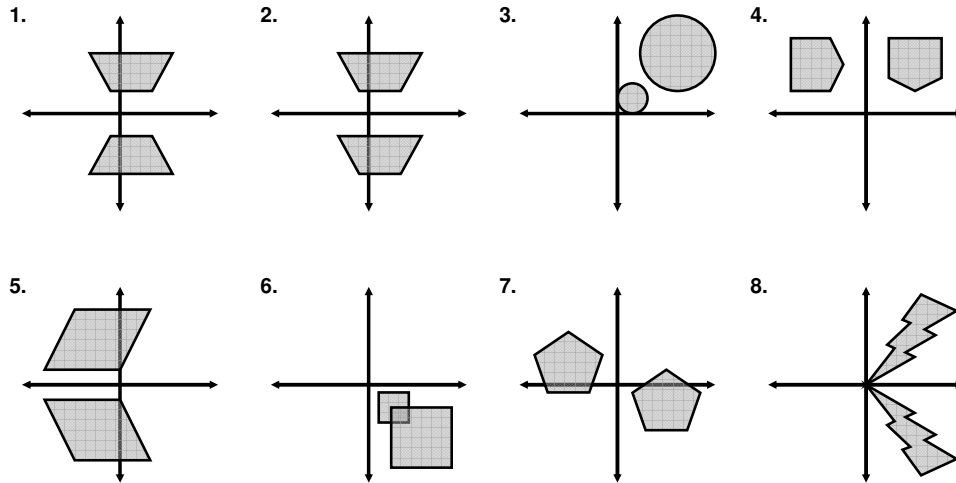
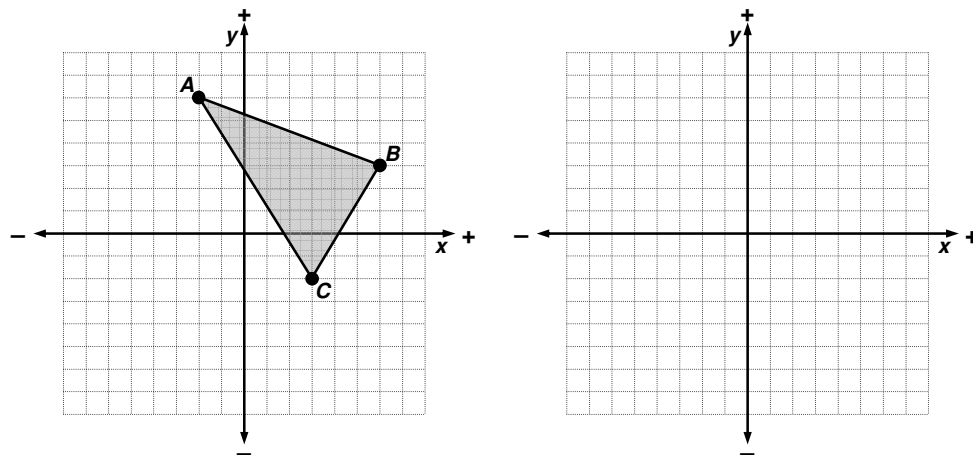


Problem of the Day:

For each shape and its image, tell whether it shows a reflection, rotation, dilation, or translation.
Be ready to explain how you know.

**Purpose Statement:****Classwork:**

1. a. Reflect triangle ABC across the y -axis. b. The points $D(5, 4)$, $E(0, 6)$, $F(-7, -1)$, and $G(-2, -3)$ form a parallelogram. Draw it, then reflect it across the x -axis.

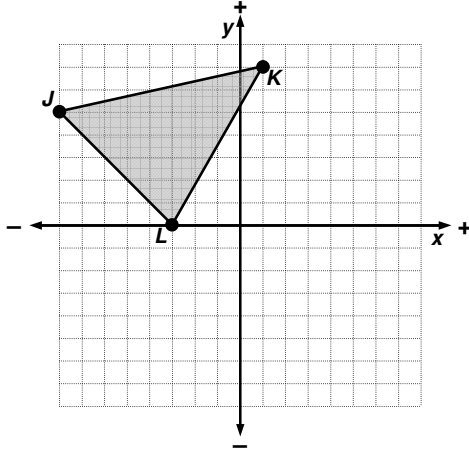


- c. Suppose a friend was having trouble drawing their reflection of shapes on a grid. Describe the technique you use to draw reflections.

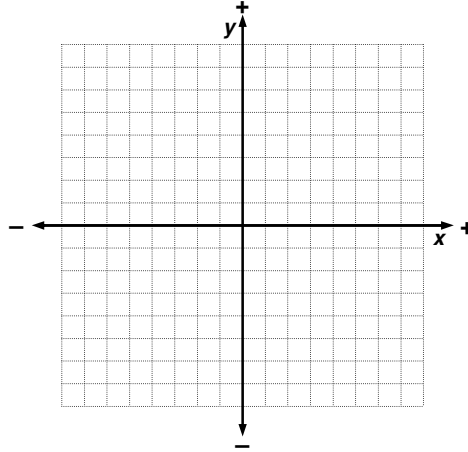
Geometry Quiz 1 Review

Draw the following transformations. Be sure to label the points on your image!

2. a. Rotate triangle JKL 90° counterclockwise about the origin.

