

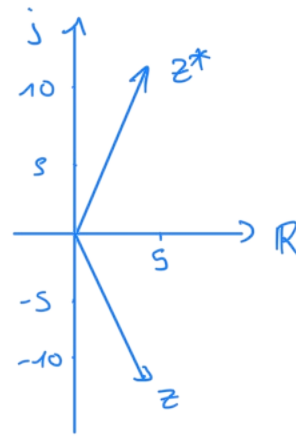
## Serie 11

$$1 \ a) \quad z = 3 - 11i$$

$$z^* = 3 + 11i$$

$$r = \sqrt{3^2 + 11^2} = \sqrt{130}$$

$$\varphi = \tan^{-1}\left(\frac{-11}{3}\right) = -1.3\pi$$



$$\text{tri Form} = \sqrt{130} (\cos(1.3\pi) + \sin(1.3\pi)i)$$

$$\text{exp Form} = \sqrt{130} e^{1.3\pi i}$$

$$b) \quad z = 4(\cos(-40^\circ) + \sin(-40^\circ)i) + 2e^{i30^\circ} = 3 + 1.5i$$