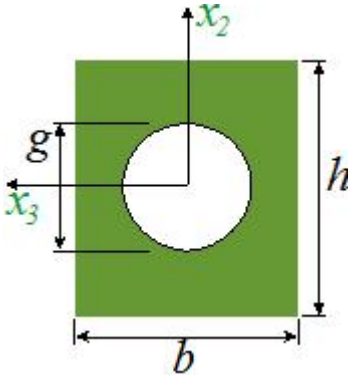
Zad. 2

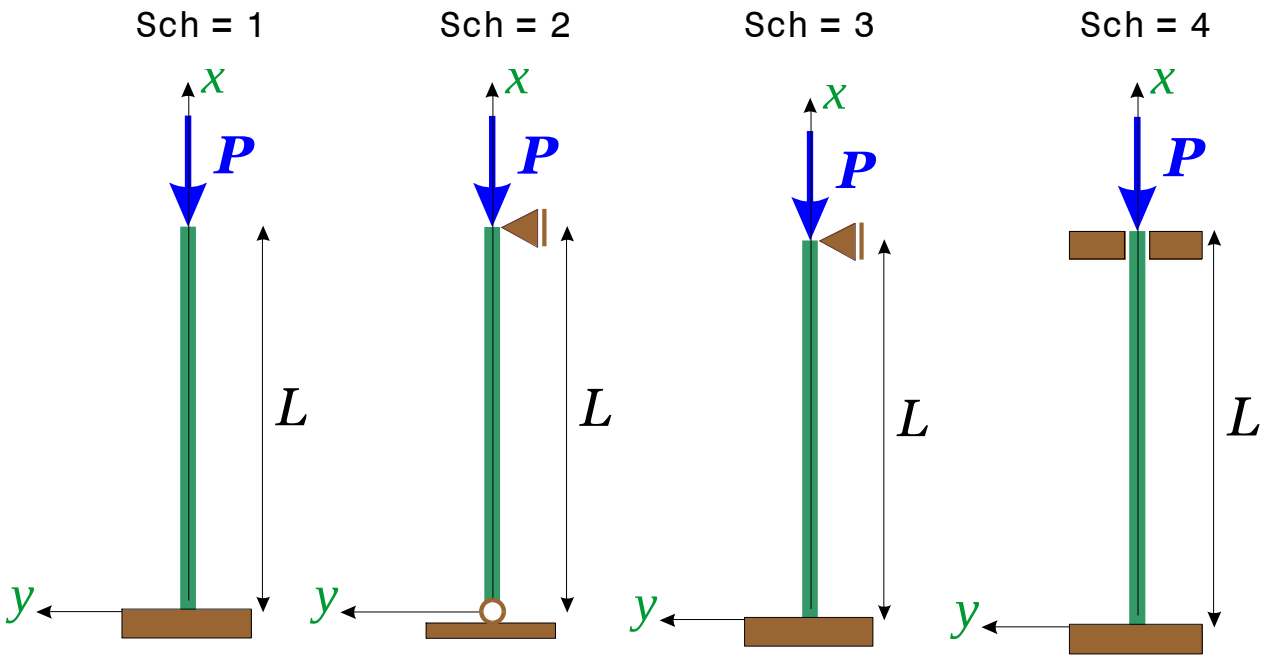
$E := 18GPa$ $L := 7m$ $b := 8cm$ $h := 10cm$ $g := 5cm$ $mb := \begin{pmatrix} 2 \\ 1 \\ 0.699156 \\ 0.5 \end{pmatrix}$

$Sch := 2$ $\mu := mb_{Sch}$ $Lw := \mu \cdot L$



$$J2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 395.987 \cdot cm^4$$

$$J3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 635.987 \cdot cm^4$$

$$J := \min(J2, J3) = 395.987 \cdot cm^4$$

$$Pkr := \frac{\pi^2 E \cdot J}{Lw^2} = 14.357 \cdot kN$$