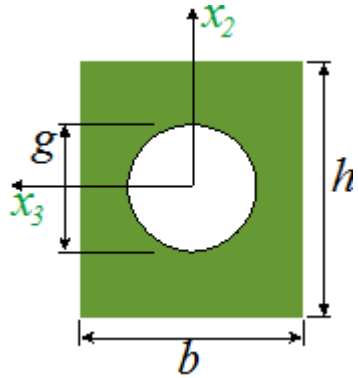


## Grupa A1, Zad. 2

$$E := 40 \text{ GPa} \quad L := 7 \text{ m} \quad b := 8 \text{ cm} \quad h := 10 \text{ cm} \quad g := 4 \text{ cm}$$

$$\text{Sch} := 1 \quad \mu := mb_{\text{Sch}} \quad L_w := \mu \cdot L$$

$$mb := \begin{pmatrix} 2 \\ 1 \\ 0.699156 \\ 0.5 \end{pmatrix}$$



$$J_2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 414.1 \cdot \text{cm}^4$$

$$J_3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 654.1 \cdot \text{cm}^4$$

$$J := \min(J_2, J_3) = 414.1 \cdot \text{cm}^4$$

$$P_{kr} := \frac{\pi^2 E \cdot J}{L_w^2} = 8.3408 \cdot \text{kN}$$

