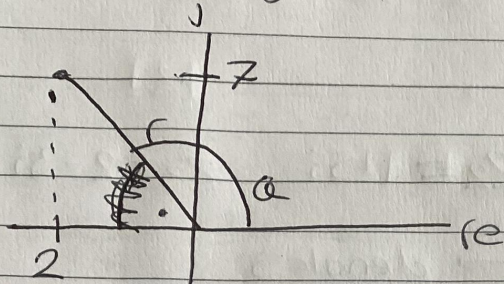


ii $(-2 + 7j)^4$



$$r^2 = \cancel{2^2}^2 + 7^2$$

$$r^2 = \sqrt{4 + 49}$$

$$r^2 = 53$$

$$r = \sqrt{53}$$

$$r = 7.2801$$

$$\theta = \tan^{-1} \frac{7}{2}$$

$$\theta = \tan^{-1} \left(\frac{7}{2} \right)$$

$$\theta = 74.05^\circ$$

$$4\theta = 180 - 74.05$$

$$\theta = 105.95$$

Put into equation

$$7.2801^{(4)} (\cos 4 \times 105.95 + j \sin 4 \times 105.95)$$

$$2808.48 (\cos 423.8 + j \sin 423.8) \leftarrow \text{Polar form}$$