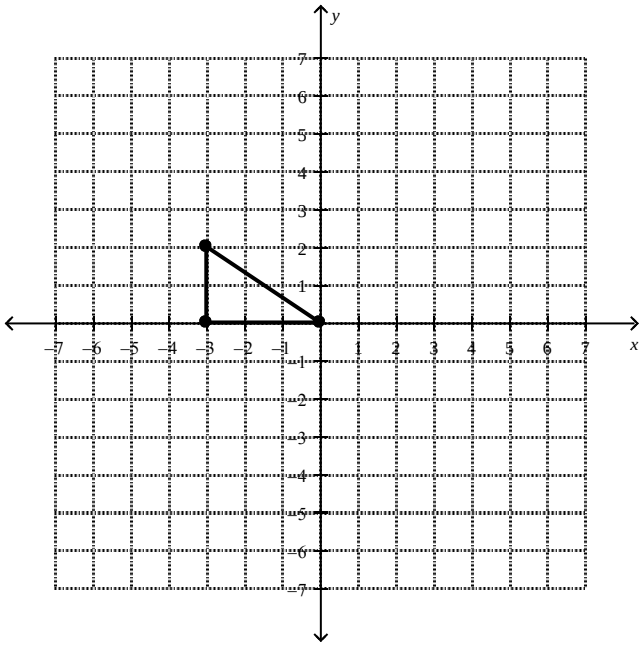
NAME_____

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>.**

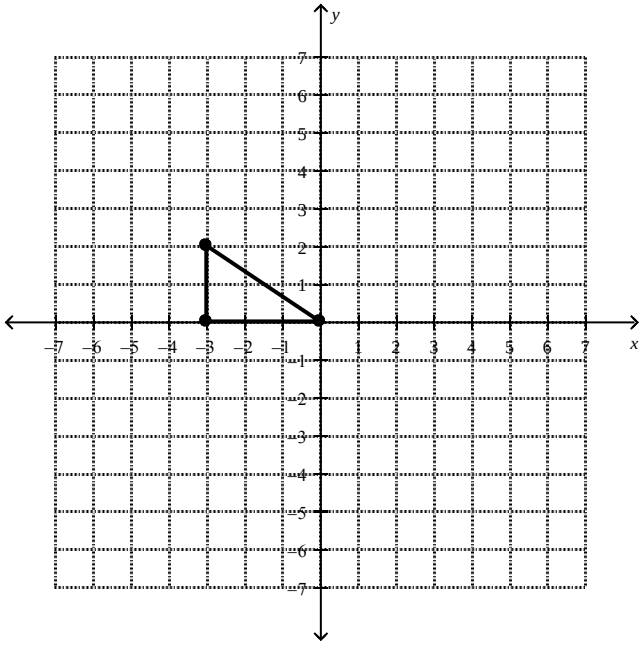
   a. **Reflect it over the y-axis.**
   b. **(x, y) → (x, y – 5)**
   c. **Rotate it 90° counter clockwise.**
   d. **(x, y) → (x – 6, y)**



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.**

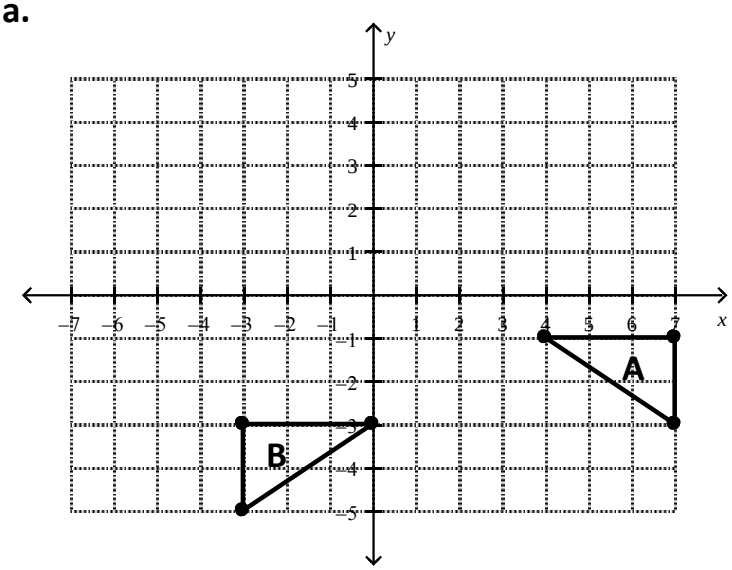
What do you notice about the location of the triangle right now? Why might this be?



