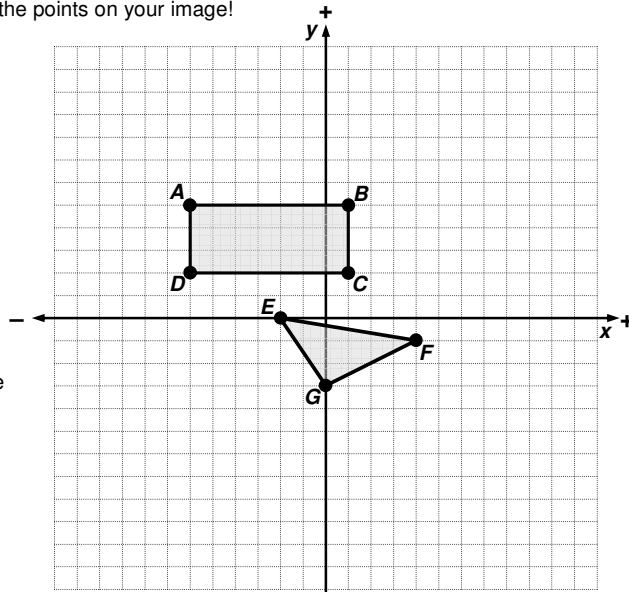


Drawing Dilations: Classwork

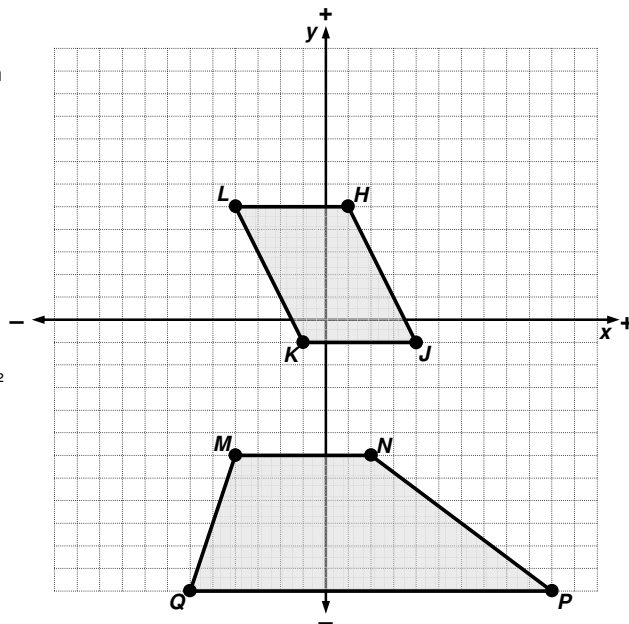
1. Draw the following dilations. Label the points on your image!

- a. Draw a dilation of rectangle $ABCD$ using a scale factor of 2 and the origin as the center of dilation.



- b. Draw a dilation of triangle EFG using a scale factor of 3 and the origin as the center of dilation.

- c. Draw a dilation of parallelogram $HJKL$ using a scale factor of 2 and the origin as the center of dilation.



- d. Draw a dilation of trapezoid $MNPQ$ using a scale factor of $\frac{1}{2}$ and the origin as the center of dilation.

2. In #1c, you performed a dilation using a scale factor of 2 and the origin as the center of dilation.

- a. Complete the table for the coordinates of each point's image.
- b. Based on the table, explain the rule for performing dilations with a scale factor of 2 and the origin as the center of dilation.

