

Grupa C

Zad. 2

$$E := 13 \text{ GPa}$$

$$L := 8 \text{ m}$$

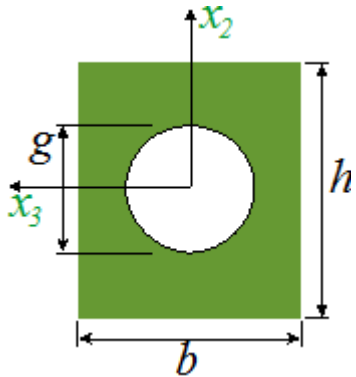
$$b := 13 \text{ cm}$$

$$h := 19 \text{ cm}$$

$$g := 5 \text{ cm}$$

$$\text{Sch} := 4$$

$$z = 6.283185$$



$$J2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 3447.904 \cdot \text{cm}^4$$

$$J3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 7399.904 \cdot \text{cm}^4$$

$$J := \min(J2, J3) = 3447.904 \cdot \text{cm}^4$$

$$P_{kr} := \frac{z^2 E \cdot J}{L^2} = 276.489 \cdot \text{kN}$$

