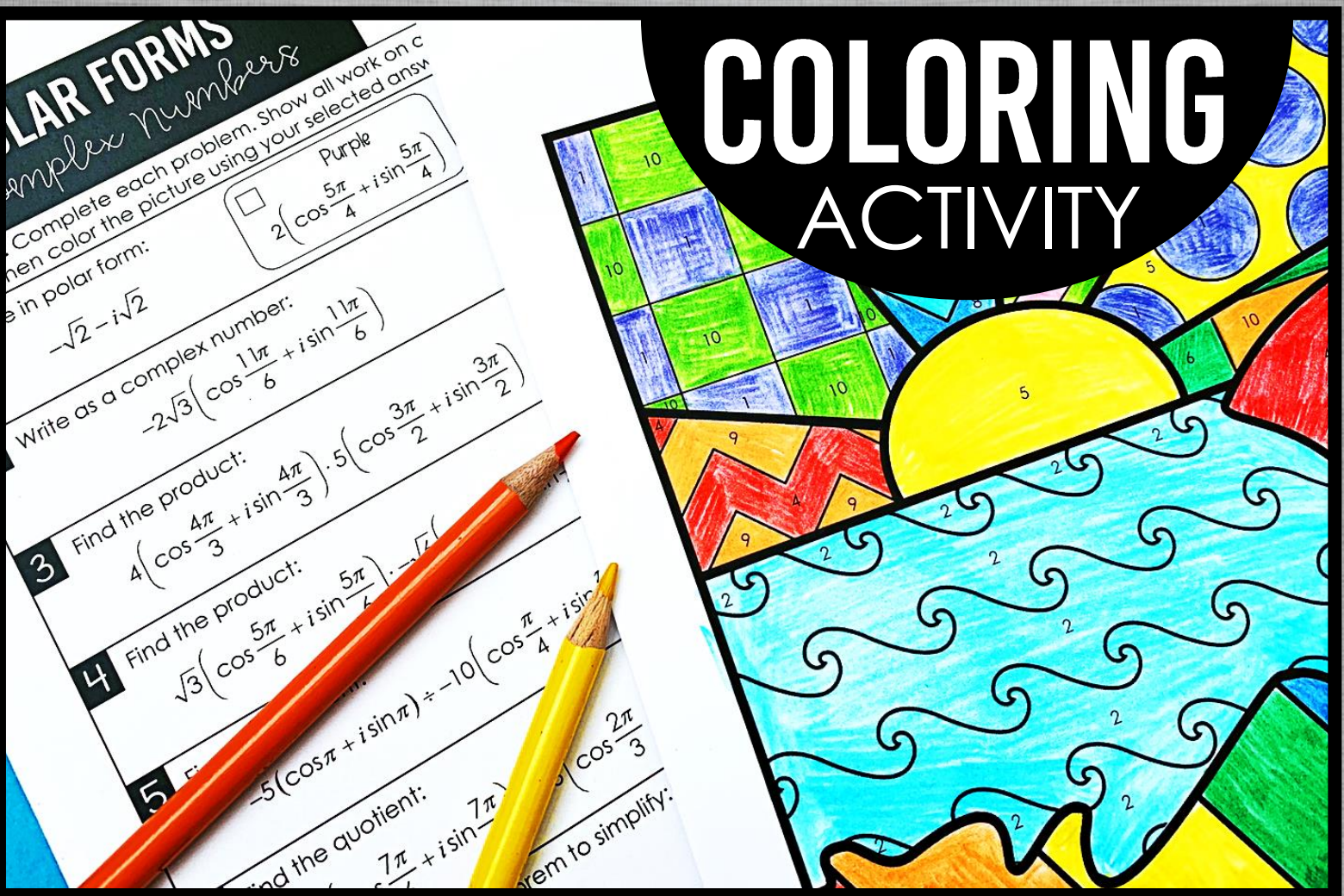

POLAR FORMS

of Complex Numbers

Created by: ALL THINGS ALGEBRA®

POLAR FORMS OF COMPLEX NUMBERS

Coloring Activity

Objective: To practice writing complex numbers from rectangular form to polar form, write complex numbers from polar form to rectangular form, multiply complex numbers in polar form, divide complex numbers in polar form, find powers of complex numbers using De Moivre's Theorem, and find the n^{th} roots of a complex number using its polar form.

Directions:

1) Copy the polar forms of complex numbers sheet and coloring picture for each student. I typically copy the coloring sheet on the back to save paper.

2) Students solve each problem. I have my students show all work on a separate sheet of notebook paper. There are three answer choices given for each problem. They check the both that matches their solution.

3) After solving all the problems, students color the picture. The question number and selected answer reveals how to color the picture. For example, if "orange" is checked for question #1, then all 1's on the picture are orange.

I have them staple their work to the paper and turn in for a classwork grade.