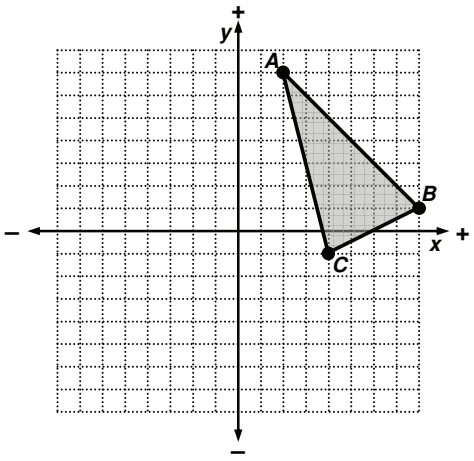
NAME:

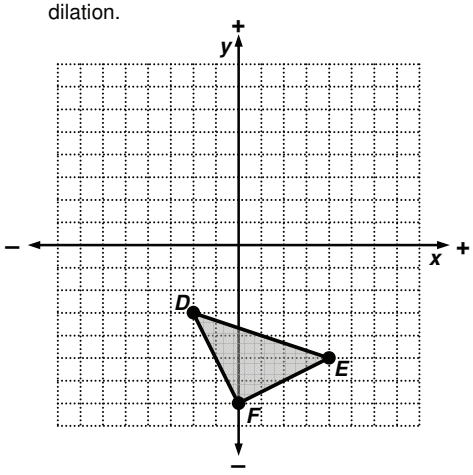
Multiple Transformations: Classwork

When drawing transformations, be sure to label all points!

1. Translate the triangle 9 units left, and then reflect the image across the *x*-axis.

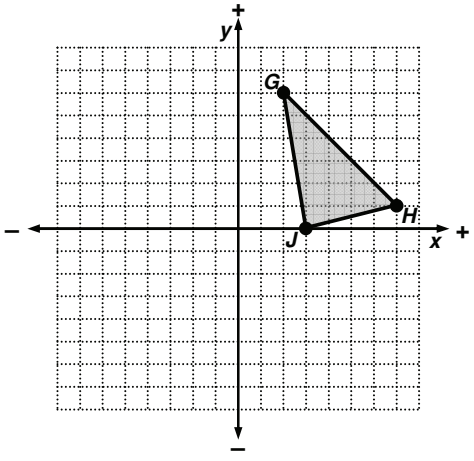


2. Translate the triangle 6 units up, and then draw a dilation of the image using a scale factor of 2 and the origin as the center dilation.

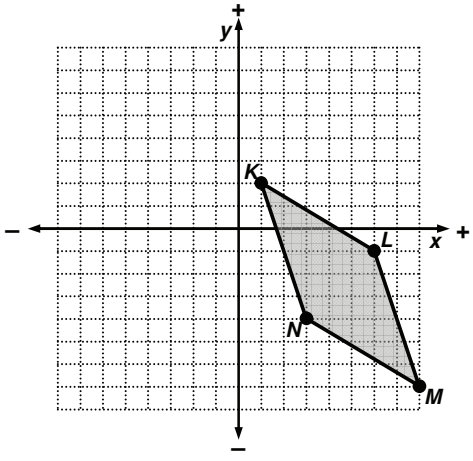


3. Find the coordinates of the point (7, 5) after a reflection across the *x*-axis and a dilation using a scale factor of 3 with the origin as the center of dilation.

4. Reflect the triangle across the *y*-axis, and then rotate the image 90° counterclockwise about the origin.



5. Rotate the parallelogram 90° clockwise about the origin, and then reflect the image across the *x*-axis.



6. Find the coordinates of the point (2, –9) after a rotation 90° counterclockwise about the origin and a translation 8 units down.

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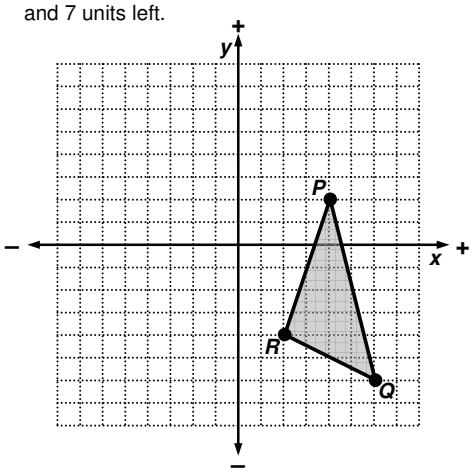
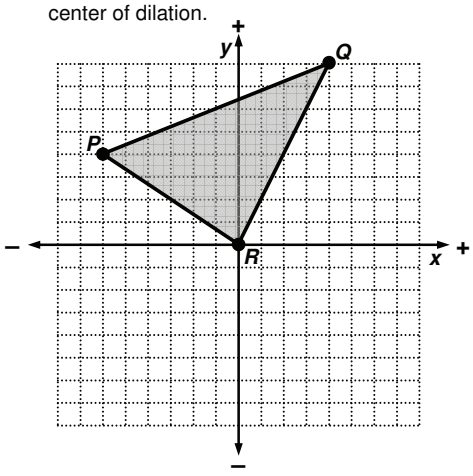
7. Draw a dilation of the triangle using a scale factor of ½ and the origin as the center of dilation, then translate the triangle 5 units up and 7 units left.



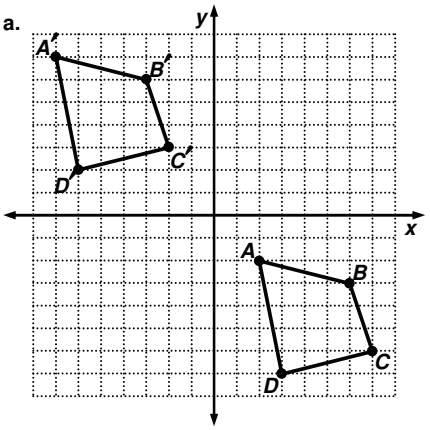
8. Rotate the triangle 90° counterclockwise, and then draw a dilation of the image using a scale factor of ¼ and the origin as the center of dilation.



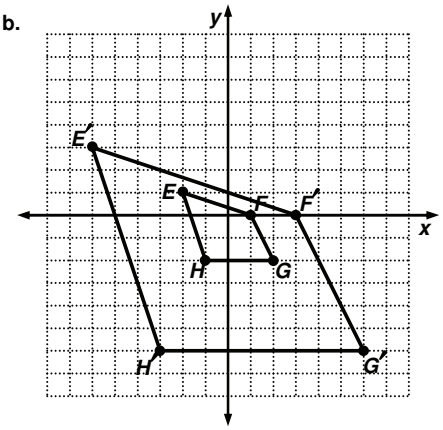
9. Find the coordinates of the point (2, –8) after a rotation 90° counterclockwise about the origin and a reflection across the *y*-axis.

10. Name and describe the transformation (reflection, rotation, dilation, translation) that was performed. Be specific in your descriptions (look at the front of this worksheet for examples of descriptions).

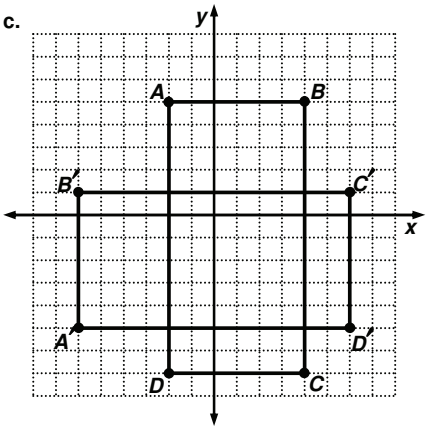
a.



b.



c.



d.