Name_____ Date_____
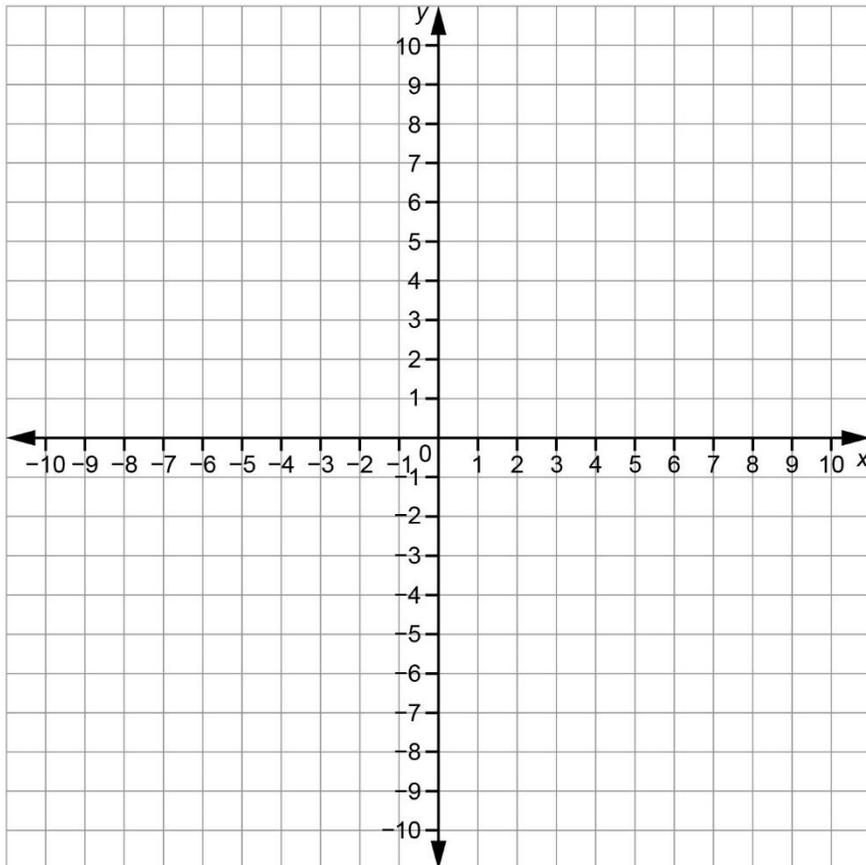
Rotating a Shape about an External Point

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 point P outside the shape.
   Rotate Shape 1 90° counterclockwise about P.
   Label the rotation imageas Shape 2.

3. Repeat Step 2 for a counterclockwise rotation of 180° about P.
   Label the rotation image of Shape 1 as Shape 3.

4. Repeat Step 3 for a counterclockwise rotation of 270° about P.
   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
an External Point (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**