$\qquad$ Date: $\qquad$

## Transformation Project

For this project you will be drawing an original figure and creating multiple images by performing translations, reflections, rotations, and dilations. You will be given a few days in class to complete the project. Creativity and neatness count! For each transformation you make you must write 4 points in coordinate notation on the back of the graph - show your work. Your drawings should be neat and colorful. All points in your drawings must accurately portray the transformations. You will be graded on the following:

1. Translation $\qquad$ 4 points
a. Original figure (Q2)
b. Horizontal translation (Q1)
c. Vertical translation (Q3)
d. Complex translation (Q4)
2. Reflection $\qquad$ 4 points
a. Original figure (Q2)
b. Over the x-axis (Q3)
c. Over the y-axis (Q1)
3. Rotation $\qquad$ 4 points
a. Original figure (Q2)
b. $90^{\circ}$ clockwise (Q1)
c. $90^{\circ}$ counterclockwise (Q3)
d. $180^{\circ}(\mathrm{Q} 4)$
4. Dilation $\qquad$ 4 points
a. Original figure (all quadrants)
b. Enlargement (all quadrants)
c. Reduction (all quadrants)
5. Creativity and Neatness $\qquad$ 4 points
