Geometry, Chapter 7: Transformations
Learning Targets

Standards: OACS- Indicators: Geometry and Spatial Sense Gr. 10 #6-9, Gr. 11 #2

          CCS- G.CO.2-6; G.SRT.1; G.GMD.4

Nouns: What will students need to know?

       Image, preimage, transformation, reflections, translations, rotations, isometry, rigid, prime, line of reflection, line of symmetry, center of rotation, angle of rotation, rotational symmetry, glide reflection, composition, dilation, reduction, enlargement

Verbs: What will students be able to do?

       Describe, identify, recognize, explain, categorize, distinguish, apply, demonstrate, indicate, analyze, validate, sketch, draw, generate, construct, produce

Teacher Knowledge: Any implied knowledge or words that need clarified for student success.

       Vector, initial point, terminal point, component form, congruent, similar

Learning Targets (KRSP):

       I can……

1. Understand basic transformation vocabulary that describes basic movement;
2. Define reflections in each axis and describe what shapes will look like when reflected;
3. Express an equation of a line of reflection and reflect points and shapes across an axis or line of reflection on a grid;
4. Show reflection symmetry in shapes and real life images;
5. Define rotations using coordinate points and rotate points and shapes around a center of rotation on a graph;
6. Explain any figure's rotational symmetry;
7. Translate points and shapes on a graph by using coordinate notation and component form;
8. Compose 2 or more transformations together;
9. Reduce and enlarge images, lines and segments using dilations where center is and is not located at the origin;
10. Compare rigid and non rigid transformations of equations;
11. Rotate shapes and equations of graphs around a line to verify types of three-dimensional shapes are produced.