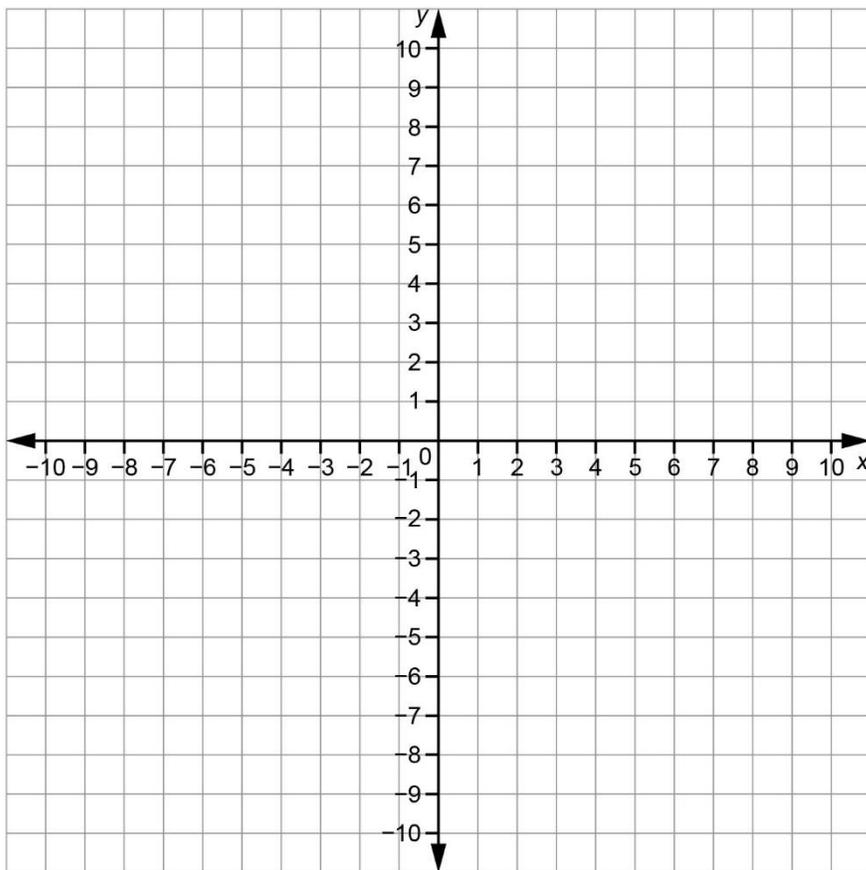


**Geometry**  
Unit 1 Line Master 6a

# Rotating a Shape about a Vertex

Record the coordinates for two vertices of each shape and their images in the table below.

1. Draw Shape 1 using a maximum of 6 points.
2. Choose a vertex.  
Rotate Shape 1  $90^\circ$  clockwise about the vertex.  
Label the rotation image as Shape 2.
3. Repeat Step 2 for a rotation of  $180^\circ$  about the same vertex.  
Label the rotation image of Shape 1 as Shape 3.
4. Repeat Step 3 for a rotation of  $270^\circ$  clockwise about the same vertex.  
Label the rotation image of Shape 1 as Shape 4.
5. Describe how each image is related to the original shape.



## Rotating a Shape about a Vertex (cont'd)

Rotation Image Shape 2		
Description	Coordinates of Vertices of Shape 1	Coordinates of Vertices of Image Shape 2
Rotation Image Shape 3		
Description	Coordinates of Vertices of Shape 1	Coordinates of Vertices of Image Shape 3
Rotation Image Shape 4		
Description	Coordinates of Vertices of Shape 1	Coordinates of Vertices of Image Shape 4