Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

Series of Transformations Project

* Create your own shape using a minimum of five points. Graph and label your pre-image.
* Now you have to apply four transformations to your shape.
	+ One translation
	+ One reflection
	+ One rotation
	+ One dilation
* You must write them out in the order you do them and write down the rule that was used for each.
	+ Translate (x,y) 🡪 (x+30, y-36)
	+ Reflect across the line y=-40
	+ Rotate 180° counterclockwise
	+ Dilation $k=50$
* Color or trace each shape in a different color.
* Make sure you are listing the coordinates for all of your points in all of the shapes.
* Make sure you are labeling all points on your graph.

**Translate**

 (x,y)🡪 (x,y)

**Reflect**

Line of Reflection

**Rotate**

Degrees & direction

**Dilation**

$$k=$$