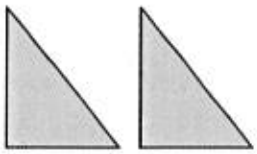
Name _____ Hour _____

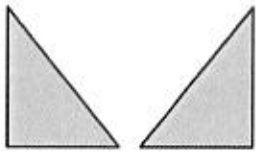
More Notes 2.4 – Multistep transformations

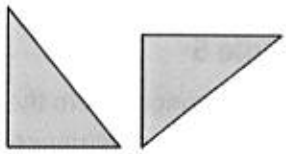
2.4 Rotations

Essential Question What are the three basic ways to move an object in a plane?

Identify the transformation.

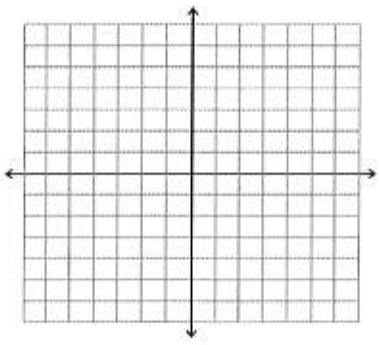
1. 

2. 

3. 

EXAMPLE 4 Using More than One Transformation

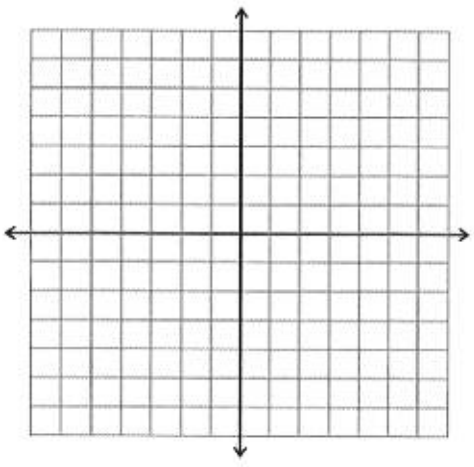
The vertices of a rectangle are $A(-3, -3)$, $B(1, -3)$, $C(1, -5)$, and $D(-3, -5)$. Rotate the rectangle 90° clockwise about the origin, and then reflect it in the y-axis. What are the coordinates of the image?



A'(,) B'(,) C'(,) D'(,)

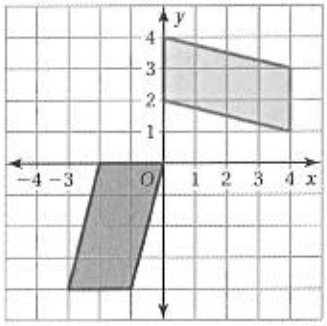
Extra Example 4

The vertices of a rectangle are $A(-1, 1)$, $B(-4, 1)$, $C(-4, 5)$, and $D(-1, 5)$. Rotate the rectangle 90° clockwise about the origin, and then reflect it in the y-axis. What are the coordinates of the image?



A'(,) B'(,) C'(,) D'(,)

EXAMPLE 5 Describing a Sequence of Transformations



The red figure is congruent to the blue figure. Describe a sequence of transformations in which the blue figure is the image of the red figure.

Extra Example 5

The red figure is congruent to the blue figure. Describe a sequence of transformations in which the blue figure is the image of the red figure.