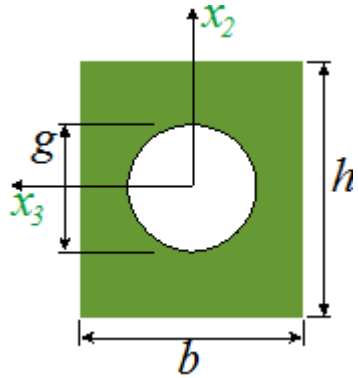


Grupa B1, Zad. 2

$$E := 12 \text{ GPa} \quad L := 4 \text{ m} \quad b := 10 \text{ cm} \quad h := 15 \text{ cm} \quad g := 5 \text{ cm}$$

$$\text{Sch} := 3 \quad \mu := mb_{\text{Sch}} \quad L_w := \mu \cdot L$$

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



$$J2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 1219.32 \cdot \text{cm}^4$$

$$J3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 2781.82 \cdot \text{cm}^4$$

$$J := \min(J2, J3) = 1219.32 \cdot \text{cm}^4$$

$$P_{kr} := \frac{\pi^2 E \cdot J}{L_w^2} = 184.64 \cdot \text{kN}$$

