Name: $\qquad$

> In the goolge classroom there is a link to the Geogebra applet for multiple transformations. Please randomize the triangles in order to find a multiple transformation that you can piece together. Use to toolbar on the top in order to move the red triangle into the green outline. As you go through that process record the points A B and C as then after the first transformation record A' B' and C' then after the second the final image A" B" and C" in the table below use your note or the books guide for writing the transformation functions. Please do this for three different randomized pairs.

1. (a) First triangle

| A | B | C | First Transformation | A' | B' | C' | Second Transformation | A" | B" | C" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | B | C | Type: $(x, y) \rightarrow$ | A | B | C | Type: $(x, y) \rightarrow$ | A | B | C |

(b) Second Triangle

| A | B | C | First Transformation | A' | B' | C' | Second Transformation | A" | B" | C" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Type: |  |  |  | Type: |  |  |  |
|  |  |  | $(x, y) \rightarrow$ |  |  |  | $(x, y) \rightarrow$ |  |  |  |

(c) Third Triangle

2. Does it matter if we do the second transformation first and the first second. Will we get a different ending figure? Make a prediction and then test your prediction using the transformations you found for you third triangle. Make sure you use the exact functions used in your third triangle.

## Prediction:



Does your prediction hold?

