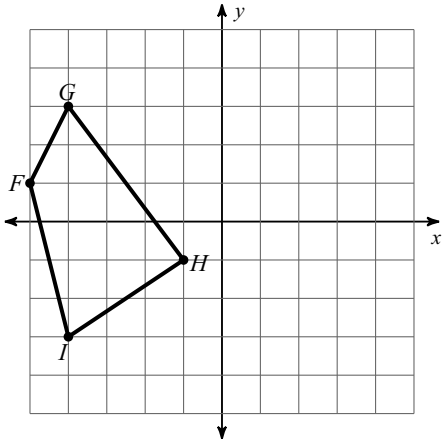
Honors Geometry [CO-A5a front, CO-A2a back] Name_____

Performing and Describing Transformations

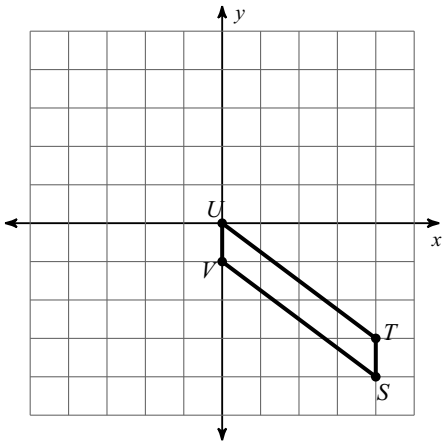
Date_____ Block____

Graph the image of the figure using the transformation given. Use primes to label the vertices.

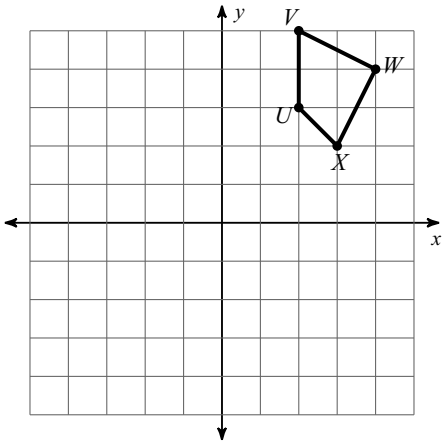
1) rotation 90° counterclockwise about the origin



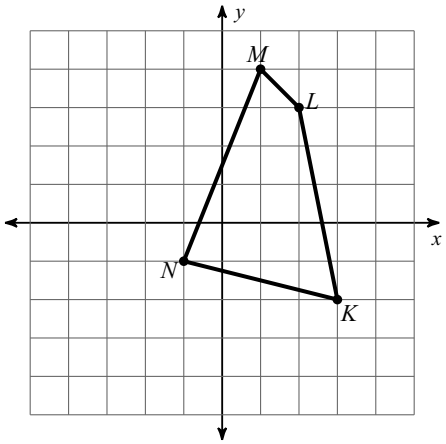
2) translation: $(x, y) \rightarrow (x + 1, y + 2)$



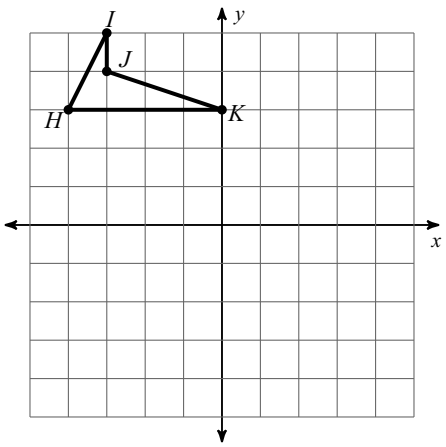
3) translation: $(x, y) \rightarrow (x - 6, y - 4)$



