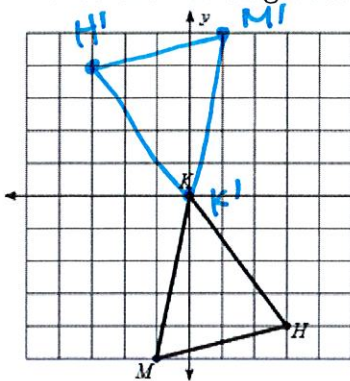


Geometry DAY 1.5
Classwork – Rotations

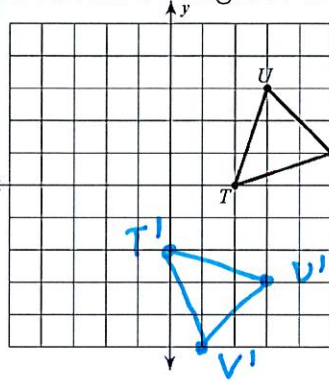
Name: key Date: _____

1. Rotate 180 degrees.



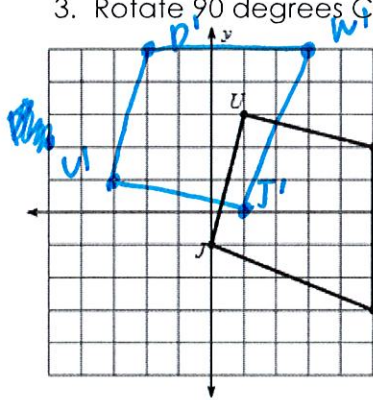
$(x, y) \rightarrow (-x, -y)$
 $K(0, 0) K'(0, 0)$
 $H(3, -4) H'(-3, 4)$
 $M(-1, -5) M'(1, 5)$

2. Rotate 90 degrees CW.



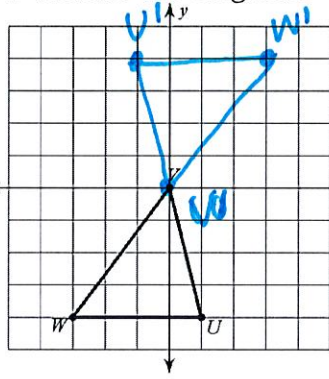
$(x, y) \rightarrow (y, -x)$
 $T(2, 0) T'(0, -2)$
 $U(3, 3) U'(3, -3)$
 $V(5, 1) V'(1, -5)$

3. Rotate 90 degrees CCW.



$(x, y) \rightarrow (-y, x)$
 $J(0, -1) J'(1, 0)$
 $U(1, 3) U'(-3, 1)$
 $D(5, 3) D'(-3, 5)$
 $W(5, -3) W'(3, 5)$

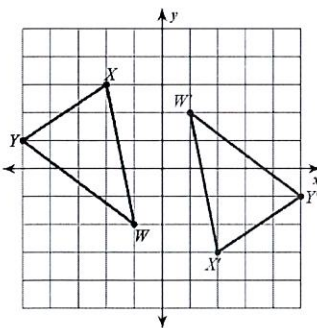
4. Rotate 180 degrees.



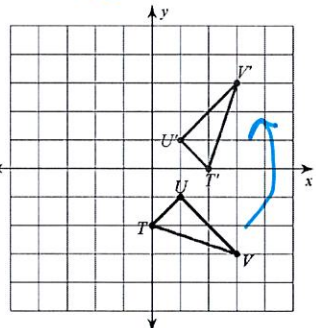
$(x, y) \rightarrow (-x, -y)$
 $W(-3, -4) W'(3, 4)$
 $V(1, -4) V'(-1, 4)$
 $V(0, 0) V'(0, 0)$

Write the degree and direction of the rotation shown below!

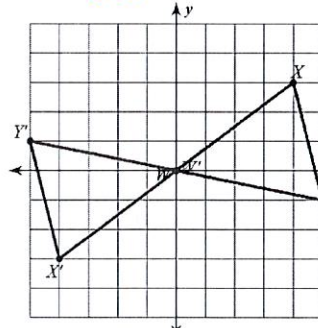
1. 180°



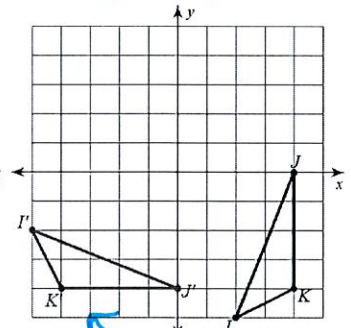
2. 90° CCW



3. 180°

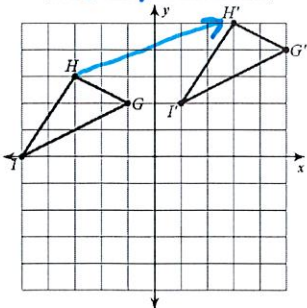


4. 90° CW

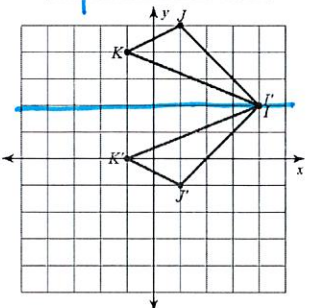


EVERYTHING! Write the translation vector, line of reflection, or direction and degree of rotation!

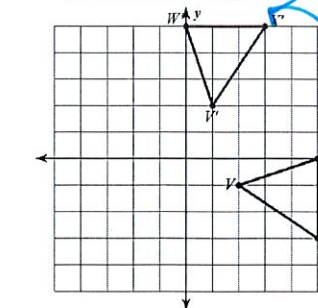
1. $\langle 2, 6 \rangle$



2. $y = 2$ reflection



3. 90° CCW



4. 180° rotation

