

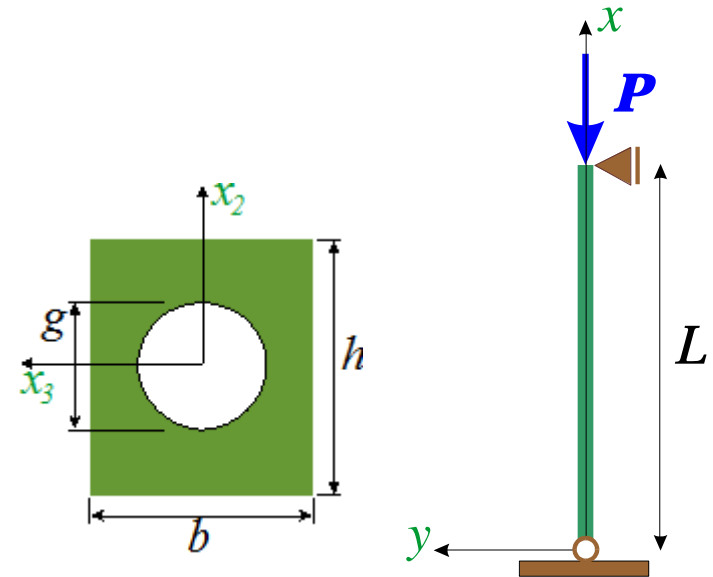
## Grupa B1

$$E := 21 \text{ GPa} \quad L := 5 \text{ m} \quad b := 30 \text{ cm} \quad h := 16 \text{ cm} \quad g := 5 \text{ cm}$$

$$J_2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 35969.32 \cdot \text{cm}^4$$

$$J_3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 10209.32 \cdot \text{cm}^4$$

$$J := \min(J_2, J_3) = 10209.32 \cdot \text{cm}^4$$



$$\sin(z) = 0$$

$$P_{kr} := \frac{z^2 E \cdot J}{L^2} = 846.40 \cdot \text{kN}$$

