Unit 4b-Transformations and Congruence

Content Area: **Mathematics**
Course(s): **Math 7 Pre-Algebra Honors**
Time Period: **Marking Period 4**
Length: **WK 2-4 Go Math! Advanced 2 Module 17**
Status: **Published**

Essential Questions

- How do you describe the properties of translation, reflection, and rotation and their effect on the congruence and orientation of figures?
- How do you describe the properties of translation, reflection, or rotation on coordinates using algebraic representation?
- What is the connection between transformations and figures that have the same size and shape?

Big Ideas

- Understand congruence and similarity using physical models, transparencies, or geometry software.

CSDT Technology Connection

8.1.8.DA.1 Organize and transform data collected using computational tools to make it usable for a specific purpose.

Enduring Understandings

Geometry

8.G.A.1 Lines are transformed to lines, and line segments to line segments of the same length.

8.G.A.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

8.G.A.3 Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinate.

Mathematical Practices Focus

2. Reason abstractly and quantitatively. Lesson 17.2, 17.3, 17.4, 17.5
3. Construct viable arguments and critique the reasoning of others. Lesson 17.1, 17.2, 17.3, 17.4, 17.5
4. Model with mathematics. Lesson 17.1, 17.3, 17.5
5. Use appropriate tools strategically. Lesson 17.2, 17.5
6. Attend to precision. Lesson 17.1, 17.2, 173.4, 17.5
7. Look for and make use of structure. Lesson 17.1, 17.3
8. Look for and express regularity in repeated reasoning. Lesson 17.1, 17.2, 17.4