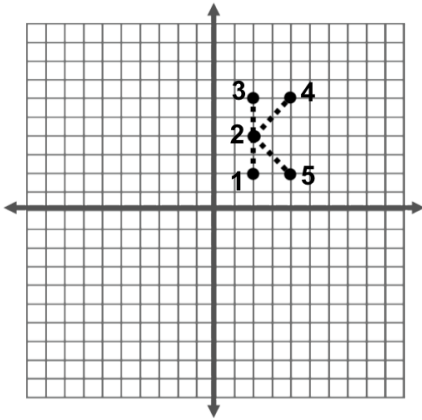1) Directions: Rotate the image **clockwise** with the given angle of rotation about the origin.
   Graph each image separately.

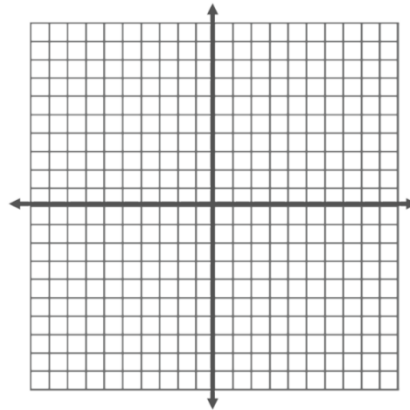| Coordinate	1 (2,2)	2 (2, 4)	3 (2, 6)	4 (4, 6)	5 (4, 2)
90°					
180°					
270°					

2) Directions: Determine the coordinates of the indicated vertices of the triangle rotated 180˚ counterclockwise about the point (1, 0).   Graph the image on the coordinate plane.

A(-8,-10), B (-4,7) , C (-3, 3)
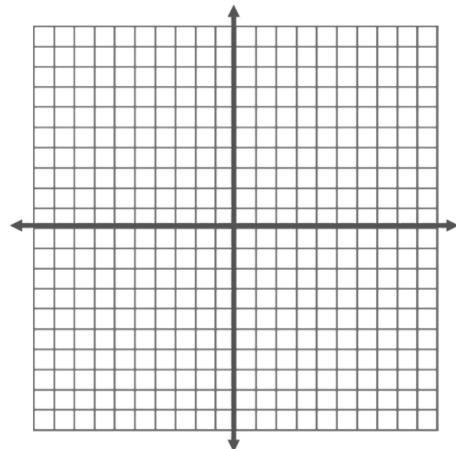
A': _____

B': _____

C': _____

3) $\overline{MK}$ is rotated 90° clockwise about the point (0, -2) . The coordinates are $M(1, 3)$ and $K(4, -6)$.

   Graph the image on the coordinate plane. What are the locations of M' and K'
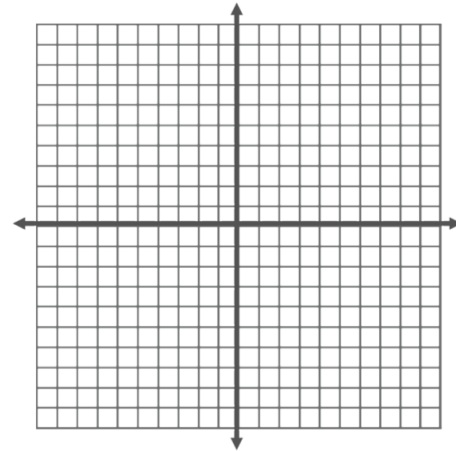
M': _____

K': _____

4) The vertices of $\triangle ABC$ are A(3,5), B (5,5) , C (7, 0) . Graph the coordinates of $\triangle A'B'C'$ and $\triangle A''B''C''$

Reflection over the line y = x

Rotation 90° counter clockwise about the origin

A'   A''
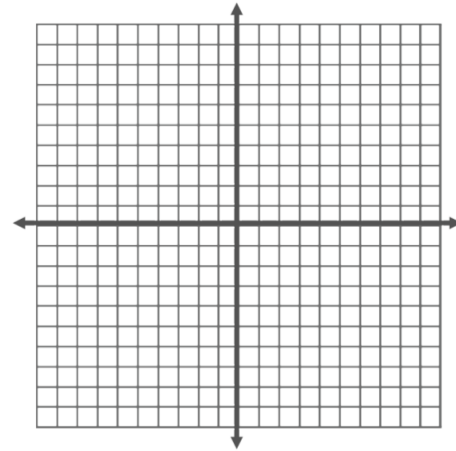
B'   B''

C'   C''

5) The vertices of $\triangle ABC$ are A(3,5), B (5,5) , C (7, 0) . Graph the coordinates of $\triangle A'B'C'$ and $\triangle A''B''C''$

Rotation 90° clockwise about the point (1, -1)

Reflection over the line y = -x

A'   A''

B'   B''

C'   C''

Answer Key

Geometry 2.3 Day 2

1)

Coordinate	1 (2,2)	2 (2, 4)	3 (2, 6)	4 (4, 6)	5 (4, 2)
90°	(2, -2)	(4, -2)	(6, -2)	(6, -4)	(2, -4)
180°	(-2, -2)	(-2, -4)	(-2, -6)	(-4, -6)	(-4, -2)
270°	(-2, 2)	(-4, 2)	(-6, 2)	(-6, 4)	(-2, 4)

2) A': (10, 10)   B': (6, -7)   C': (5, -3)

3) M': (5, -3)   K': (-4, -6)

4) A' (5, 3)   A'' (-3, 5)   5) A' (7, -3)   A'' (3, -7)

   B' (5, 5)   B'' (-5, 5)   B' (7, -5)   B'' (5, -7)

   C' (0, 7)   C'' (-7, 0)   C' (2, -7)   C'' (7, -2)