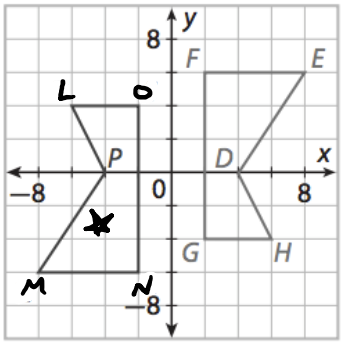
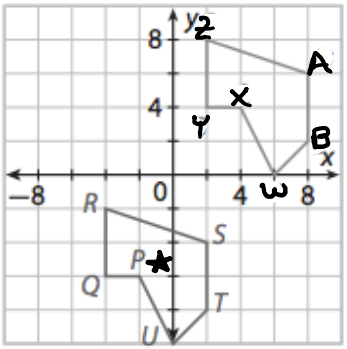
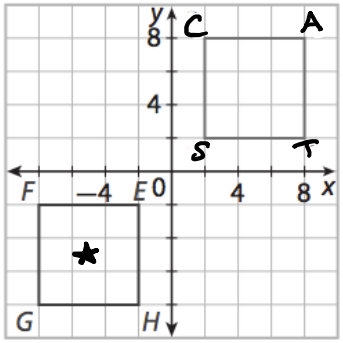
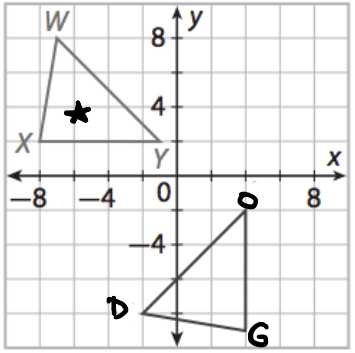
a. Find a sequence of transformations that maps one figure to the other. **The starred figure is the <u>preimage</u>.**
b. Write a congruency statement (i.e. $\Delta ABC \cong \Delta DEF$). The order of the letters matters!

1. 

2. 

3. 

4. 

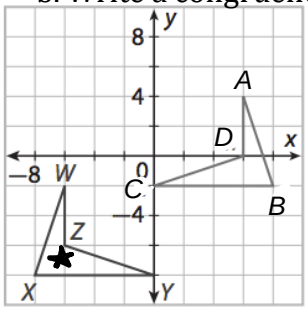
c. For #2 and #3 above, identify <u>all</u> congruent parts.

<u>#2</u>

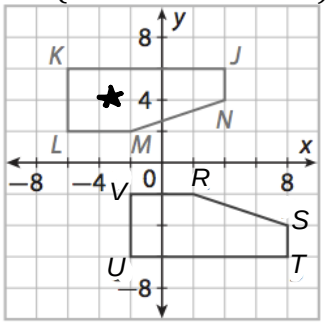
<u>#3</u>

a Find a sequence of transformations that maps one figure to the other. **The starred figure is the <u>preimage</u>.**
b. Write a congruency statement (i.e. $\Delta ABC \cong \Delta DEF$). The order of the letters matters!

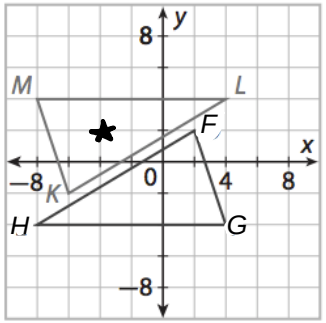
5.



6.



7.



8.

Which sequence of transformations does not map a figure onto a congruent figure? Explain.

A. Rotation of 180° about the origin, reflection across the x-axis, horizontal translation $(x, y) \rightarrow (x + 4, y)$

B. Reflection across the y-axis, combined translation $(x, y) \rightarrow (x - 5, y + 2)$

C. Rotation of 180° about the origin, reflection across the y-axis, dilation $(x, y) \rightarrow (2x, 2y)$

D. Counterclockwise rotation of 90° about the origin, reflection across the y-axis, combined translation $(x, y) \rightarrow (x - 11, y - 12)$