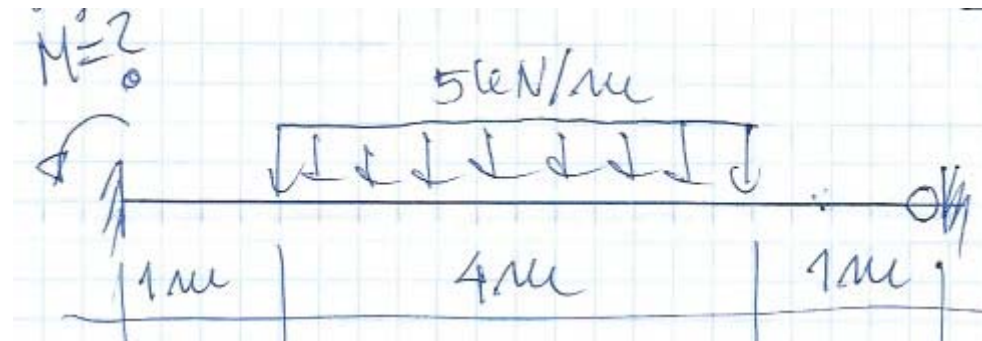
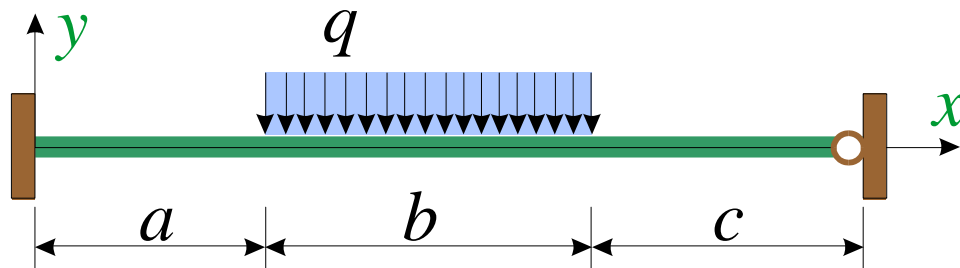


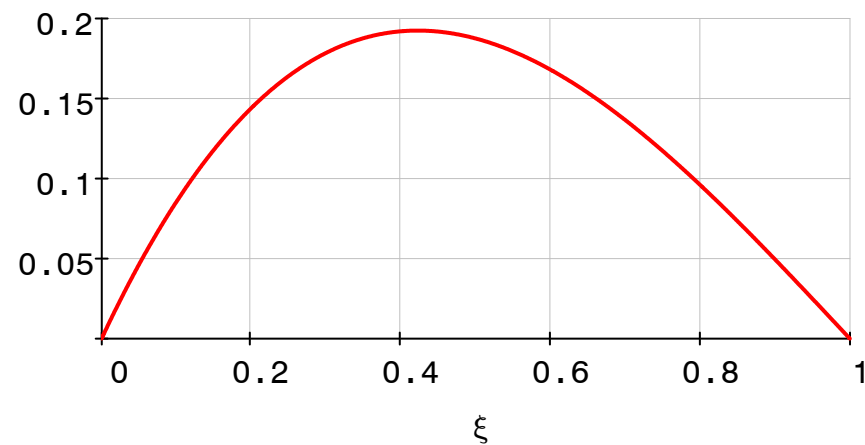
## Egzamin 11 marca, zad 2

$$q := 5 \frac{\text{kN}}{\text{m}} \quad a := 1\text{m} \quad b := 4\text{m} \quad c := 1\text{m} \quad L := a + b + c$$

$$\xi_1 := \frac{a}{L} = 0.166667 \quad \xi_2 := \frac{a+b}{L} = 0.833333$$



$$G0100(\xi) := \frac{\xi}{2} \cdot (2 - 3 \cdot \xi + \xi^2)$$



## Równanie pracy wirtualnej

$$M_i \cdot 1 - q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} G0100(\xi) d\xi = 0$$

$$M_i := q \cdot L^2 \cdot \int_{\xi_1}^{\xi_2} G0100(\xi) d\xi$$

$$M := M_i = 19.167 \cdot \text{kN} \cdot \text{m}$$