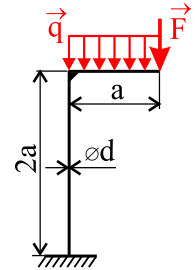


Problem 611

Determine the displacement and the slope at the free end of the angular beam supported and loaded according the figure. The geometry of the beam, its bearing, loads and material characteristics are known.

Input values:

$$\begin{aligned} a &= 0,5 \text{ m}, & \phi d &= 40 \text{ mm}, \\ q &= 500 \text{ Nm}^{-1}, & F &= 1 \text{ kN}, \\ E &= 2 \cdot 10^5 \text{ MPa}, & \sigma_K &= 350 \text{ MPa} \end{aligned}$$



angular beams

procedure of solving supported beams