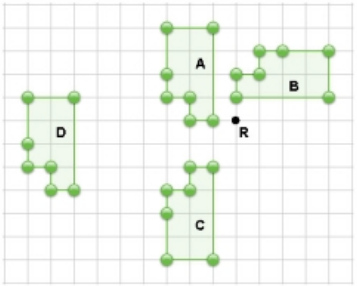
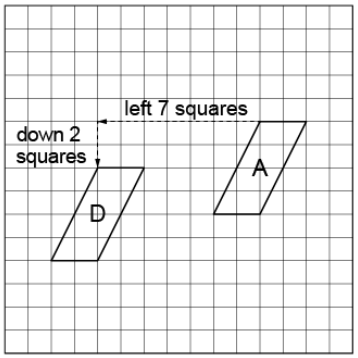
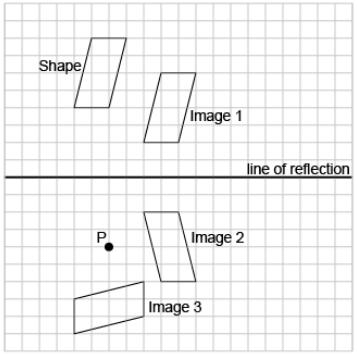
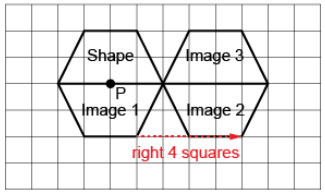
Geometry

Activity 12 Assessment
Transformations Consolidation

Applying and Visualizing Transformations on a Grid

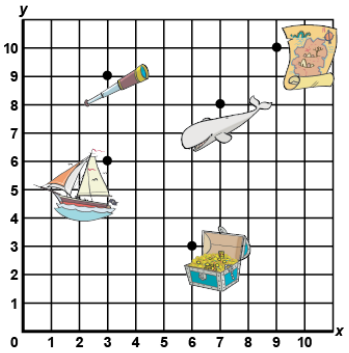
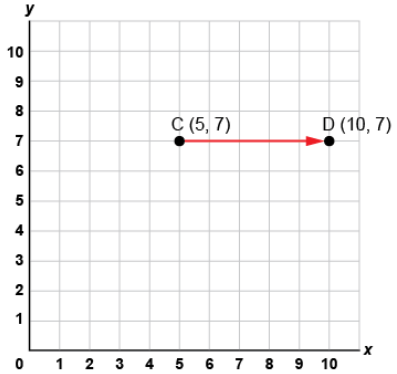
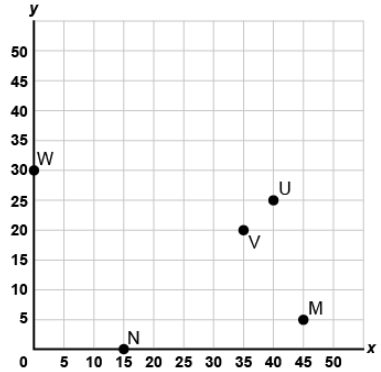
Identifies and describes transformations on a grid.	Describes and performs single transformations on a grid.	Describes and performs combinations of transformations.	Visualizes, describes, and flexibly performs combinations of transformations.
			
"Shape A to Shape D is a translation. Shape A is reflected in the horizontal line halfway between Shapes A and C to get Shape C. Shape A is rotated 90° clockwise about point R to get Shape B."	"I translated Shape A left 7 squares and down 2 squares to Image D."	"I used a combination of transformations. I translated the Shape right 4 squares, down 2 squares to Image 1; I reflected Image 1 in the line of reflection shown to get Image 2; I rotated Image 2 90° clockwise about point P to get Image 3."	"I visualized the transformations and predicted where the images would be. I performed the transformations to check. I rotated the shape 180° about point P to get Image 1; then translated Image 1 right 4 squares to get Image 2; then reflected Image 2 in the common side to get Image 3. My predictions were correct."

Observations/Documentation

Geometry

Activity 12 Assessment
Transformations Consolidation

Locating and Mapping Shapes in 1st Quadrant of the Cartesian Plane

Describes the location of 2-D shape/objects on the grid.	Describes translations of points by describing distance, direction, and coordinates.	Plots and locates points on a grid using various scales and labels the coordinates.
		
"The treasure chest is located at (6,3)."	"I plotted the point C(5, 7), then translated it right 5 squares to C'(10, 5). The *x*-coordinate increased by 5."	"To plot each point, I counted by 5s along each axis and labelled the coordinates: W(0,30), N(15,0), V(35,20), U(40,25), M(45,5)."

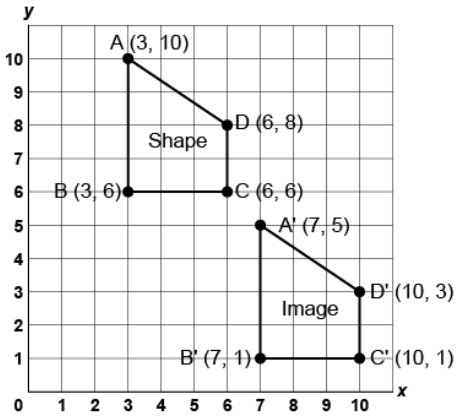
Observations/Documentation

Geometry

Activity 12 Assessment
Transformations Consolidation

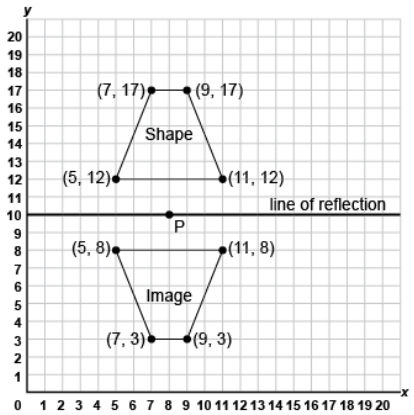
Locating and Mapping Shapes in 1st Quadrant of the Cartesian Plane (cont'd)

Translates or reflects shapes and labels coordinates of the image.



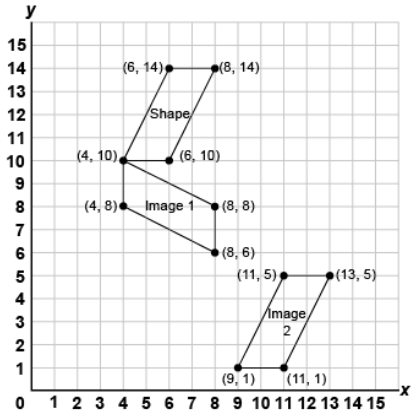
"I translated the quadrilateral right 4 squares, then down 5 squares. The *x*-coordinate of each vertex of the image increased by 4 and each *y*-coordinate decreased by 5."

Analyzes and locates the vertices of 2-D shapes before and after rotations.



"I rotated the shape 180° about P(8, 10). I chose point P because it is on the line of symmetry of the trapezoid, so when I rotate it 180°, the image is also a reflection."

Visualizes and predicts the location of 2-D shapes after transformations using various scales.



"I visualized and predicted the location of the image after different transformations and identified the coordinates. Image 1 is a rotation 90° clockwise, and Image 2 is a translation right 5 squares, down 9 squares."

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