Unit: Transformations
Student Handout 1

Name _____
Date _____Pd_____

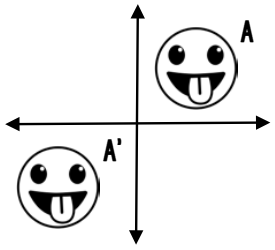
BASICS OF TRANSFORMATIONS

GEOMETRIC TRANSFORMATIONS

- To transform a shape or figure means to _____ it. In general, we can change the size, location and direction that a figure is facing.
- The shape or figure before the transformation is called the _____-_____, or original. We might label it A.
- The shape or figure after the transformation is called the _____, or new figure. We would then label it A', pronounced "A _____".

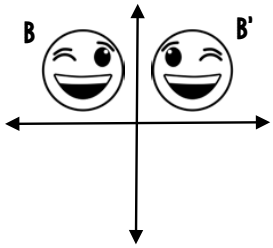
TYPES OF TRANSFORMATIONS

_____



Keywords:

_____



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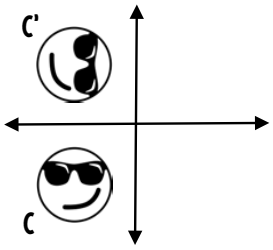

Keywords:

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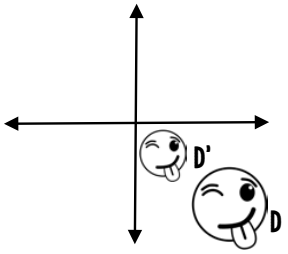


Keywords:

Where do you see transformations in the real world? List some examples below.

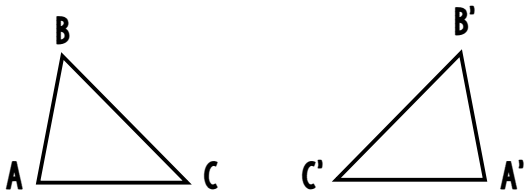
Translations:	Reflections:	Rotations:	Dilations:

CONGRUENCE & ORIENTATION

- A transformation that preserves congruence, or keeps the same _____ and _____ of the figure, it is called a _____ transformation.
- Orientation of the _____ refers to whether or not the figure is facing the same direction on the coordinate plane after a transformation.
- Orientation of the _____ refers to the order in which the vertices are labeled, clockwise or counterclockwise.

Label the type of transformation shown. Then, state whether the size and orientation changed or stayed the same.

1. Transformation: _____

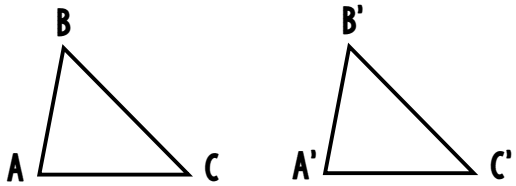


Size: _____

Orientation of Figure: _____

Orientation of Vertices: _____

2. Transformation: _____

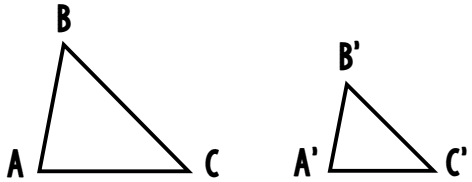


Size: _____

Orientation of Figure: _____

Orientation of Vertices: _____

3. Transformation: _____

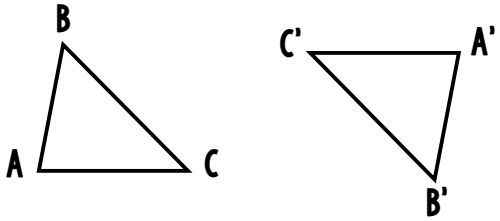


Size: _____

Orientation of Figure: _____

Orientation of Vertices: _____

4. Transformation: _____



Size: _____

Orientation of Figure: _____

Orientation of Vertices: _____

Summarize today's lesson: