

Dados...

$$\bar{z}_1 = 10 - j5$$

$$\bar{z}_2 = -3 + j2$$

$$\bar{z}_3 = 5 \cdot e^{j\frac{\pi}{4}}$$

$$\bar{z}_4 = 2 \cdot e^{j20^\circ}$$

Realizamos

$$1) \bar{z}_1 + \bar{z}_2$$

$$(10 - j5) + (-3 + j2)$$

$$2) \bar{z}_2 + \bar{z}_3$$

$$(-3 + j2) + (5 \cdot e^{j\frac{\pi}{4}})$$

$$3) \bar{z}_3 + \bar{z}_4$$

$$(3,53 + j3,53) + (2 \cdot e^{j20^\circ})$$

$$4) \bar{z}_1 \cdot \bar{z}_2$$

$$(10 - j5) \cdot (-3 + j2)$$

$$5) \bar{z}_2 \cdot \bar{z}_4$$

$$(-3 + j2) \cdot (1,8 + j0,68)$$

$$\begin{aligned} & -30 + j20 + j18 - 1,10^2 \\ & -20 + j35 - 1,10^2 \\ & -20 + j35 + 10 \\ & -20 + j35 \end{aligned}$$

$$6) \bar{z}_3 \cdot \bar{z}_4$$

$$(3,53 + j3,53) \cdot (1,8 + j0,68)$$

$$2,54 + j23,88$$

$$\frac{\bar{z}_3}{\bar{z}_4}$$

$$\frac{3,53 + j3,53}{1,8 + j0,68}$$