Use this worksheet for the Mirror-Mirror lesson.

Handedness

In the boxes below, describe your conclusions about whether each function preserves or reverses the handedness of the motion of x. (Use CW for clockwise and CCW for counter-clockwise.)

Function	Domain	Range	Conclusion
Reflect	When <i>x</i> moves \underline{CW} on $\triangle ABC$,	x' moves on $\Delta A'B'C'.$	The reflect function (preserves / reverses) handedness.
Rotate	When <i>x</i> moves	x' moves	The rotate function
Glide Reflect	When <i>x</i> moves	x' moves	The glide reflect function
Translate	When <i>x</i> moves	x' moves	The translate function
Dilate	When <i>x</i> moves	x' moves	The dilate function

Explore Multiple Reflections

On page 1, what single function produced the same result as your two reflections? What did you notice about your solution?

On page 2, what single function produced the same result as your three reflections? What did you notice?

On page 3, what single function, from a different family than on page 1, produced the same result as your two reflections? What did you notice about your solution?

Construct Multiple Reflections

On the back of this paper record your group's efforts, on each page, to use reflections to produce the same result as the transformation function already shown on the page. If you were successful, describe how you constructed the mirror(s). If you were not successful, explain why.