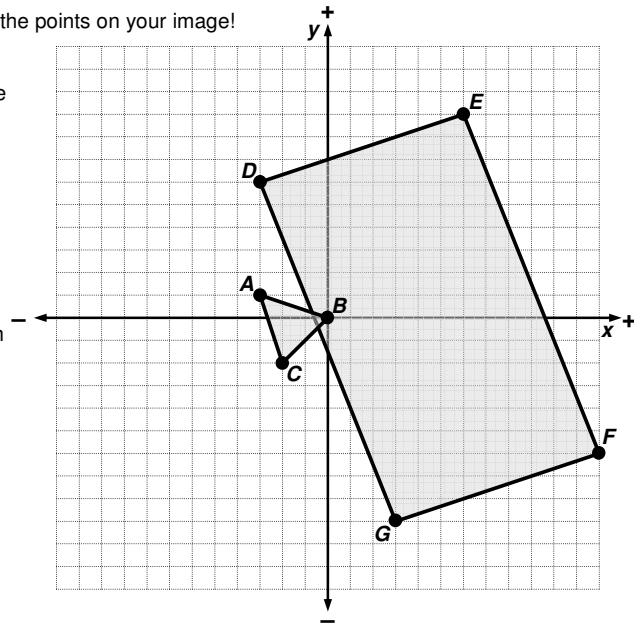
Original Points	Image Points
$H(1, 5)$	
$J(4, -1)$	
$K(-1, -1)$	
$L(-4, 5)$	

- c. How do you think the rule would change if the scale factor was 3? Explain.

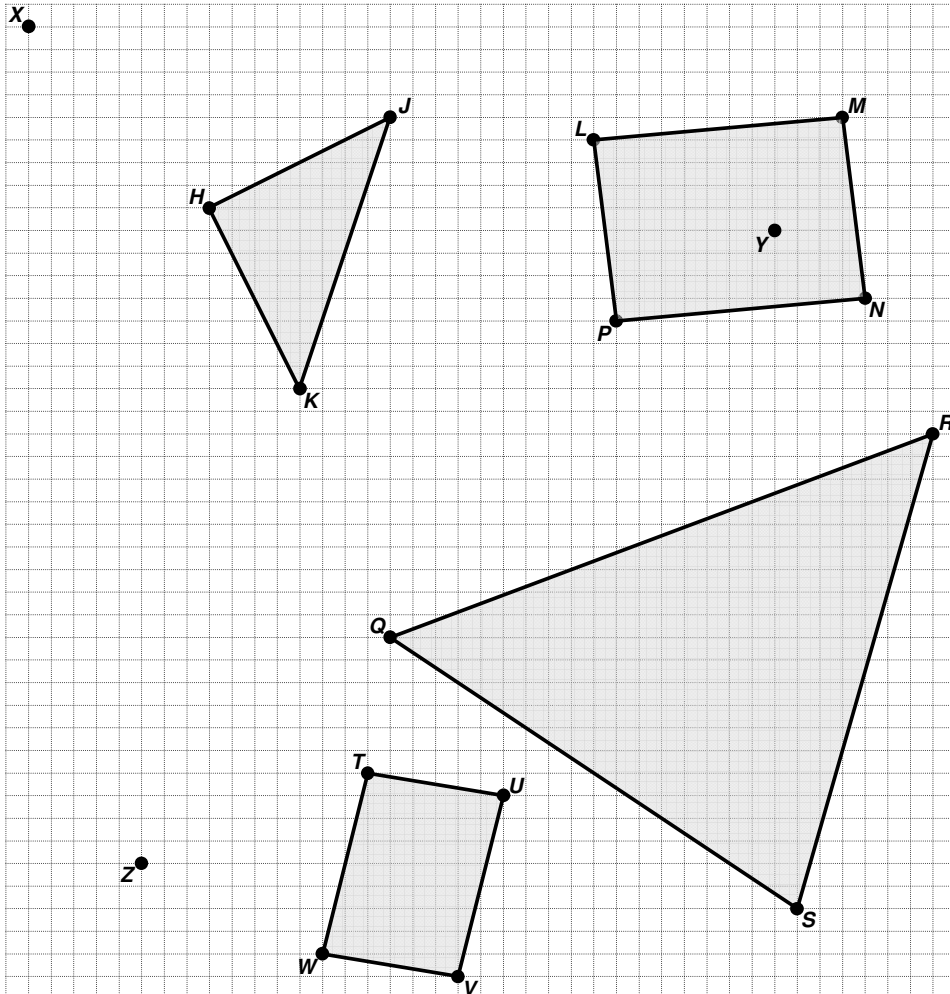
3. Draw the following dilations. Label the points on your image!

a. Draw a dilation of triangle ABC using a scale factor of 4 and the origin as the center of dilation.

b. Draw a dilation of parallelogram $DEFG$ using a scale factor of $1/3$ and the origin as the center of dilation.



