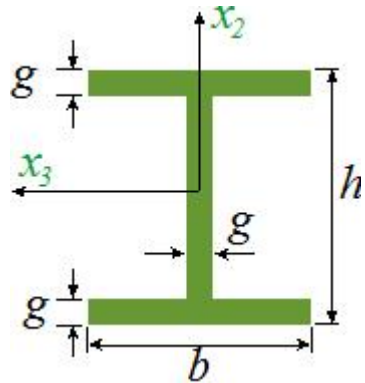


## Grupa B1

### Zad. 2

$$E := 15 \text{ GPa} \quad L := 7 \text{ m} \quad b := 12 \text{ cm} \quad h := 9 \text{ cm} \quad g := 2 \text{ cm}$$

$$\text{Sch} := 2 \quad \mu := mb_{\text{Sch}} \quad L_w := \mu \cdot L$$



$$b_1 := b - g \quad h_1 := h - 2 \cdot g$$

$$J_3 := \frac{b \cdot h^3}{12} - \frac{b_1 \cdot h_1^3}{12}$$

$$J_2 := \frac{g \cdot b^3}{6} + \frac{h_1 \cdot g^3}{12}$$

$$J := \min(J_2, J_3) = 579.333333 \cdot \text{cm}^4$$

$$P_{\text{kr}} := \frac{\pi^2 E \cdot J}{L_w^2} = 17.50 \cdot \text{kN}$$

$$mb := \begin{pmatrix} 2 \\ 1 \\ \frac{\pi}{z} \\ 0.5 \end{pmatrix}$$

$$z := 4.493409$$

$$mb_3 = 0.699156$$

