

### Problem 619

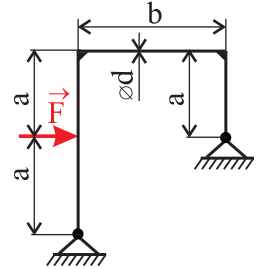
Determine how should be the force  $\vec{F}$  to bring the frame in the figure in the limit state of elasticity.

Input values:

$$a = 0,8 \text{ m}, \quad \varnothing d = 30 \text{ mm},$$

$$b = 1 \text{ m},$$

$$E = 2 \cdot 10^5 \text{ MPa}, \quad \sigma_K = 300 \text{ MPa}$$



angular beams

procedure of solving supported beams