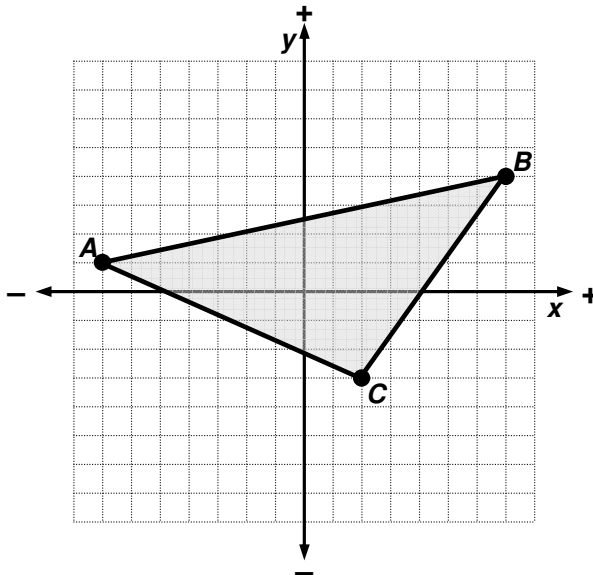
4. Draw a dilation of the triangle HJK using a scale factor of $1/4$ and X as the center of dilation.
5. Draw a dilation of the parallelogram $LMNP$ using a scale factor of 2 and Y as the center of dilation.
6. Draw a dilation of the triangle QRS using a scale factor of $1/3$ and S as the center of dilation.
7. Rotate parallelogram $TUVW$ 90° counterclockwise about point Z , then draw a dilation of the image using a scale factor of $1/2$ and Z as the center of dilation.



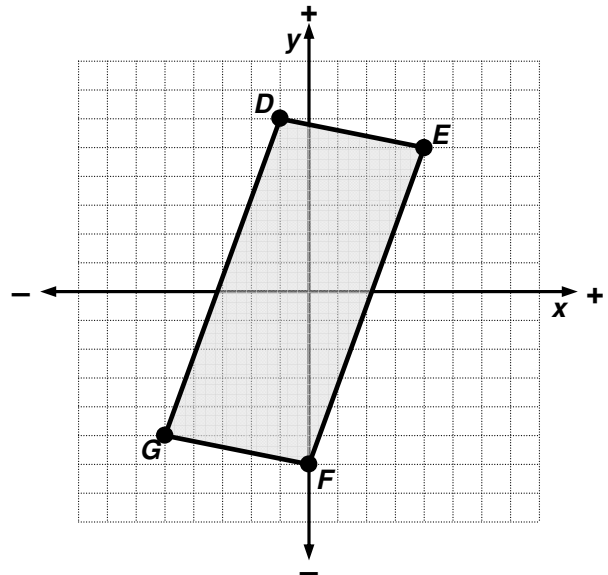
Drawing Dilations: Homework

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

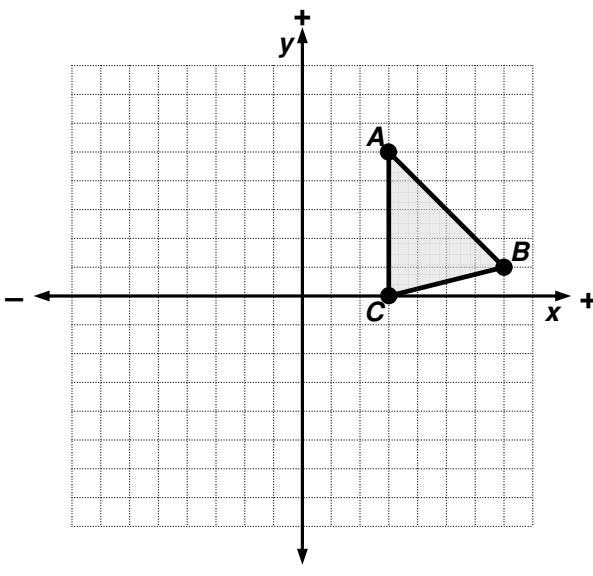
a. Reflect the triangle across the x-axis.



