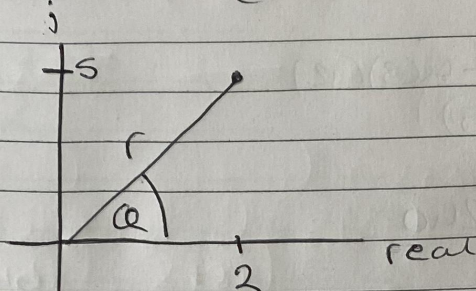


c) Polar form de moires theorem

i $(2+5j)^6$

theorem = $r^n (\cos \theta + j \sin \theta)$



$$r^2 = 2^2 + 5^2$$

$$r = \sqrt{4 + 25}$$

$$r = \sqrt{29}$$

$$r = \underline{\underline{5.38}}$$

$$\tan \alpha = \frac{5}{2}$$

$$\alpha = \tan^{-1}\left(\frac{5}{2}\right)$$

$$\alpha = \underline{\underline{68.1985}}$$

Put into equation

Polar form



$$5.38^6 (\cos 6 \times 68.1985 + j \sin 6 \times 68.1985)$$

$$24248.98 (\cos 409.141 + j \sin 409.141)$$

$$\underline{\underline{24248.98}}$$