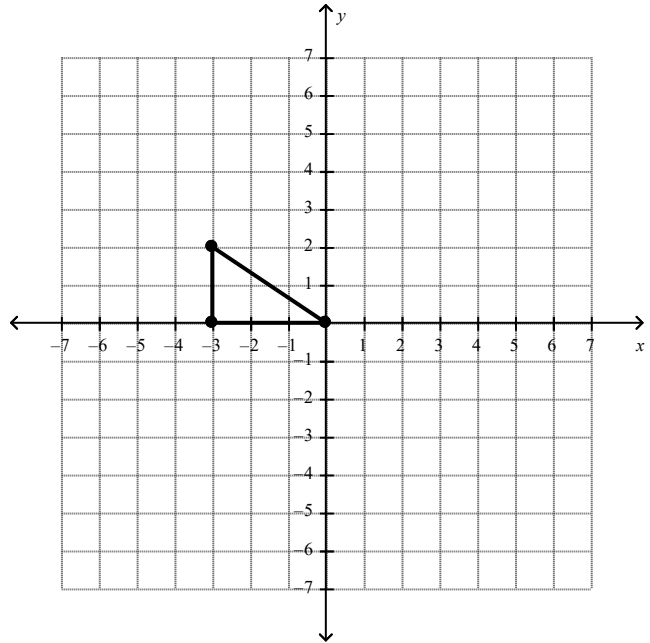# Sequencing Transformations

1. Apply the sequence of transformation listed below, sketching a new image after each. Apply each transformation to the most recent image, <u>not the original pre-image</u>.

    a. Reflect it over the y-axis.

    b. $(x, y) \rightarrow (x, y - 5)$

    c. Rotate it 90° counter clockwise.

    d. $(x, y) \rightarrow (x - 6, y)$

1. Apply the sequence of transformation listed below, sketching a new image after each. Apply each transformation to the most recent image, <u>not the original pre-image</u>.
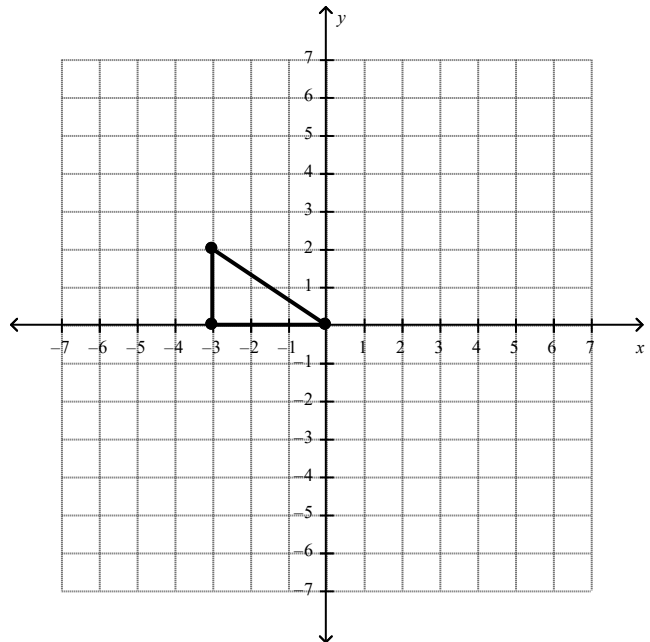
    a. Rotate 180°.

    b. Reflect over the y-axis.

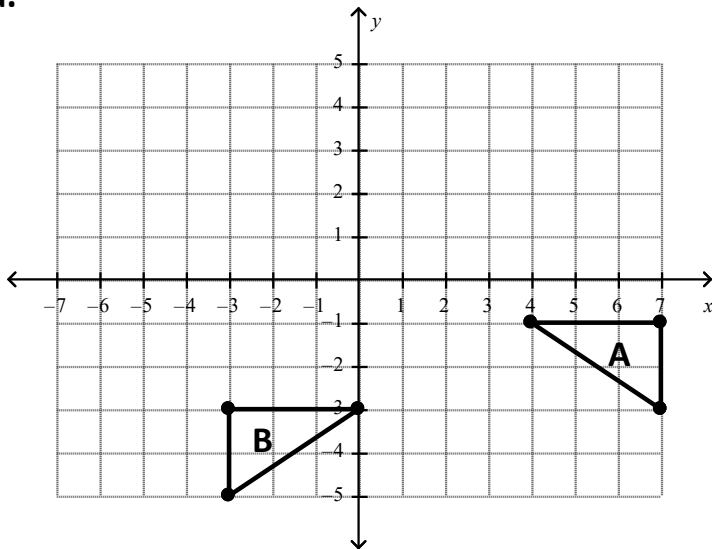   c. Reflect over the x-axis.

