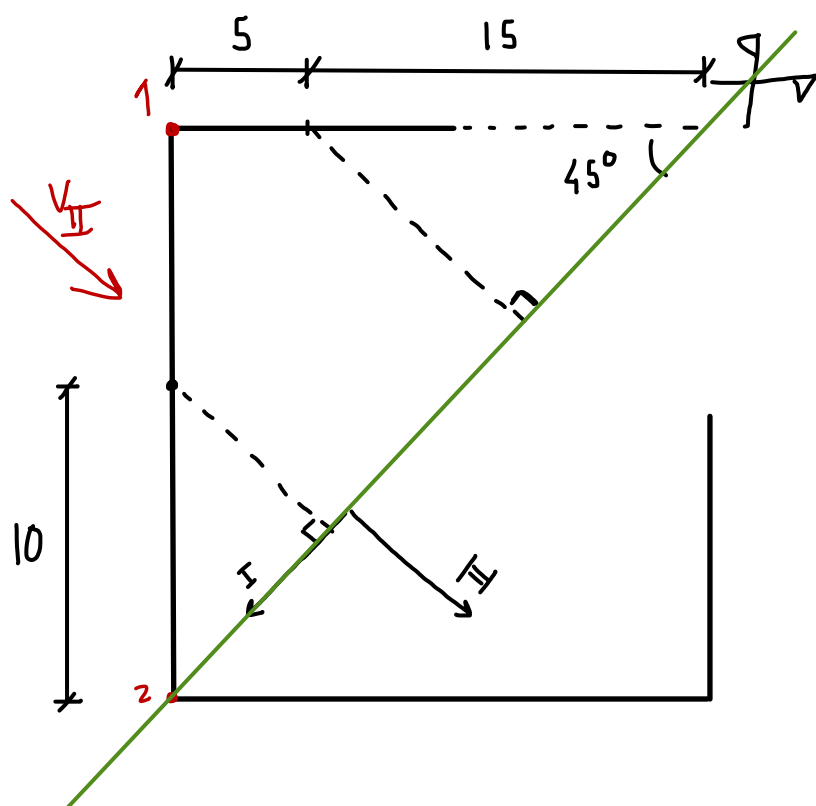
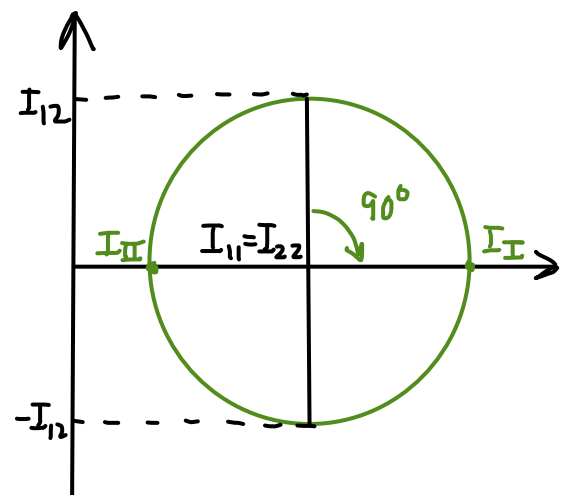
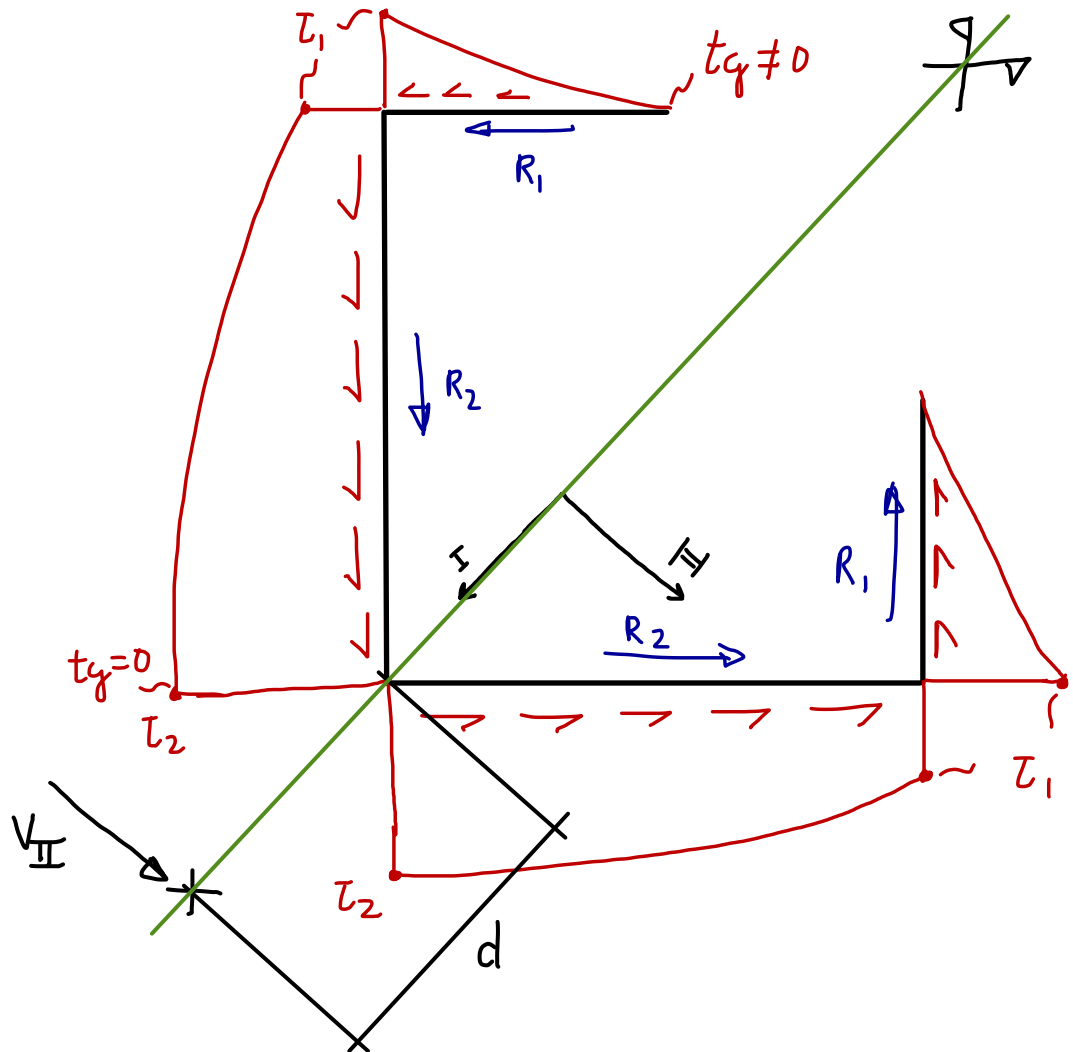


