$\underline{Z}_1$=10Ω,$\underline{Z}_2$=j10Ω, $\underline{Z}_3$=-j10Ω zvezdu transformišemo u trougao(vidi sliku)
$\underline{Z}_{12}$,$\underline{Z}_{13}$,$\underline{Z}_{23}$=?

$\underline{Z}_{12}=\underline{Z}_1+\underline{Z}_2+\dfrac{Z_1 \bullet Z_3}{Z_3}=10-j10+\dfrac{10 \bullet (-j10)}{j10}=10-j10-10=-j10\Omega$

$\underline{Z}_{12}$=j10Ω(kalem)

$\underline{Z}_{13}=\underline{Z}_1+\underline{Z}_3+\dfrac{Z_1 \bullet Z_3}{Z_3}=10-j10+\dfrac{10 \bullet (-j10)}{j10}=10-j10-10=-j10\Omega$

$\underline{Z}_{13}$=-J10Ω(kondenzator)

$\underline{Z}_{23}= Z_2+Z_3+\dfrac{Z_2 \bullet Z_3}{Z_1}= j10-j10+\dfrac{j10 \bullet (-j10)}{10}=10\Omega$

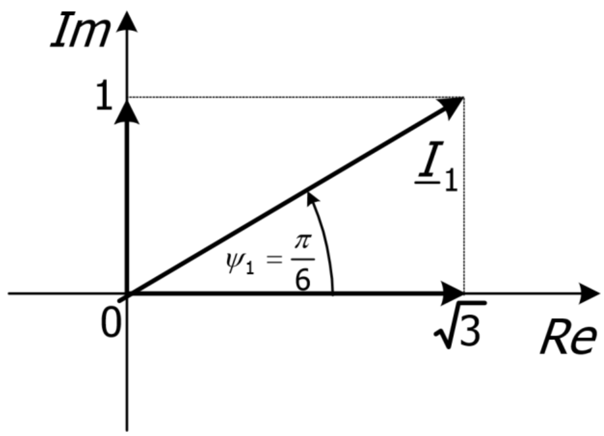
$\underline{Z}_{23}$=10Ω(otpornik)

$$e^{j\psi} = \cos\psi + j\sin\psi \, ,$$

$$\underline{I}_1 = I_1 \, e^{j\psi_1} = I_1(\cos\psi_1 + j\sin\psi_1) = I_1\cos\psi_1 + j \cdot I_1\sin\psi_1 \, .$$

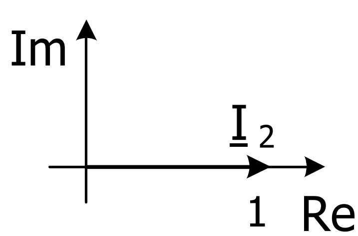
Zamenimo brojne vrednosti u izrazu:

$$\underline{I}_1 = 2\ \text{A} \cdot e^{j\frac{\pi}{6}} = 2\ \text{A} \cdot \left(\cos\frac{\pi}{6} + j\sin\frac{\pi}{6}\right) = 2\ \text{A} \cdot \left(0{,}5\sqrt{3} + j0{,}5\right) = \left(\sqrt{3} + j\right)\text{A} \, .$$



Kompleksni izraz za jačinu struje je:

$$\underline{I}_2 = I_2 \, e^{j\psi_1} = 0{,}5\sqrt{2}\ \text{A} \cdot e^{j0} = 0{,}5\sqrt{2}\ \text{A} \cdot (\cos 0 + j\sin 0) = 0{,}5\sqrt{2}\ \text{A} \cdot (1 + j0) = 0{,}5\sqrt{2}\ \text{A}$$



$$\underline{Z_{12}} = \frac{Z_1 * Z_2}{Z_1 + Z_2} = \frac{(5 + j20) * 30}{5 + j20 + 30} = \frac{150 + j600}{35 + j20} = \frac{6 * (35 + j21)}{13}\ \Omega$$