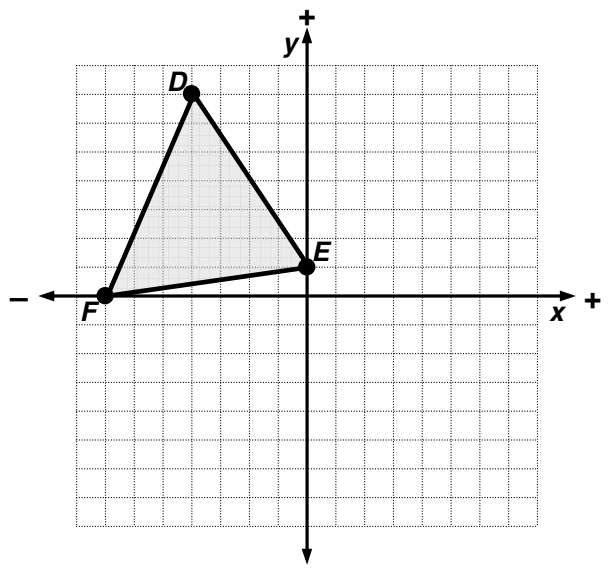
b. Reflect the parallelogram across the y-axis.



c. Rotate the triangle 90° counterclockwise about the origin.

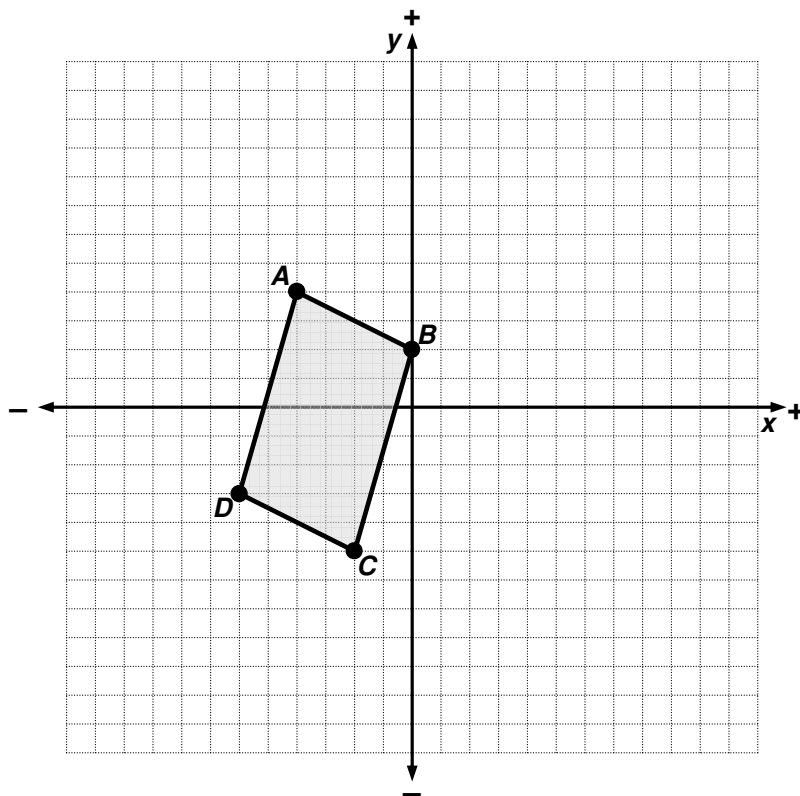


d. Rotate the triangle 90° counterclockwise about the origin.



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

- a. Draw a dilation of the parallelogram using a scale factor of 2 and the origin as the center of dilation.



- b. Draw a dilation of the parallelogram using a scale factor of 2 and the origin as the center of dilation.

