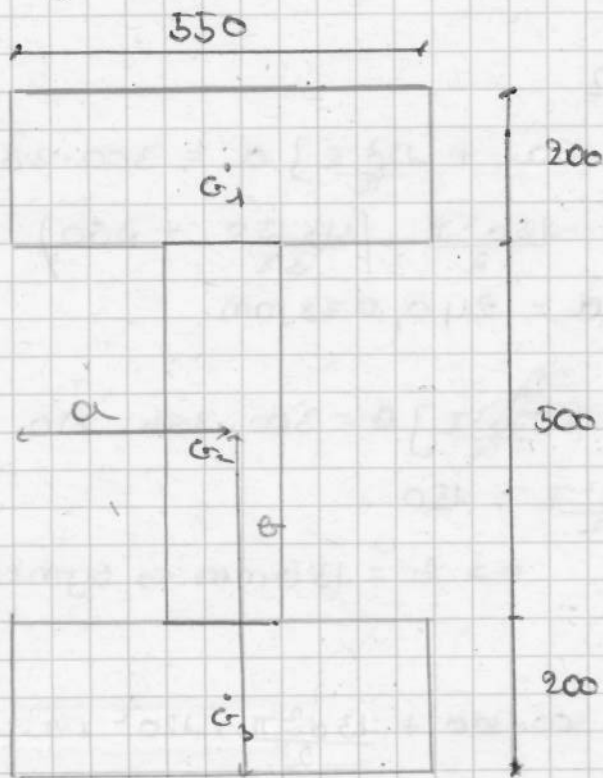


opgawe 6.9:



eg?

wegen symmetrie:

$$\begin{cases} a = 275 \text{ mm} \\ b = 450 \text{ mm} \end{cases}$$

$I_y, I_z, P_{yz}$ ?

$$I_y = \frac{550 \cdot 200^3}{12} + (450 - 100)^2 \cdot 550 \cdot 200 + \frac{130 \cdot 500^3}{12} + (450 - 430) \cdot 450 \cdot 500 \\ + \frac{550 \cdot 200^3}{12} + (450 - 800)^2 \cdot 550 \cdot 200 = 2,92 \cdot 10^{10} \text{ mm}^4$$

$$I_z = 2 \cdot \frac{200 \cdot 550^3}{12} + \frac{500 \cdot 450^3}{12} = 5,69 \cdot 10^9 \text{ mm}^4$$

$P_{yz} = 0 \rightsquigarrow$  wegen symmetrie

$$\tan 2\alpha = 0 \Rightarrow \alpha = 0$$

$$I_y = 2,92 \cdot 10^{10} \text{ mm}^4$$

$$I_z = 5,69 \cdot 10^9 \text{ mm}^4$$