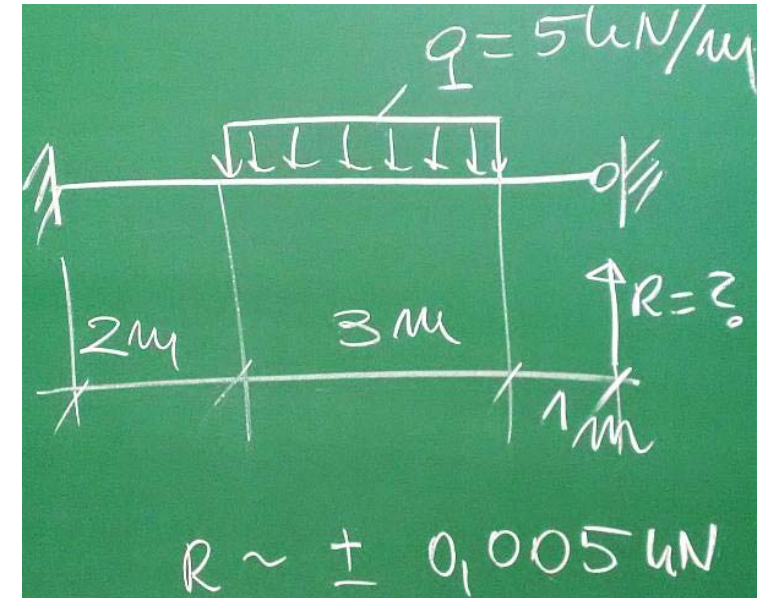
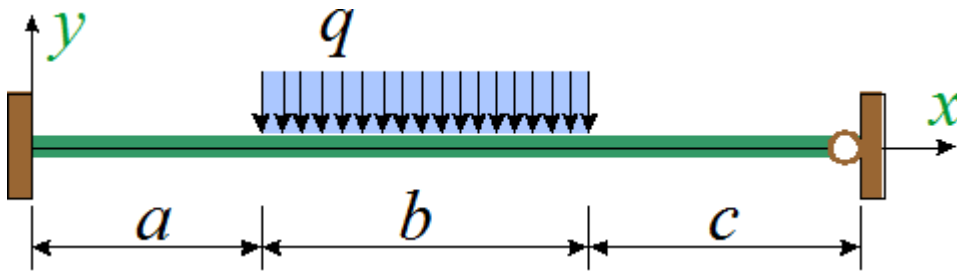


## Grupa A

$$q := 5 \cdot \frac{\text{kN}}{\text{m}} \quad a := 2 \cdot \text{m} \quad b := 3 \cdot \text{m} \quad c := 1 \cdot \text{m} \quad L := a + b + c$$

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

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



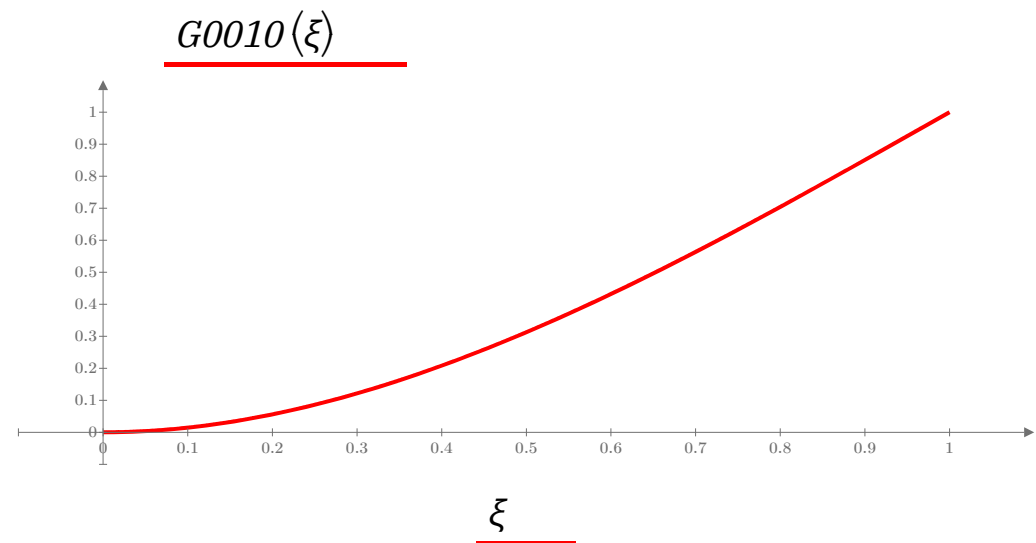
$$G0010(\xi) := \frac{\xi^2}{2} \cdot (3 - \xi)$$

