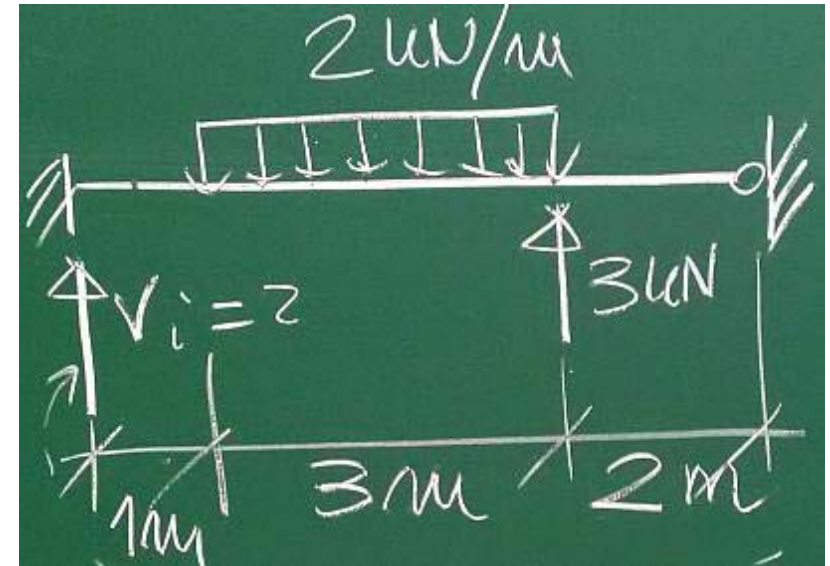
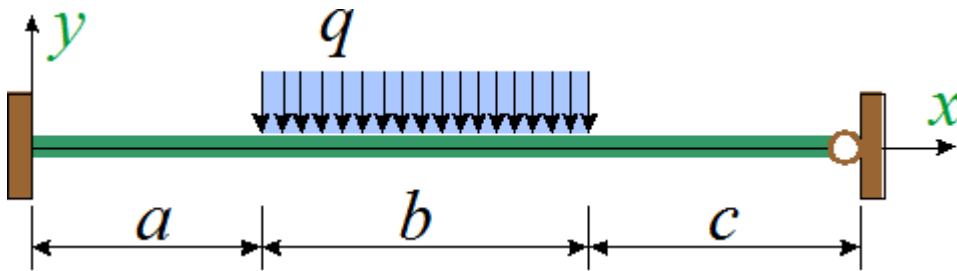


## Grupa 1

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

$$\xi_1 := \frac{a}{L} = 0.166667 \quad \xi_2 := \frac{a+b}{L} = 0.666667 \quad \xi_P := \xi_2$$



$$G1000(\xi) := 1 - \frac{3}{2} \cdot \xi^2 + \frac{1}{2} \cdot \xi^3$$

## Równanie pracy wirtualnej

$$V_i \cdot 1 + P \cdot G1000(\xi_P) - q \cdot L \cdot \int_{\xi_1}^{\xi_2} G1000(\xi) d\xi = 0$$

$$V_i := q \cdot L \cdot \int_{\xi_1}^{\xi_2} G1000(\xi) d\xi - P \cdot G1000(\xi_P) = 3.1007 \text{ kN}$$

