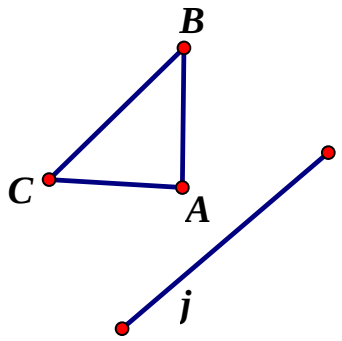
Name:_____ Date:_____ Period:_____

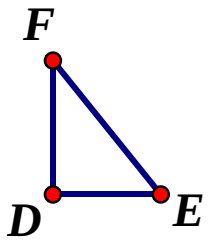
Transformations Test Review

8.G.1 Verify experimentally the properties of rotations, reflections, and translations.

1. Reflect triangle ABC across line j



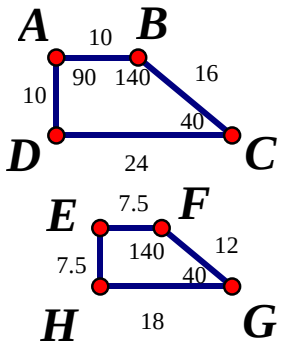
2. Rotate triangle DEF 90 degrees counter-clockwise around point D.



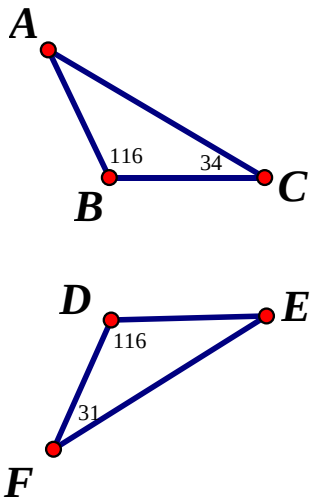
8.G.2 Given two figures determine if they are congruent or similar with each other through a series of transformations.

3. Determine if the figures below are similar, congruent, or neither. Justify your answer by showing work. If similar or congruent identify the transformations that have occurred.

a.



b.

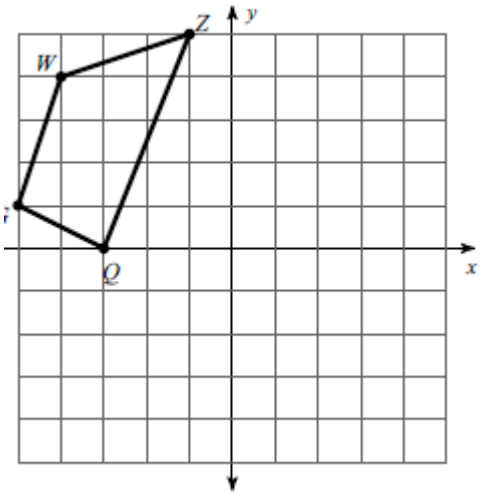


8.G.3 Describe the effect of dilations, translations, rotations, and reflections on figures using coordinates.

4. Graph the image of the figure using the transformation given.

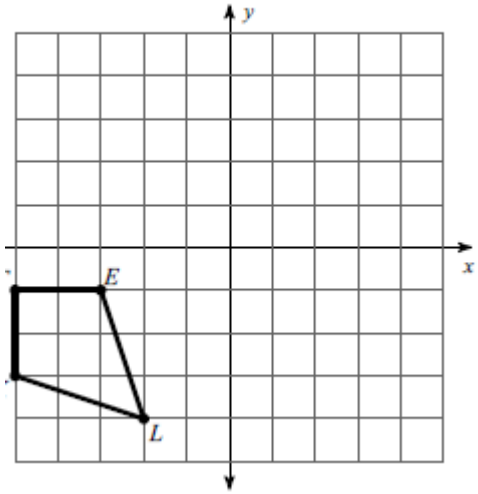
a.

rotation 180° about the origin



b.

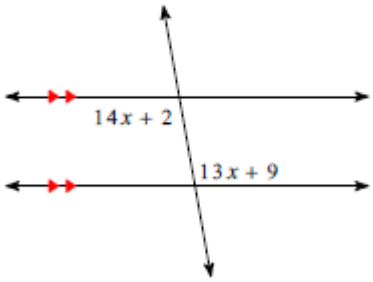
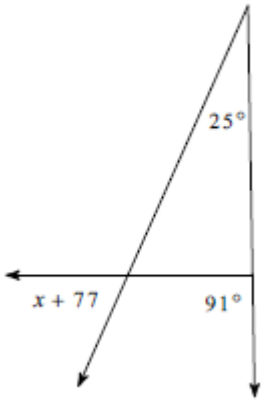
reflection across the y-axis



8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal.

5. <u>Explain</u> what angle relationships you are using to setup your equation. Then setup an equation and solve for x.

a.



b.