

MATH 120A Prep: Complex Numbers II

1. Calculate the cube of $1 + i$ in rectangular and polar form. Convert the result to verify they are equal.

2. Write out the set of 8th roots of unity and graph them as in the video.

3. Follow the example of finding the n th roots of unity to find all complex solutions to $z^3 = -8$. [Hint: This statement can be rephrased as finding the 3rd roots of -8.]