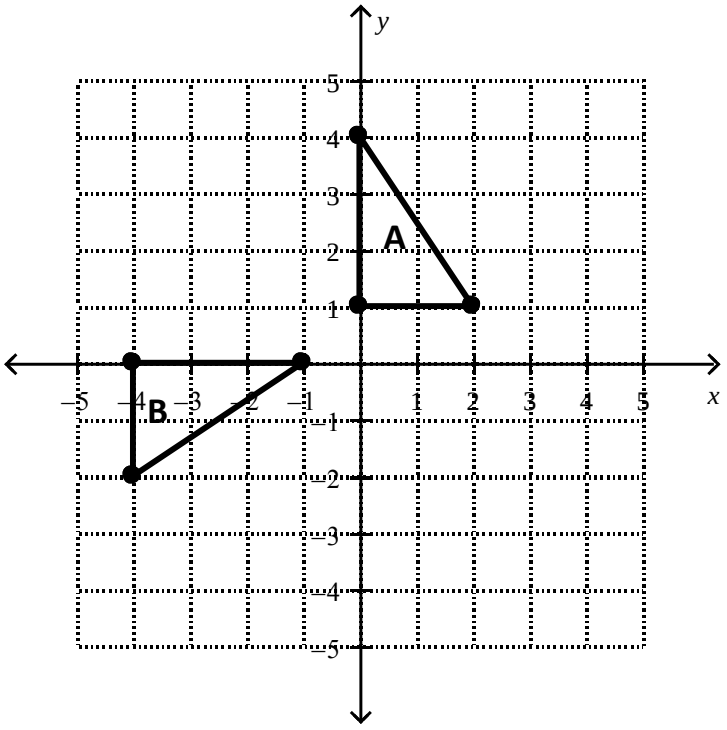
   d. **Dilate by a scale factor of 2.**
   e. **(x, y) → (x + 7, y + 3)**
   f. **Reflect over the line x= 1.**
   g. **Rotate 180°.**

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.

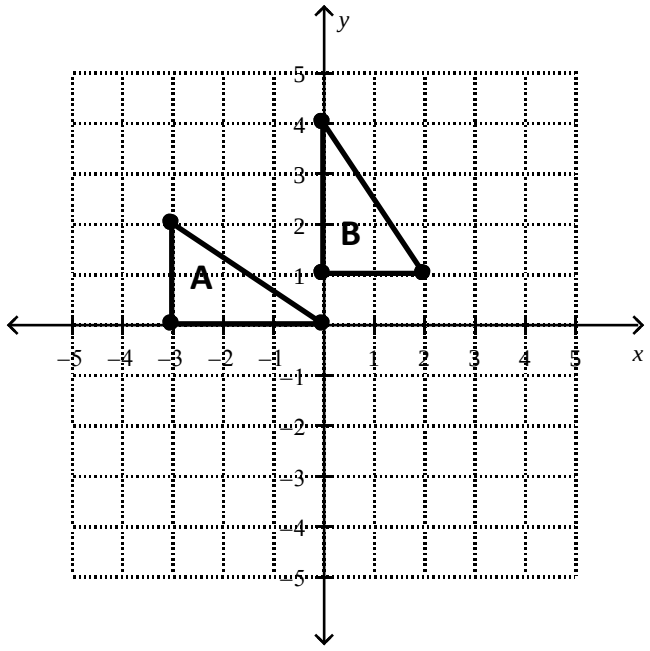
a.



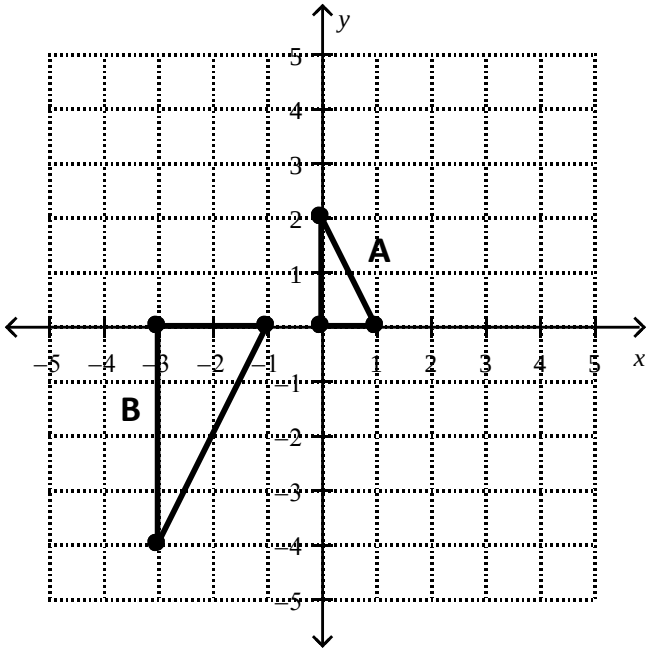
b.



c.



d.



e.