

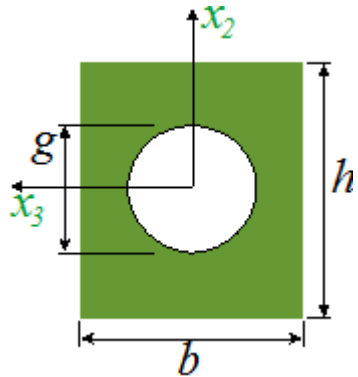
Grupa B

Zad. 2

$$E := 17 \text{ GPa} \quad L := 5 \text{ m} \quad b := 12 \text{ cm} \quad h := 15 \text{ cm} \quad g := 5 \text{ cm}$$

$$\text{Sch} := 4 \quad z := z_{\text{Sch}} = 6.283185$$

$$z_{\text{S}} := \begin{pmatrix} \frac{\pi}{2} \\ \pi \\ 4.493409 \\ 2\pi \end{pmatrix}$$



$$J_2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 2129.32 \cdot \text{cm}^4$$

$$J_3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 3344.32 \cdot \text{cm}^4$$

$$J := \min(J_2, J_3) = 2129.32 \cdot \text{cm}^4$$

$$P_{\text{kr}} := \frac{z^2 E \cdot J}{L^2} = 571.62 \cdot \text{kN}$$

