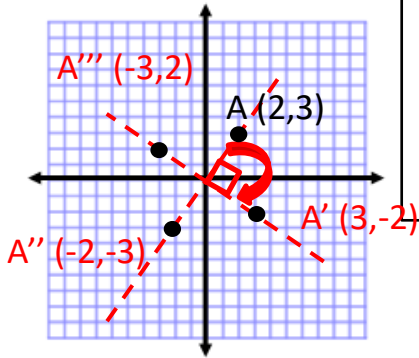


Using the preimages below, the given center of rotation, and the given angle and direction, rotate the preimages. Label the images appropriately.

0 → the origin (0,0)

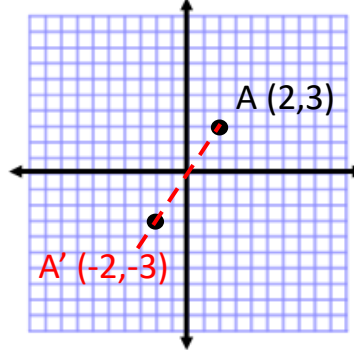
Rotation Coordinate Method:

90° Clockwise (CW):



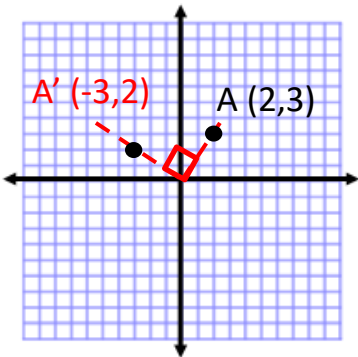
Notation:
 $R_{0,90^\circ CW}(A)$
 Arrow Notation:
 $(x,y) \rightarrow (y,-x)$

180° Clockwise (CW) OR Counter-clockwise (CCW):



Notation:
 $R_{0,180^\circ}(A)$
 Arrow Notation:
 $(x,y) \rightarrow (-x,-y)$

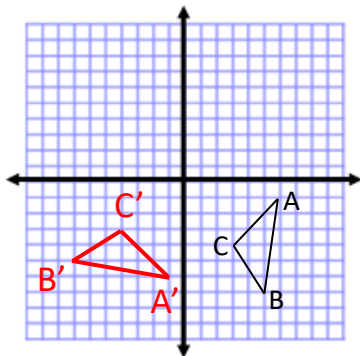
90° Counter-clockwise (CCW) OR 270° Clockwise (CW):



Notation:
 $R_{0,270^\circ CW}(A)$ or $R_{0,90^\circ CCW}(A)$
 Arrow Notation:
 $(x,y) \rightarrow (-y,x)$

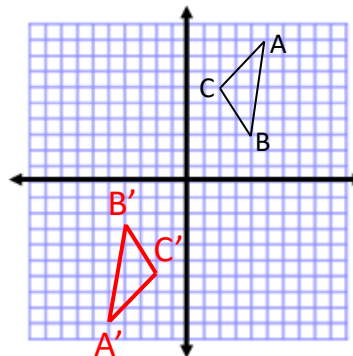
Examples:

1. $R_{0,90^\circ CW}(\triangle ABC)$



$A'(-1,-6)$
 $B'(-7,-5)$
 $C'(-4,-3)$

2. $R_{0,180^\circ}(\triangle ABC)$



$A'(-5,-9)$
 $B'(-4,-3)$
 $C'(-2,-6)$

Summary:

$R_{0,90^\circ CW}(x,y) = (\underline{\quad y \quad}, \underline{-x \quad})$

$R_{0,90^\circ CCW}(x,y) = (\underline{-y \quad}, \underline{\quad x \quad})$

$R_{0,180^\circ CW}(x,y) = (\underline{-x \quad}, \underline{-y \quad})$

$R_{0,180^\circ CCW}(x,y) = (\underline{-x \quad}, \underline{-y \quad})$

$R_{0,270^\circ CW}(x,y) = (\underline{-y \quad}, \underline{\quad x \quad})$

$R_{0,270^\circ CCW}(x,y) = (\underline{\quad y \quad}, \underline{-x \quad})$