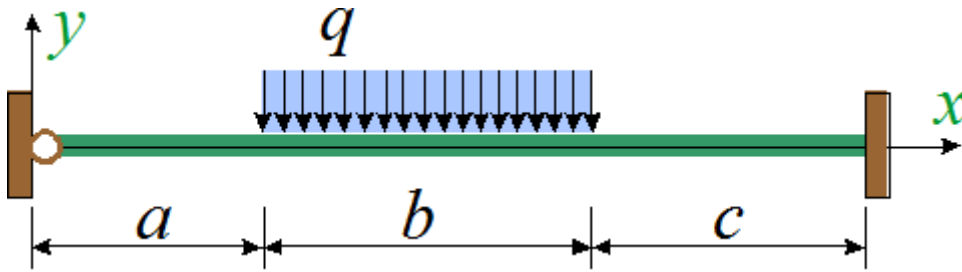


Grupa 1

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

$$\xi_1 := \frac{a}{L} = 0.333333 \quad \xi_2 := \frac{a+b}{L} = 0.833333 \quad \xi_P := \xi_1$$



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

Równanie pracy wirtualnej

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

$$M_j := -q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} K0001(\xi) d\xi + P \cdot L \cdot K0001(\xi_P) = 7.6285 \text{ kN} \cdot m$$

