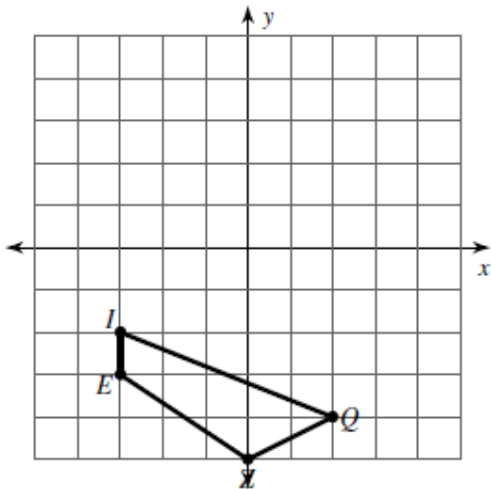


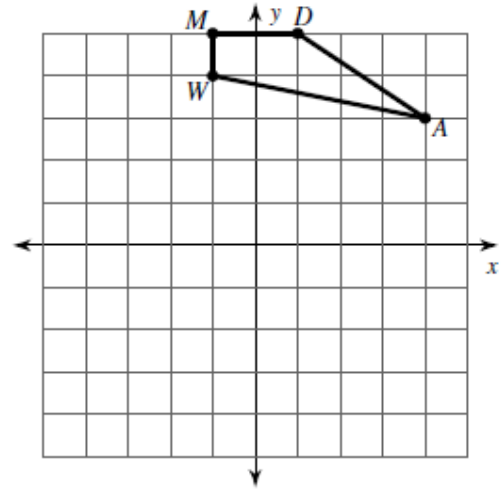
Reflections

Reflect the given pre-image over the given line of reflection. Make sure to label the image points with the correct prime notation.

1) reflection across $y = -2$

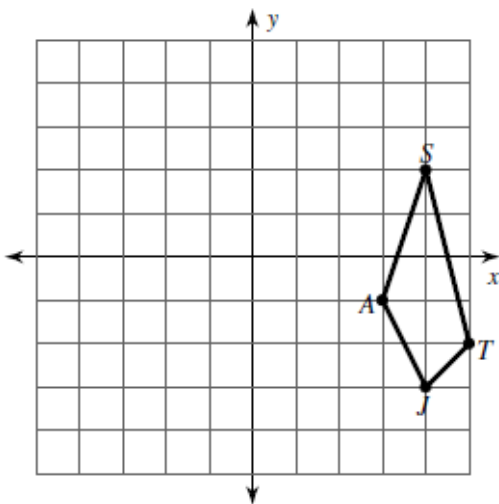


2) reflection across the x -axis

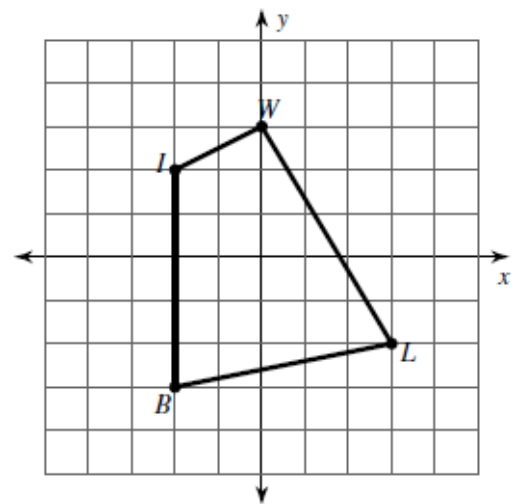


Function: $(x, y) \rightarrow (\quad , \quad)$

3) reflection across $y = -x$



4) reflection across $y = -1$

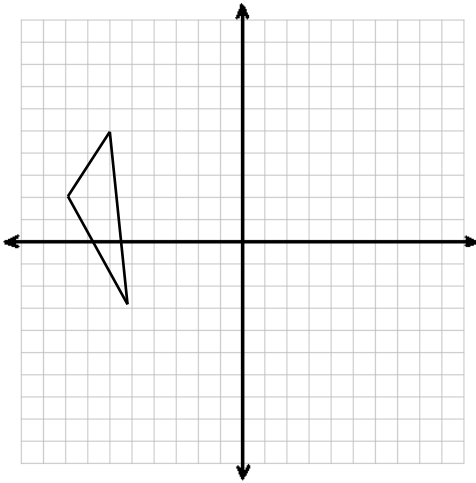


Function: $(x, y) \rightarrow (\quad , \quad)$

5. In any reflection how are the pre-image and image points related to the line of reflection?

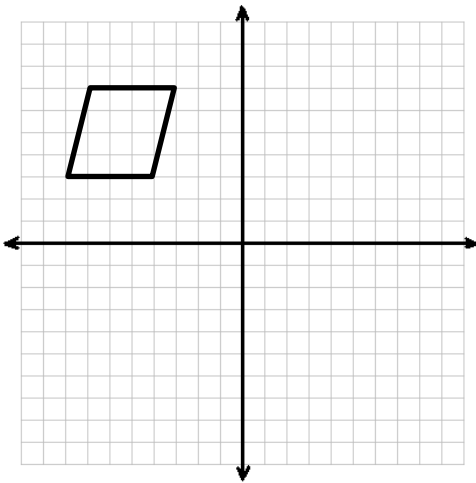
6. If you connected the pre-image and image point to create a segment, how would that segment be related to the line of reflection?

7. Reflect the figure over the line $x = -3$ and then again over the line $x = 2$.



The sequence of these two transformations results in what single transformation?

8. Reflect the figure over the line $x = -1$ and then again over the line $y = -2$.



The sequence of these two transformations results in what single transformation?

What conjectures can you make about reflecting over parallel lines? What about over intersecting lines?