

Geometry DAY 1.8
Video Notes – Composition of Transformation

Name: _____

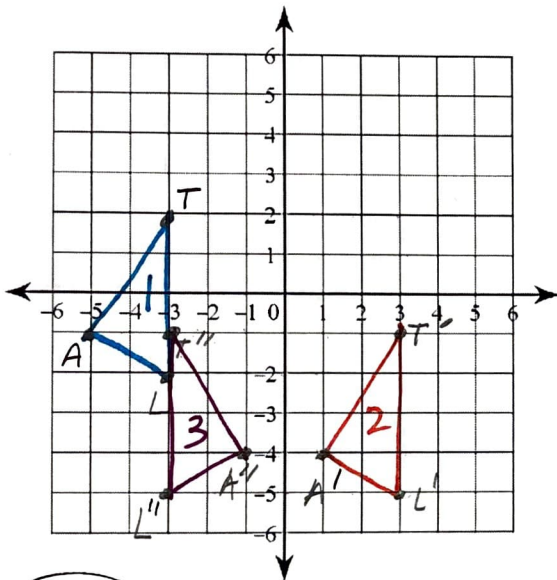
Date: _____

You should already know how to do the following:

- Translations (slides)
- Reflections (flips, like with a mirror)
- Rotations (spins or turns)
- Dilations (stretches or shrinks)

Now you are going to try some multiple transformations: ORDER MATTERS! So do the first transformation written and then the next one.

1. Translate $\triangle ALT$ if $A(-5,-1)$, $L(-3,-2)$, $T(-3,2)$ by moving it right 6 and down 3, then reflect the image over the y-axis.



$$A'(\underline{1}, \underline{-4})$$

$$L'(\underline{-1}, \underline{-5})$$

$$T'(\underline{3}, \underline{-1})$$

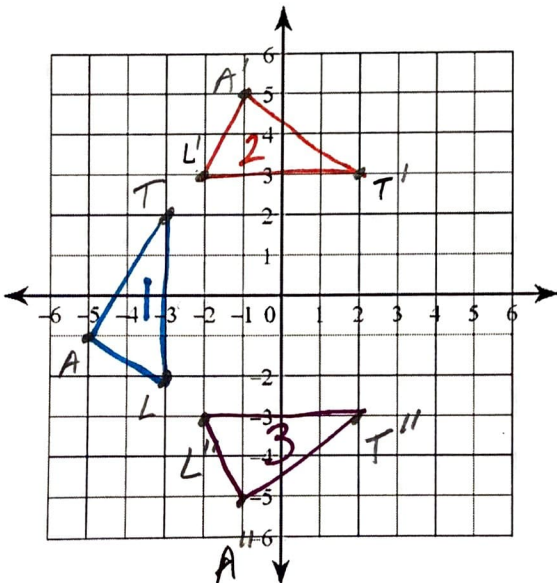
$$A''(\underline{-1}, \underline{-4})$$

$$L''(\underline{-3}, \underline{-5})$$

$$T''(\underline{-3}, \underline{-1})$$

2. Rotate $\triangle ALT$ if $A(-5,-1)$, $L(-3,-2)$, $T(-3,2)$ 90° clockwise ground the origin, then reflect the image over the x-axis.

$$(x, y) \rightarrow (y, -x)$$



$$A'(\underline{-1}, \underline{5})$$

$$L'(\underline{-2}, \underline{3})$$

$$T'(\underline{2}, \underline{3})$$

$$A''(\underline{-1}, \underline{-5})$$

$$L''(\underline{-2}, \underline{-3})$$

$$T''(\underline{2}, \underline{-3})$$