

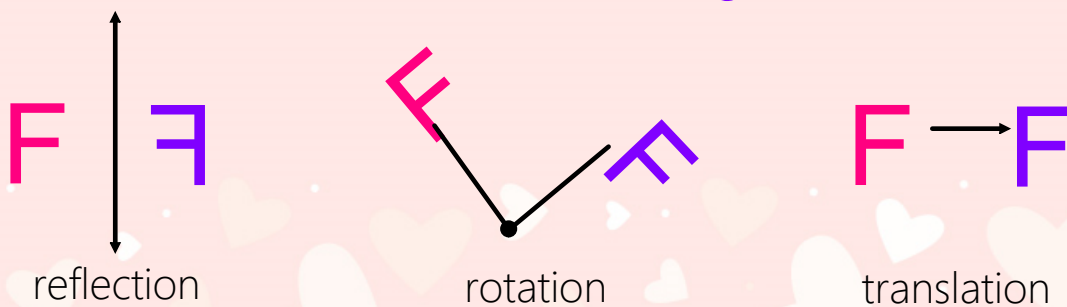
rigid transformations - transformations that do not alter the size or shape of a figure (ex: rotations, reflections, translations)

preimage - the original figure/image

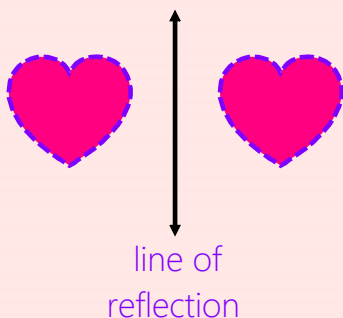
image - the new figure/image

isometry - a transformation that preserves lengths (also preserves angle measures, parallel lines, & distance between points)

preimage & image

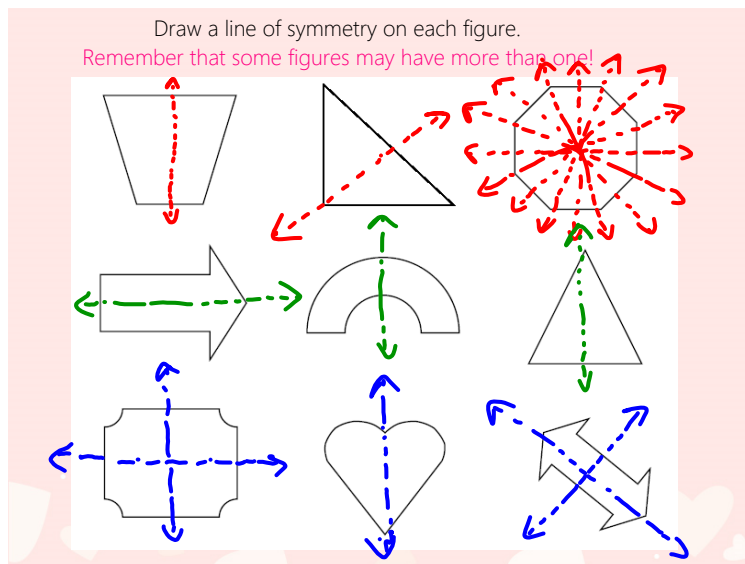
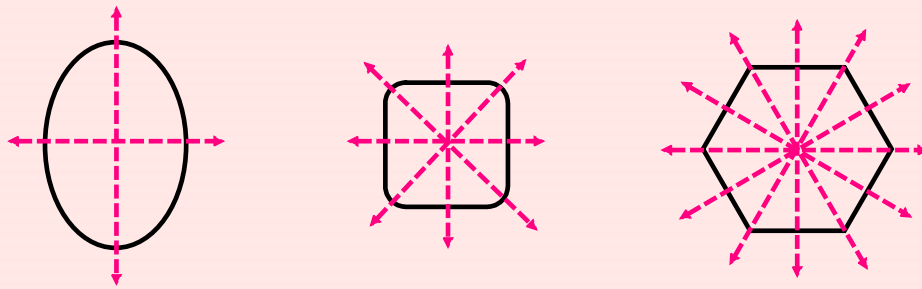


## Reflections



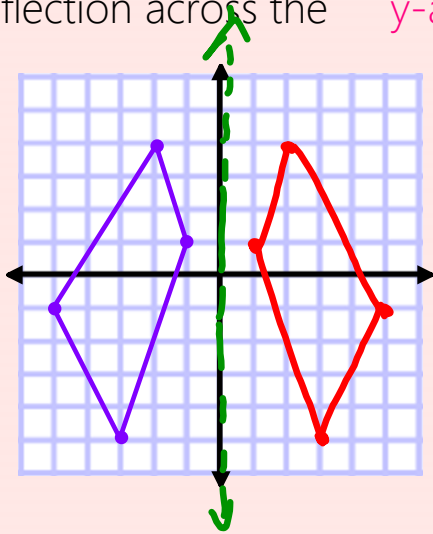
A line of reflection acts like a mirror, with an image reflected over the line.

