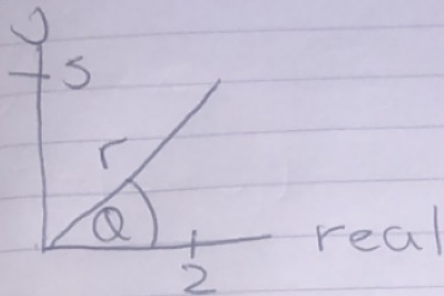


$$c) (2 + 5j)^6$$

$$\text{theorem} = r^n (\cos Q + j \sin Q)$$



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

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

$$r = \sqrt{29}$$

$$r = 5.38$$

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

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

$$Q = 68.1985$$

Put into equation

Polar Form

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

$$24248.93 (\cos 409.191 + j \sin 409.191)$$

$$ii) (-2 + 7j)^4$$