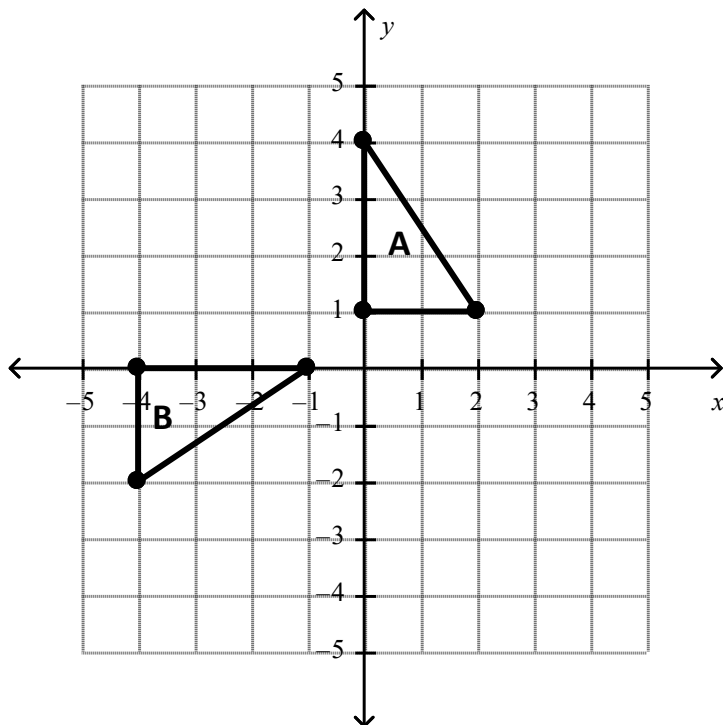What do you notice about the location of the triangle right now? Why might this be?

    d. Dilate by a scale factor of 2.

    e. $(x, y) \rightarrow (x + 7, y + 3)$

    f. Reflect over the line x= 1.

    g. Rotate 180°.

2. For each of the following identify a sequence of transformations that would translate triangle A to triangle B. The goal is to accomplish this in the least amount of steps possible.
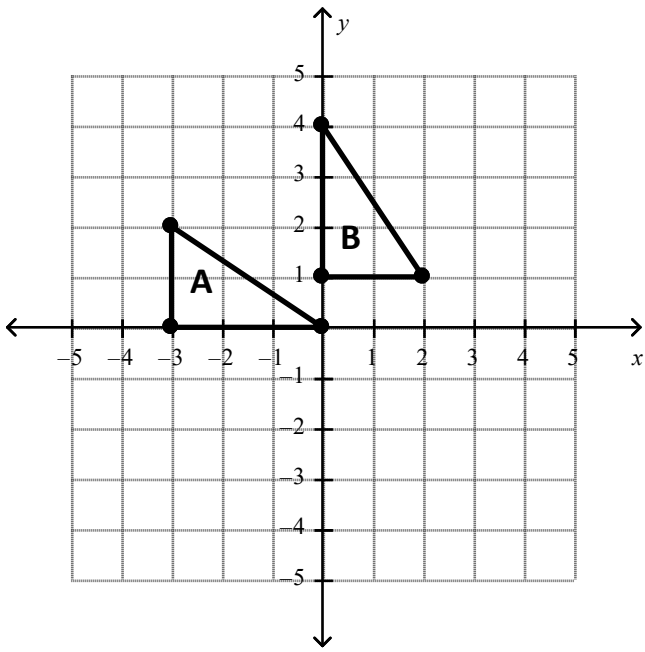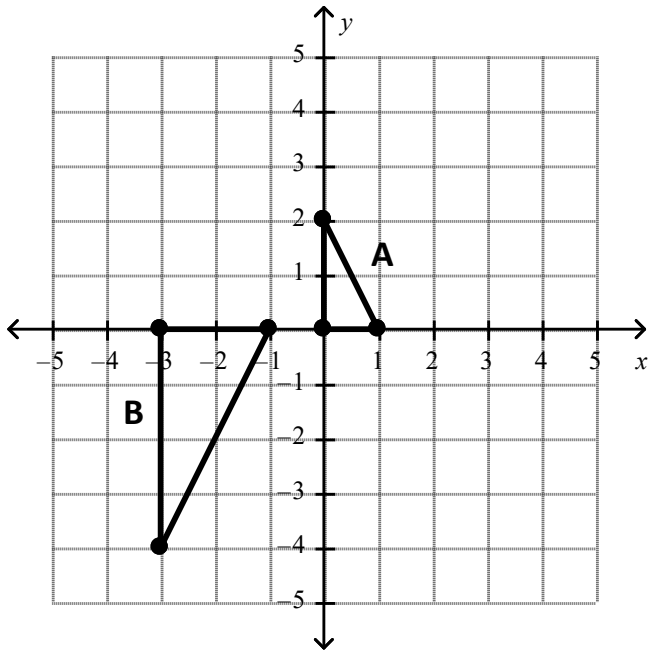
a.

b.

c.

d.

e.