GeoGebra Lab

Unit 2

Open the geogebra icon on the desktop. If missing go to www. Geogebra.org then click Download then Webstart.

Rotations

1. Go to view then layout and select the circle/triangle box. Click on the grid tab and check the box show grid.
2. Create points A(5, 1) and B(-1, -1).
3. Connect the points A(5, 1) and B(-1, -1).) to make a segment.
4. Create a rotation of 150 degrees counterclockwise about the point B (-1, -1).
5. Use the measurement tool to measure the distance AB and AB'.
6. Draw a circle with center B through point A.
7. Print the document. The title is Rotation. The Author is your name.
8. Open a word document. Title your paragraph Rotations. Include your name and hour. In a paragraph, explain how you know (verify) that the computer actually rotated point A 150 degrees counterclockwise to Point A'. Remember to use the definition of rotation to support your explanation. (See back for formatting)

Reflection

1. In Geogebra, open a new document.
2. Go to view then layout and select the circle/triangle box. Click on the grid tab and check the box show grid.
3. Create segment with endpoints (5, 1) and (4, 3).
4. Draw a line where x = 1. (You must create two points on the line, then connect)
5. Create a reflection across the x = 1 line.
6. Create a segment between points A and A'. Create another segment between B and B'.
7. Create points (intersection of two objects) where the newly created segments intersect the line x = 1.
8. Take measurements with Geogebra to assist you in the verification that the segment is the image of the segment with endpoints (5, 1) and (4, 3). Hint: You will need to measure segments and angles.)
9. Print the document. The title is Reflection
10. Return to your word document. Title your paragraph reflection.   Using equation editor for symbols, explain (verify) that the image is a reflection. Use geometrical terminology, definition of reflection as well as reference values calculated by geogebra.

Geogebra Lab

Name and block

Rotation

I know this is a rotation because…….

Reflection