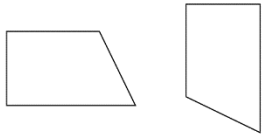
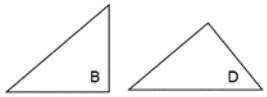
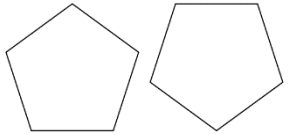
Geometry

Activity 6 Assessment

2-D Shapes, Transformations, and the Cartesian Plane Consolidation

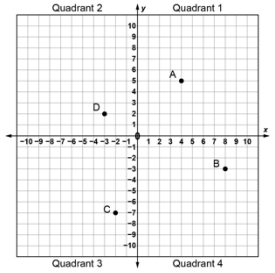
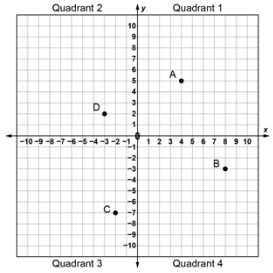
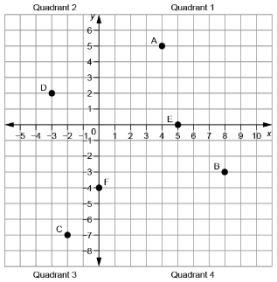
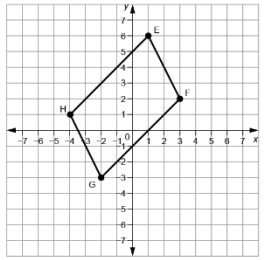
Exploring Symmetry and Congruence			
Verifies symmetry of two shapes by reflecting or rotating one shape onto another.  "I reflected one trapezoid in a vertical line of reflection so that it mapped onto the other trapezoid exactly. So, the two shapes are symmetrical."	Describes the symmetry between two shapes as reflection symmetry or rotation symmetry, or a combination of two transformations.  "These two symmetrical shapes are related by a combination of transformations. I could reflect the shape on the left in a vertical line, then rotate the image counterclockwise until it has the same orientation as the other shape."	Demonstrates congruence between two shapes in any orientation by superimposing.  "The two shapes are congruent even though they have different orientations. I traced Shape B and placed the tracing on Shape D and they matched exactly. They have the same size and shape."	Understands that shapes related by symmetry are congruent to each other.  "These two shapes are related by rotation symmetry. I can map one shape onto the other through rotation so that they match exactly. This means the shapes are congruent as they have the same size and shape."
Observations/Documentation			

Geometry

Activity 6 Assessment

2-D Shapes, Transformations, and the Cartesian Plane Consolidation

Location and Transformations in the Cartesian Plane

Reads and interprets the Cartesian plane.	Locates points on a Cartesian plane using ordered pairs.	Uses coordinates to plot points on a Cartesian plane.	Models and describes the location of the vertices of a polygon in the Cartesian plane using coordinates.
			
"The *x*-axis looks like a horizontal number line and the *y*-axis looks like a vertical number line, and the two number lines intersect."	"Point A is at (4, 5), Point B is at (8, -3), Point C is at (-2, -7), and Point D is at (-3, 2)."	"I plotted Point E(5, 0) and Point F(0, –4)."	"I drew a parallelogram. Its vertices are at E(1, 6), F(3, 2), G(–2, –3), and H(–4, 1)."

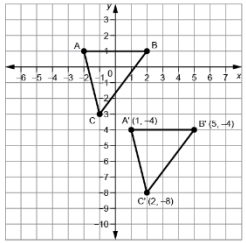
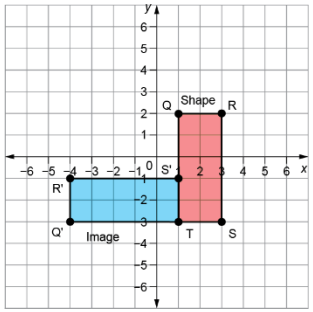
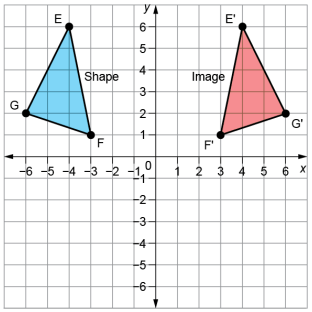
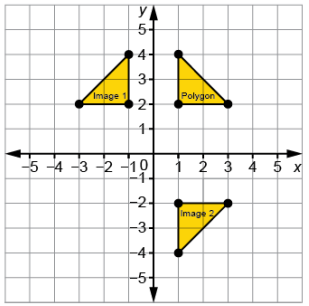
Observations/Documentation

Geometry

Activity 6 Assessment

2-D Shapes, Transformations, and the Cartesian Plane Consolidation

Location and Transformations in the Cartesian Plane (cont'd)

Describes and performs transformations of polygons on a Cartesian plane.	Identifies transformation used to move a polygon on a Cartesian plane.	Relates the coordinates of a polygon and its image after a translation, reflection, or rotation.	Flexibly visualizes and predicts where the image of a polygon will be after a transformation.
			
"I translated △ABC right 3 squares and down 5 squares to get △A'B'C'."	"The shape was rotated 90° counterclockwise about T to get the image. The shape and its image are congruent but have different orientations."	"After a reflection in the *y*-axis, the *x*-coordinates of the vertices change sign, and the *y*-coordinates stay the same."	"I can picture the Polygon's reflection, Image 1, on the other side of the *y*-axis, and the Polygon's reflection, Image 2, on the other side of the *x*-axis. Each time, matching vertices will be the same distance from the line of reflection and the polygon, and its image will have opposite orientations."

Observations/Documentation