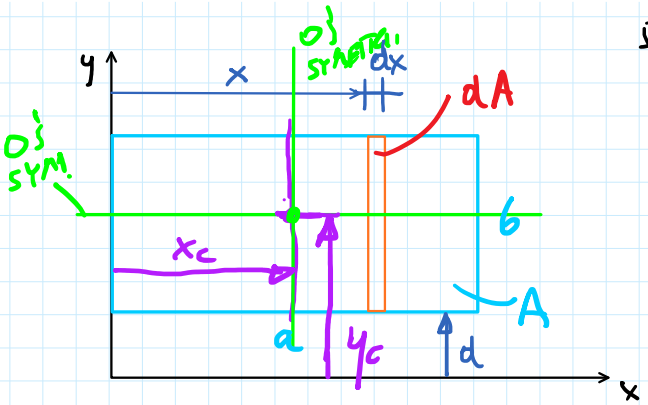


DANE:
$a, b, \rho = const.$ $\quad ab = A$

SZUKANE:
x_c, y_c

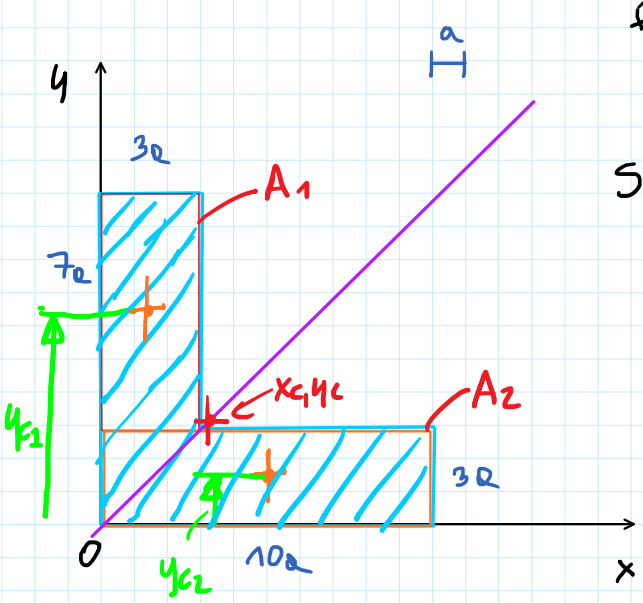
$$x_c = \frac{S_{yz}}{V} \Rightarrow x_c = \frac{S_y}{A} = \frac{\int_A x\,dA}{\int_A dA}$$

$$dA = dx \cdot b$$

$$A = ab$$

$$x_c = \frac{\int_A x\,dA}{ab} = \frac{\int_0^a x\,b\,dx}{ab} = \frac{b\int_0^a x\,dx}{ab} = \frac{\frac{x^2}{2}\Big|_0^a}{a} = \frac{\frac{a^2}{2}}{a} = \frac{a}{2}$$

$$y_c = \frac{b}{2} + d$$



DANE:
$a, \rho = const.$

SZUKANE:
x_c, y_c

$$S_x = S_{x_1} + S_{x_2} \Rightarrow S_{x1} = y_{c_1} \cdot A_1 \;,\; S_{x2} = y_{c2} \cdot A_2$$

$$y_c = \frac{S_x}{A} \Rightarrow y_c = \frac{y_{c_1} \cdot A_1 + y_{c2} \cdot A_2}{A_1 + A_2}$$

$$y_c = \frac{(3+3{,}5)a \cdot 3a \cdot 7a + 1{,}5a \cdot 3a \cdot 10a}{3a \cdot 7a + 3a \cdot 10a} = 3{,}6a$$

$$x_c = y_c = 3{,}6a$$