

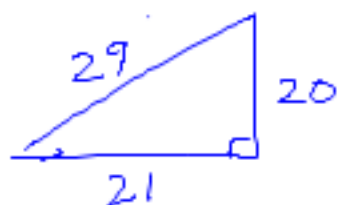
$$z = 5 + 2i$$

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$$|z| = \sqrt{29} = \sqrt{5^2 + 2^2}$$

$$z^2 = 21 + 20i$$

$$|z^2| = \sqrt{841} = 29$$



$$|z^3| = 29\sqrt{29}$$

$$|z^4| = 841$$

$$z = m + ni$$

$$|z| = \sqrt{m^2 + n^2}$$

$$z^2 = (m^2 - n^2) + (2mn)i$$

Square $z \Rightarrow$ square magnitude
multiply ? direction
divide
add