	A [cm ²]	$I_G^{(x_1)}/I_G^{(x_2)}$ [cm ⁴]	$I_{11} = I_{22}$ [cm ⁴]	$I_{12} = -P_{12}$ [cm ⁴]
1 (4)	20	$\frac{10 \times 2^3}{12} = 6,67$	$6,67 + 20 \times 12,5^2$	$20 \times 2,5 \times 12,5$
2 (3)	40	$\frac{20^3 \times 2}{12} = 1333,3$	$1333,3 + 40 \times 2,5^2$	$40 \times 2,5 \times 7,5$
3 (2)	40	$\frac{20 \times 2^3}{12} = 13,33$	$13,33 + 40 \times 7,5^2$	$40 \times 7,5 \times 2,5$
4 (1)	20	$\frac{10^3 \times 2}{12} = 166,7$	$166,7 + 20 \times 2,5^2$	$20 \times 2,5 \times 12,5$
TOTAL	120	—	7270	2750



$$\sigma_1 = \frac{V_{II}}{I_I} \frac{20 \times 15 \frac{\sqrt{2}}{2}}{2} = \frac{V_{II}}{I_I} 106,1$$

$$\sigma_2 = \sigma_1 + \frac{V_{II}}{I_I} \frac{40 \times 10 \frac{\sqrt{2}}{2}}{2} = \frac{V_{II}}{I_I} 247,5$$

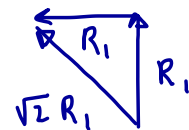
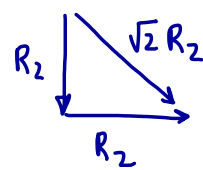


$$V_{II} \times d = 2 \times R_1 \times 20$$

$$d = 40 \times \frac{943,9}{I_I} = \underline{\underline{3,768 \text{ cm}}}$$

$$R_2 = \frac{V_{II}}{I_I} \times 2 \left[106,1 + \frac{2}{3} (247,5 - 106,1) \right] \times 20$$

$$= 8015 \frac{V_{II}}{I_I}$$



$$\sqrt{2} R_2 - \sqrt{2} R_1 = V_{II} \Rightarrow R_1 = 943,9 \frac{V_{II}}{I_I}$$