## Rotations

## A rotation is a <br> $\qquad$ specified <br> $\qquad$ in a specified <br> $\qquad$ .

 around a fixed point (called the center of rotation) through aRotation CCW $90^{\circ}$ about origin
$(x, y) \rightarrow(\quad, \quad)$
Pre-image Image


Rotation CCW $180^{\circ}$ about origin $(x, y) \rightarrow(\quad, \quad)$

Pre-image Image


Rotation CCW $270^{\circ}$ about origin
$(x, y) \rightarrow(\quad, \quad)$
Pre-image Image