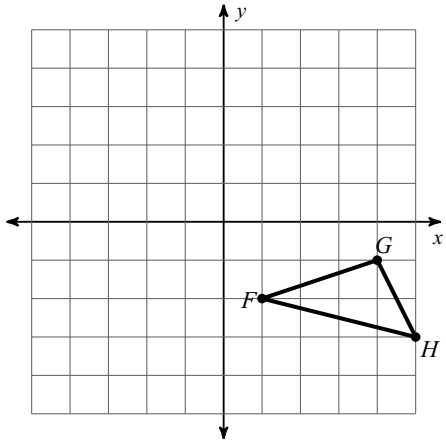
4) reflection across $y = -x$



5) reflection across $x = -1$

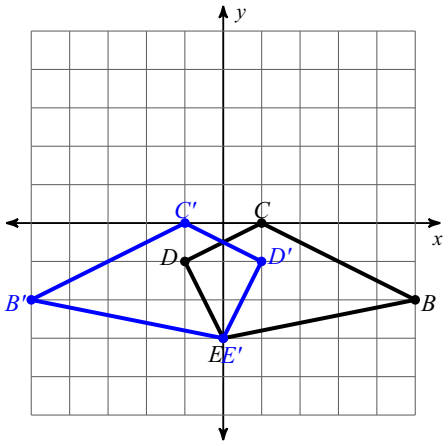


6) rotation 180° about the origin

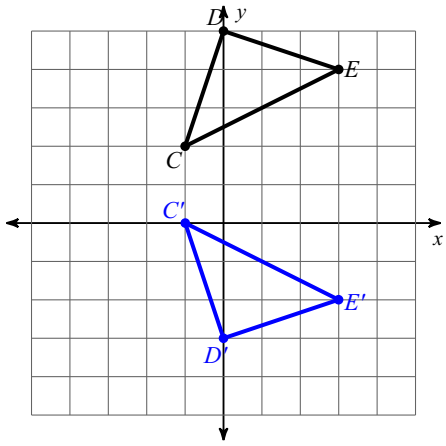


First identify whether each is a translation, reflection, or rotation. For translations, write a rule in arrow notation to describe the motion. For reflections, write the equation of the line of reflection. For rotations, given the angle of rotation CCW about the origin.

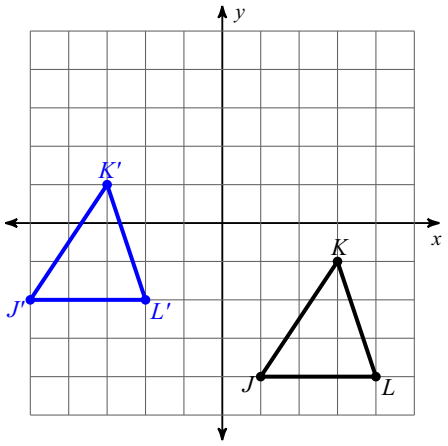
7)



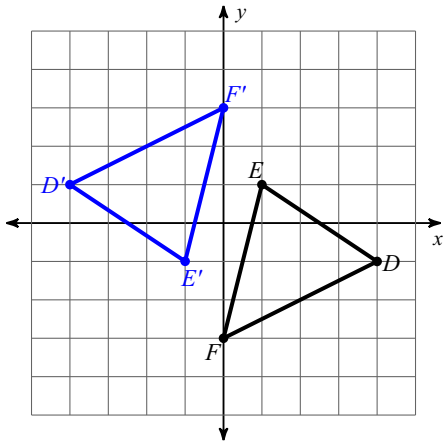
8)



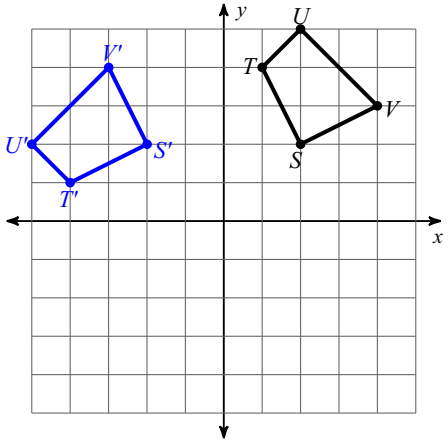
9)



10)



11)



12)