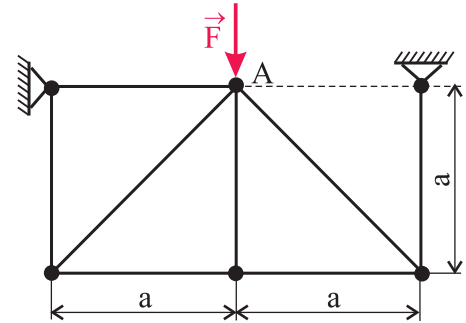


### Problem 429

Determine the displacement of the point A of the strut frame supported and loaded according the figure. All the bars are homogeneous, of the same diameter  $\phi d$  and are made of the same material.

Input values:

$$a = 500 \text{ mm}, \quad \phi d = 30 \text{ mm} \quad E = 2 \cdot 10^5 \text{ MPa},$$
$$F = 10^5 \text{ N}, \quad \sigma_K = 350 \text{ MPa}.$$



tension      systems with bars