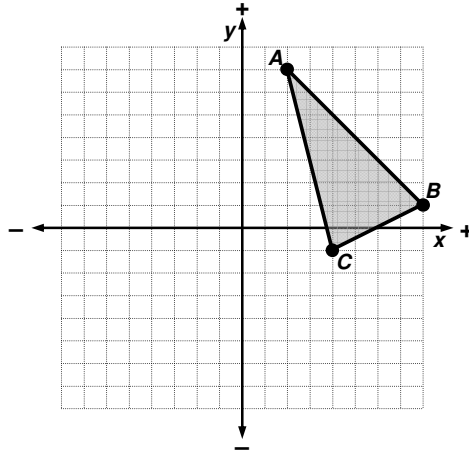


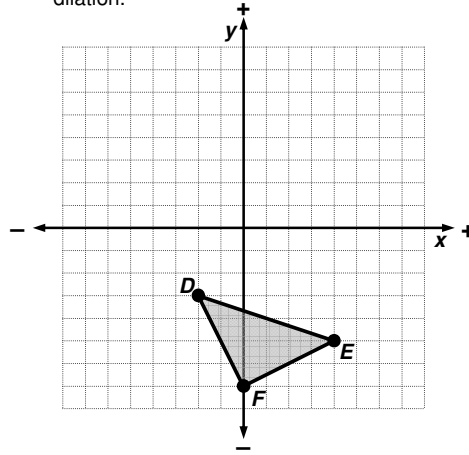
## Multiple Transformations

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

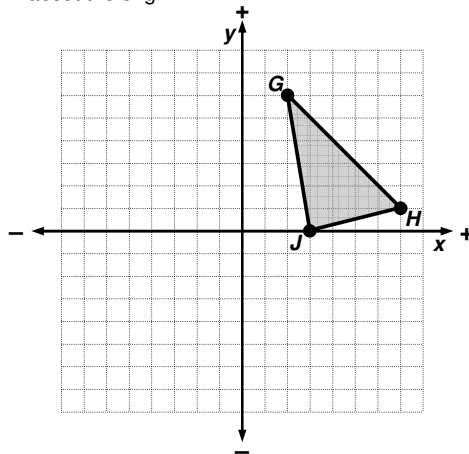
1. Translate the triangle 9 units left, and then reflect the image across the  $x$ -axis.



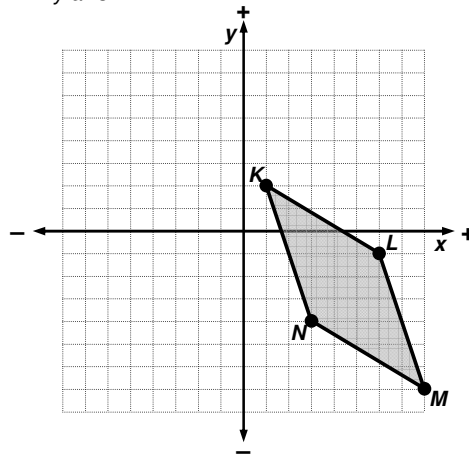
2. Translate the triangle 6 units up, and then draw a dilation of the image using a scale factor of 2 and the origin as the center of dilation.



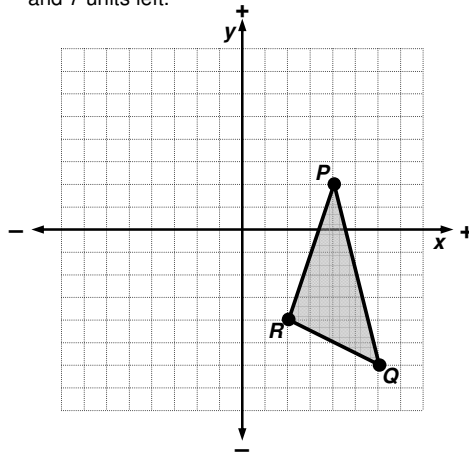
3. Reflect the triangle across the  $y$ -axis, and then rotate the image  $90^\circ$  counterclockwise about the origin.



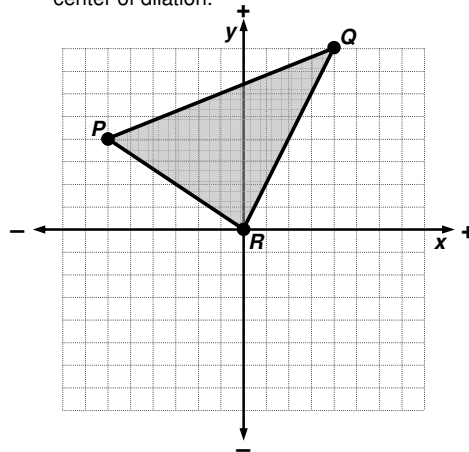
4. Reflect the parallelogram across the  $x$ -axis, and then reflect the image across the  $y$ -axis.



5. Draw a dilation of the triangle using a scale factor of  $\frac{1}{2}$  and the origin as the center of dilation, then translate the triangle 5 units up and 7 units left.



6. Rotate the triangle  $90^\circ$  counterclockwise, and then draw a dilation of the image using a scale factor of  $\frac{1}{4}$  and the origin as the center of dilation.



Write a rule to describe each transformation. Be as specific as you can!