## Równanie pracy wirtualnej

$$R_j \cdot 1 - q \cdot L \cdot \int_{\xi_1}^{\xi_2} G0010(\xi) d\xi = 0$$

$$R_j := q \cdot L \cdot \int_{\xi_1}^{\xi_2} G0010(\xi) d\xi$$

$$R_j = 6.36 \text{ kN}$$



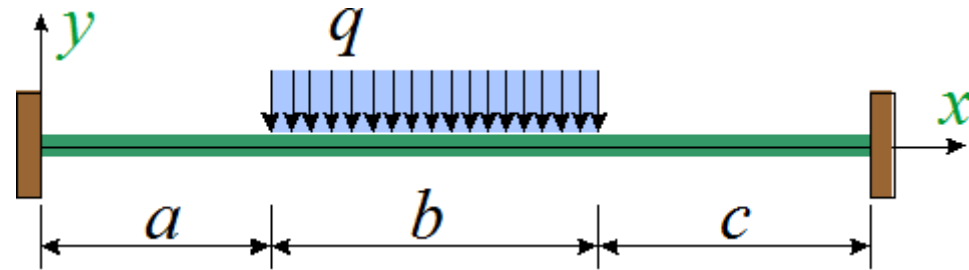
## Definicja wielomianów Hermite'a dla belki obustronnie sztywno zamocowanej

$$H1000(\xi) := 1 - 3 \cdot \xi^2 + 2 \cdot \xi^3$$

$$H0100(\xi) := \xi \cdot (1 - 2 \cdot \xi + \xi^2)$$

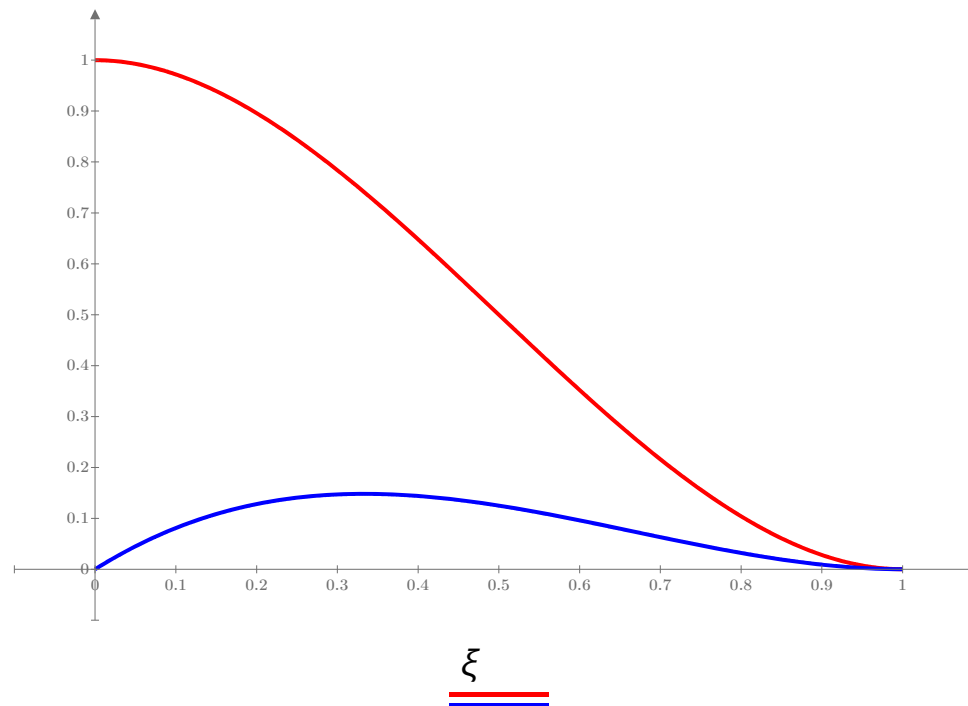
$$H0010(\xi) := \xi^2 \cdot (3 - 2 \cdot \xi)$$

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



$$\underline{H1000(\xi)}$$

$$\underline{H0100(\xi)}$$

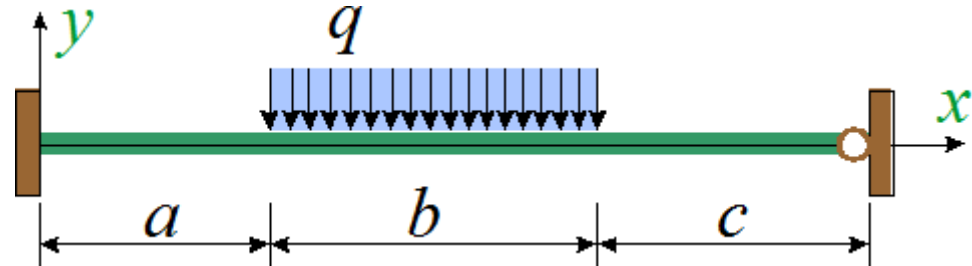


*Definicja wielomianów Hermite'a dla belki zamocowanej przegubowo na prawej podporze -  $G(\xi)$*

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

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

$$G0010(\xi) := \frac{\xi^2}{2} \cdot (3 - \xi)$$



*Definicja wielomianów Hermite'a dla belki zamocowanej przegubowo na lewej podporze -  $K(\xi)$*

$$K1000(\xi) := \frac{1}{2} \cdot \xi^3 - \frac{3}{2} \cdot \xi + 1$$

$$K0010(\xi) := \frac{\xi}{2} \cdot (3 - \xi^2)$$

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

