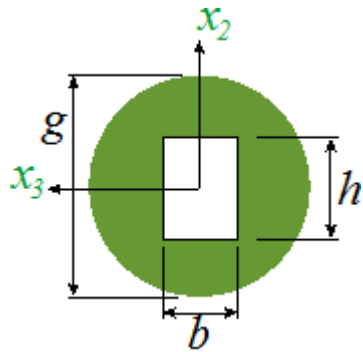


Grupa B2, Zad. 2

$$E := 22 \text{ GPa} \quad L := 6 \text{ m} \quad b := 3 \text{ cm} \quad h := 7 \text{ cm} \quad g := 20 \text{ cm}$$

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

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



$$J3 := \frac{-b \cdot h^3}{12} + \frac{\pi g^4}{64} = 7.768232 \times 10^3 \cdot \text{cm}^4$$

$$J2 := \frac{-b^3 \cdot h}{12} + \frac{\pi g^4}{64} = 7.838232 \times 10^3 \cdot \text{cm}^4$$

$$J := \min(J2, J3) = 7768.231634 \cdot \text{cm}^4$$

$$P_{kr} := \frac{\pi^2 E \cdot J}{Lw^2} = 117.13 \cdot \text{kN}$$

