# Congruence \& Similarity Through Transformations 

## Math 2, Unit 7

Anaheim Union High School District

Why are we studying this?
In this unit, students will begin a foundational study of transformations, which they will use and apply in future studies of families of functions and congruence and similarity in geometry.


## Dear Student \& Parent/Guardian,

Students will be exploring transformations on the coordinate plane by translating, rotating, reflecting, and dilating various geometric figures to investigate how a figure is changed by these transformations.

We will apply these principles to understand how characters are brought to life in video games and animated motion pictures, and students will get the chance to create their own animation!
-AUHSD Math Teachers
Sample question we will be able to answer: Sketch the transformation and record the coordinates of the transformed object. Are the two objects congruent, similar, or neither? Why?


Math Topics Addressed in this Unit:

- Translations
- Reflections
- Rotations
- Dilations
- Similarity
- Congruence


Do the following represent a translation, rotation, reflection, or dilation from the first image to the second?


Fig. 1


Fig. 2

## A Note About Homework:

Homework in this unit will focus on concepts learned the prior year and prior units, necessary for success in Math 2, as well as current topics of transformations.