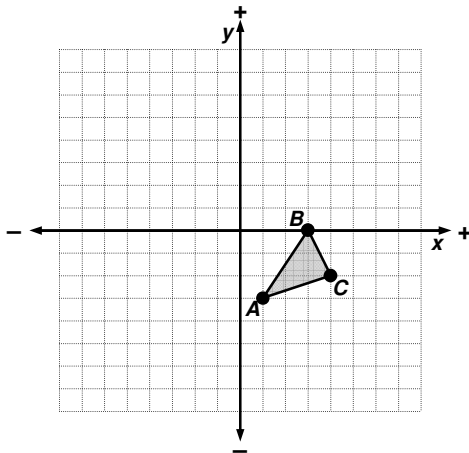


- b. The points $M(3, 1)$, $N(7, -8)$, and $P(-3, -5)$, form a triangle. Draw it, then rotate the triangle 90° counterclockwise about the origin.

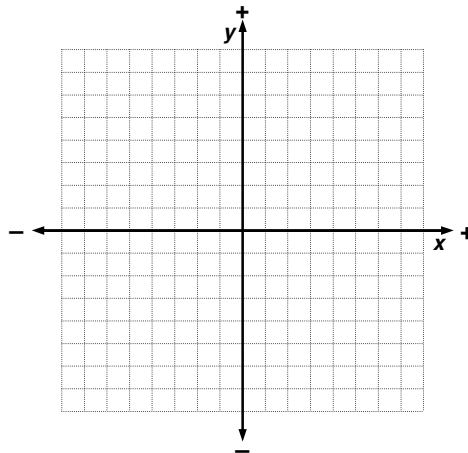


- c. Suppose a friend was having trouble drawing their rotations of shapes on a grid. Describe the technique you use to draw rotations.

3. a. Draw a dilation of triangle ABC using a scale factor of 2 and the origin as the center of dilation.

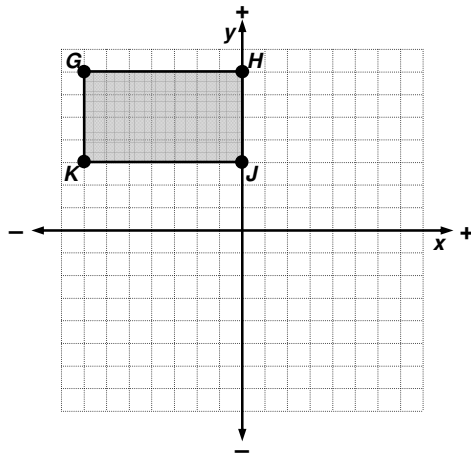


- b. The points $D(8, 4)$, $E(2, -6)$, and $F(-6, 6)$ form a triangle. Draw it, then draw a dilation of the triangle using a scale factor of $\frac{1}{2}$ and the origin as the center of dilation.

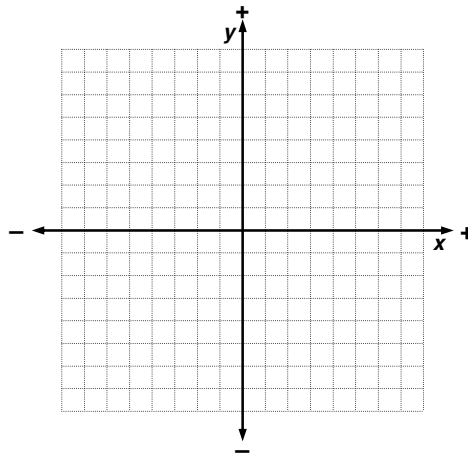


- c. Suppose a friend was having trouble drawing their dilations of shapes on a grid. Describe the technique you use to draw dilations.

4. a. Translate rectangle $GHJK$ 4 units right and 2 units down.

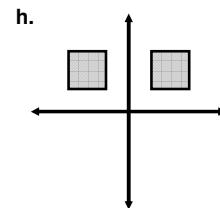
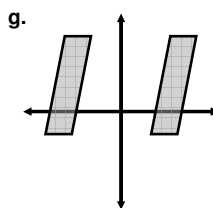
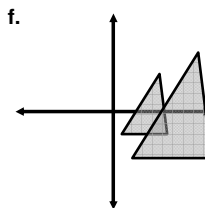
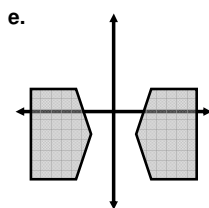
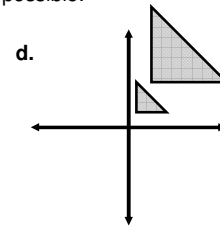
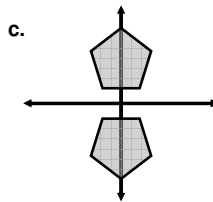
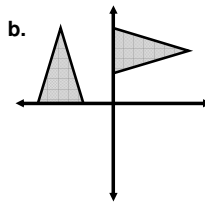
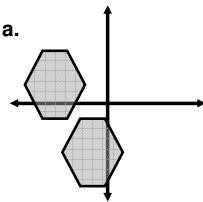


- b. The points $L(3, 0)$, $M(8, -2)$, $N(4, -4)$, and $P(-1, -2)$ form a parallelogram. Draw it, then translate it 2 units left and 7 units up.



- c. Suppose a friend was having trouble drawing their translations of shapes on a grid. Describe the technique you use to draw translations.

5. For each shape and its image, tell whether the transformation was a reflection, rotation, translation, and/or dilation. If there is more than one possible answer, then list all that are possible.



6. Use the coordinate rules in your notes to answer the following:

- Find the coordinates of the point $(10, 25)$ after a 90° counterclockwise rotation about the origin.
- Find the coordinates of the point $(-82, 45)$ after a reflection across the y -axis.
- Find the coordinates of the point $(-64, -100)$ after a reflection across the x -axis.
- Find the coordinates of the point $(58, -34)$ after a translation of 16 units up and 80 units left.