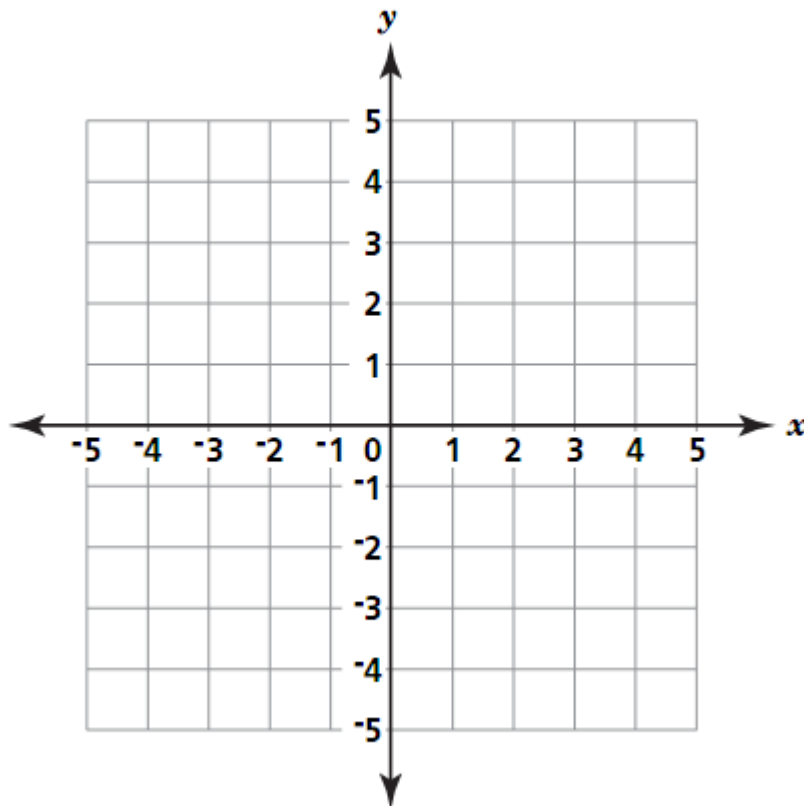


Name _____

Homework _____

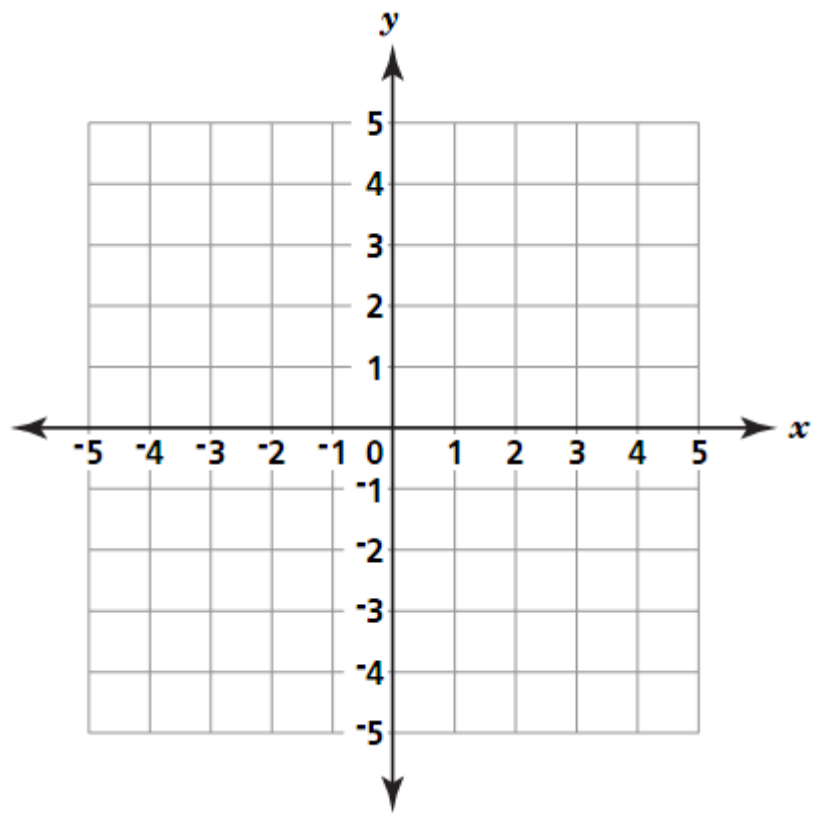
Review of Transformations

1. A pentagon has vertices $L(0, 4)$, $M(6, 2)$, $N(6, -4)$, $P(-6, -4)$, $R(-6, 2)$. Find the coordinates of the dilated pentagon $L'M'N'P'R'$ if the scale factor of $\frac{1}{2}$.
2. Draw triangle DEF with vertices $D(1, 3)$, $E(3, 2)$, $F(2, -1)$. Then find the coordinates of the vertices of the image after a reflection in the y -axis and draw the image. Then rotate the image about the origin 90 degrees counterclockwise. Find the coordinate of D'' , E'' , and F'' , graph and label each vertex.



3. Triangle QRS with vertices $Q(-2, 6)$, $R(8, 0)$, and $S(6, 4)$ is dilated. If the image $Q'R'S'$ has vertices $Q'(-1, 3)$, $R'(4, 0)$, and $S'(3, 2)$ what is the scale factor?

4. Graph the figure and its image, then describe the transformation of parallelogram $WXYZ$ with $W(-5, 3)$, $X(-2, 5)$, $Y(0, 3)$, and $Z(-3, 1)$ if the coordinates of its image are $W'(5, 3)$, $X'(2, 5)$, $Y'(0, 3)$, and $Z'(3, 1)$.



5. Draw triangle FGH with vertices $F(-3, 2)$, $G(2, 5)$, $H(6, 3)$. Then find the coordinates of the vertices of the image after a rotation of 180 degrees about the origin and draw the image. Then translate image using $(x, y) \rightarrow (x + 6, y - 2)$. Draw, label and state the coordinate of F'' , G'' , and H'' .

