

## Assignment - Day 2 Triangle Transformation

Date \_\_\_\_\_ Period \_\_\_\_\_

1) Write the rule for the given transformations:

Translation:

Reflection:

Rule:

Rule:

Rotation:

Dilation:

Rule:

Rule:

**Given the pre-image and the new image, write a rule to describe each transformation.****Translation:**

$$2) K(2, -3), L(2, 2), M(3, 0)$$

to

$$K'(1, 0), L'(1, 5), M'(2, 3)$$

$$3) S(3, -1), T(4, 3), U(5, 1)$$

to

$$S'(3, -5), T'(4, -1), U'(5, -3)$$

**Reflection:**

$$4) N(-3, -5), M(-2, -3), L(1, -3)$$

to

$$M'(2, -3), L'(-1, -3), N'(3, -5)$$

$$5) V(-5, -4), U(-4, -1), T(-1, -1)$$

to

$$U'(-4, 1), T'(-1, 1), V'(-5, 4)$$

**Rotation:**

$$6) I(-5, 2), J(-3, 5), K(0, 1)$$

to

$$I'(5, -2), J'(3, -5), K'(0, -1)$$

$$7) F(-4, -4), E(-4, -2), D(-3, -4)$$

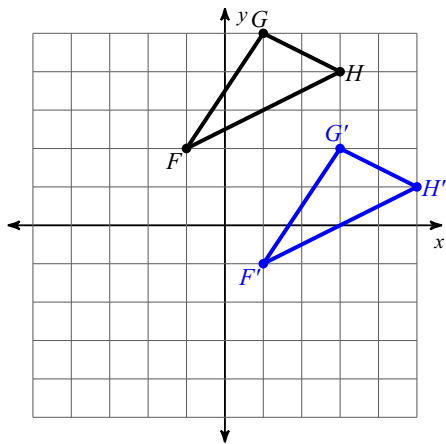
to

$$F'(-4, 4), E'(-2, 4), D'(-4, 3)$$

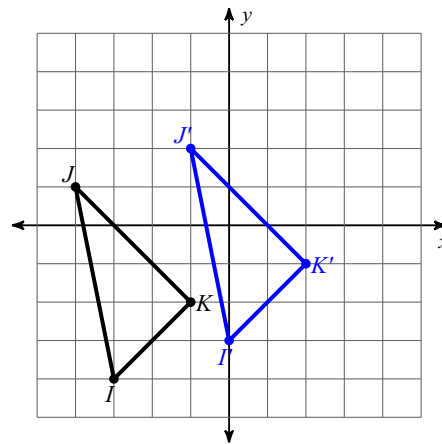
Given the pre-image and the new image, write a rule to describe each transformation.

**Translation:**

8)

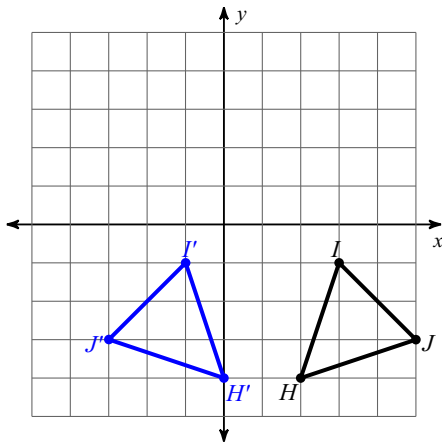


9)

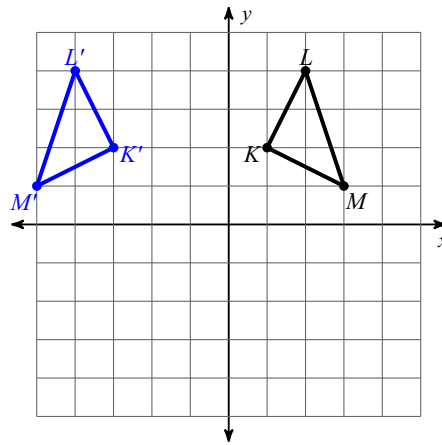


**Reflection:**

10)

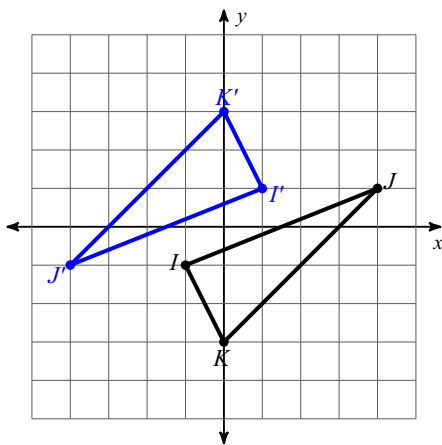


11)