A figure has a line of symmetry if the figure can be mapped onto itself by a reflection over the line.

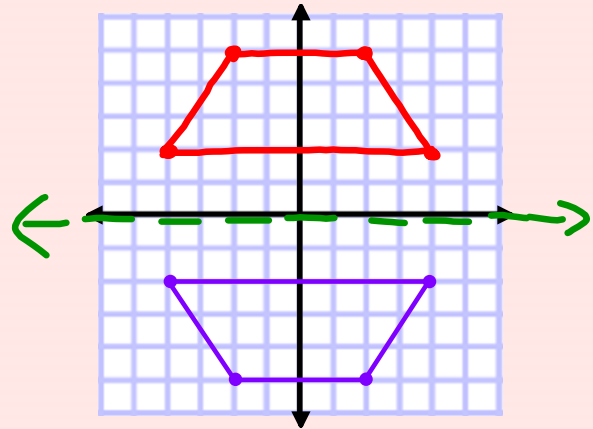


Graph the image of the figure using the transformation given.

Reflection across the **y-axis**

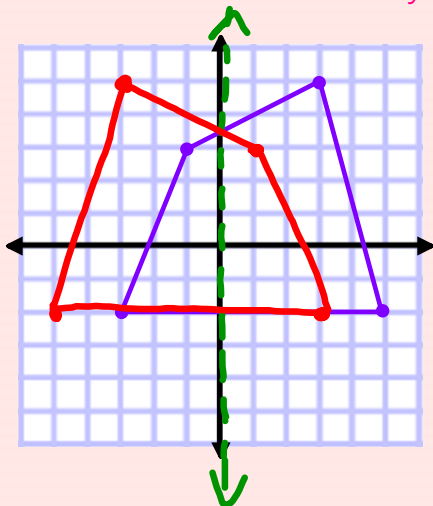


Reflection across the **x-axis**

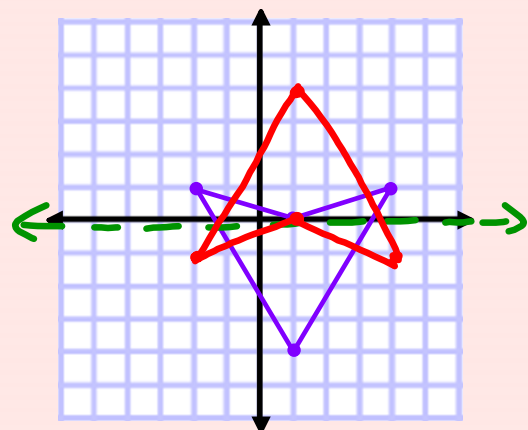


Graph the image of the figure using the transformation given.

Reflection across the **y-axis**

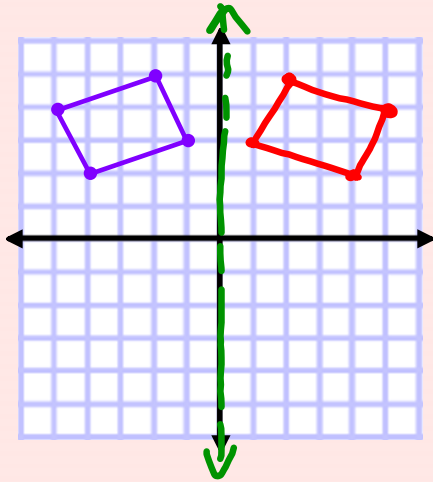


Reflection across the **x-axis**

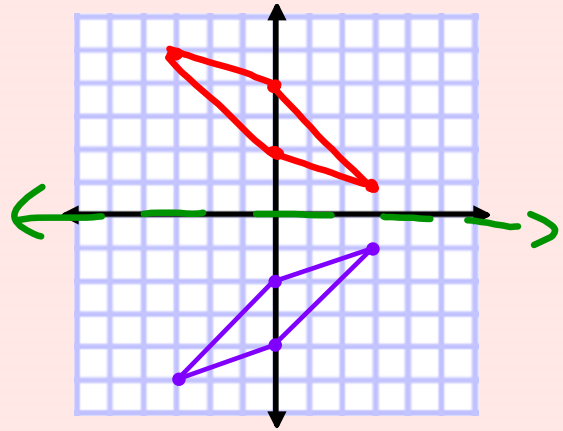


Graph the image of the figure using the transformation given.