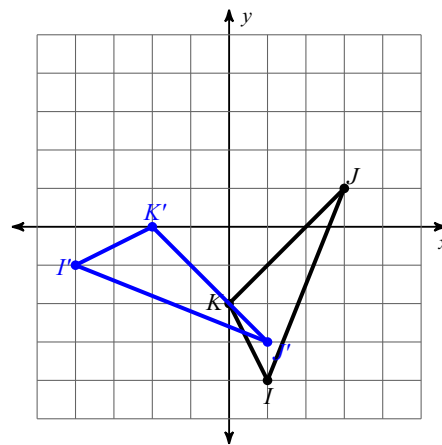


**Rotation:**

12)

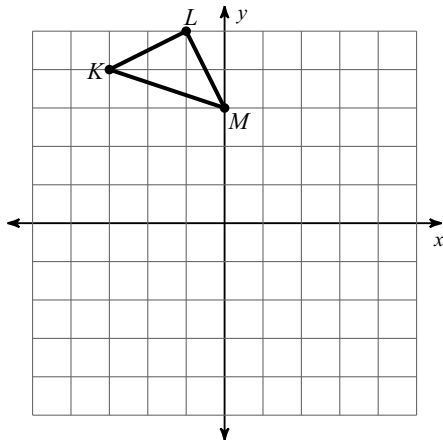


13)

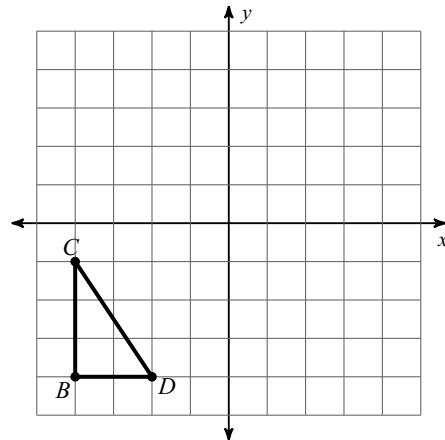


Given the pre-image and rule, graph the image of the figure using the transformation given.

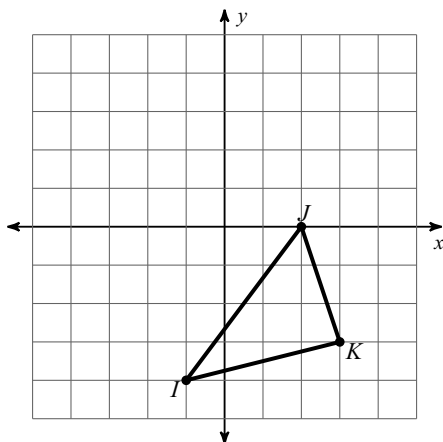
14) translation: 5 units right and 5 units down



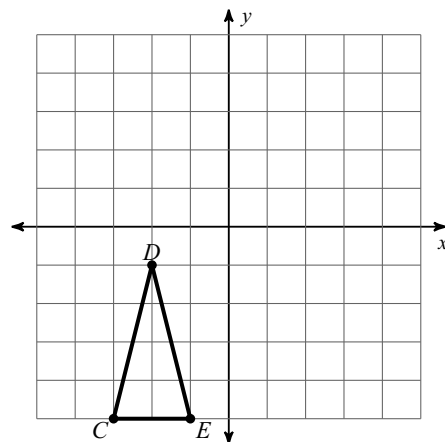
15) translation: 3 units right and 4 units up



16) reflection across the x-axis

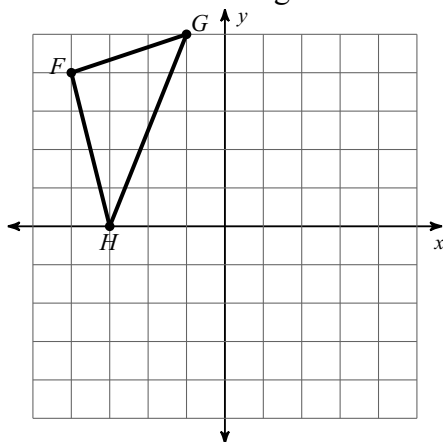


17) rotation 90° clockwise about the origin



Given the pre-image find the coordinates of the vertices of each figure after the given transformation and draw the new image.

18) translation: 3 units right and 3 units down



19) rotation 90° counterclockwise about the origin