Reflection across the  $y$ -axis

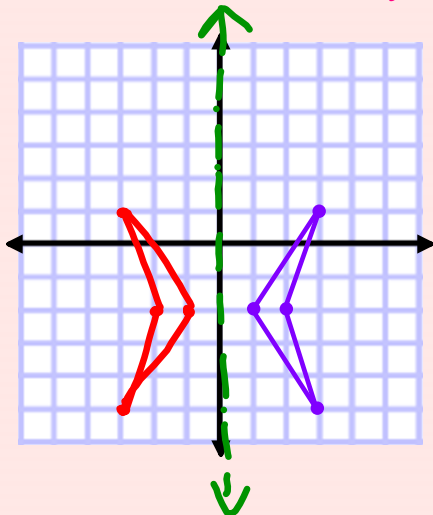


Reflection across the  $x$ -axis

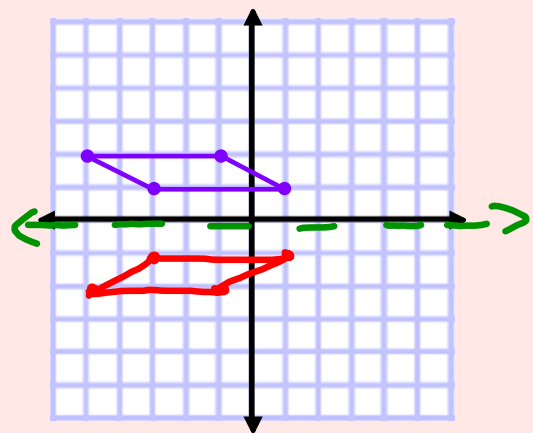


Graph the image of the figure using the transformation given.

Reflection across the  $y$ -axis

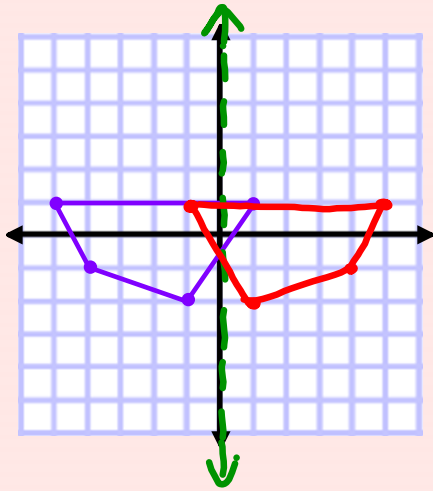


Reflection across the  $x$ -axis

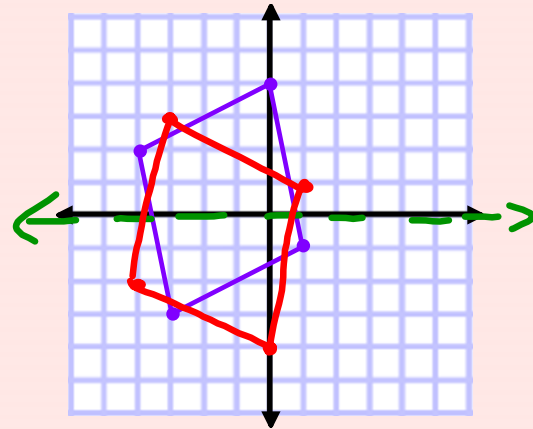


Graph the image of the figure using the transformation given.

Reflection across the **y-axis**

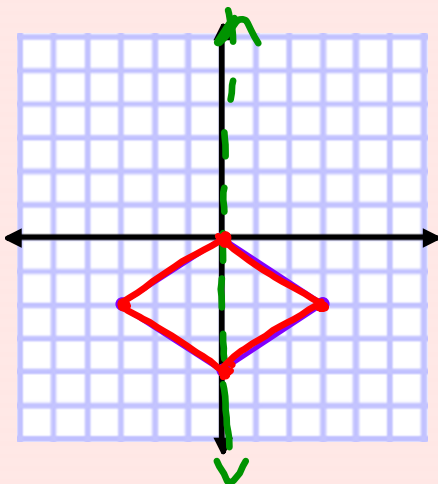


Reflection across the **x-axis**



Graph the image of the figure using the transformation given.

Reflection across the **y-axis**



Reflection across the **x-axis**

