

**Mrs. Logan Advanced Math**  
**Week 16: December 4-8**

**Module 3: Two-Dimensional Geometry**  
**Topic D: Scale Drawings and Dilations**  
**and**  
**Topic E: Similarity**

|                 | Monday<br>December 4th   | Tuesday<br>December 5th   | Wednesday<br>December 6th   | Thursday<br>December 7th   | Friday<br>December 8th  |
|-----------------|--|---|---|--|---|
| Lesson          | Module 3 Topic D Quiz  | Lesson 23: Using Lined Paper to Explore Dilations   | Lesson 24: Figures and Dilations  | Lesson 26: Dilations on the Coordinate Plane   | Lesson 27: Similar Figures  |
| Pages           | 291-369  | 373-388   | 389-403   | 413-430  | 431-448   |
| We will...      | understand the scale factor as the unit rate and how a reduction or enlargement is produced.   | use parallel lines to find the images of segments under a dilation and refine our understanding of the properties of dilations. | use properties of dilations to find images of many different figures under a dilation | introduce coordinates to the grid and use them to precisely locate images of points under dilations. | describe sequences that show two figures are similar.                       |
| Bell Ringer     | Quiz Prep  | Center of Dilation  | Dilation of a Triangle  | Dilation on a Grid   | Similarities and Differences  |
| Exit Ticket     | Quiz Feedback  | Correct Location  | Segment Length  | Find Coordinates   | Sequence of Rigid Motions   |
| I will...       | compare areas of images and scale drawings and find distances between images and scale drawings using the scale factor.  | draw the image of a segment under a dilation and learn properties of dilations.   | draw images of figures under dilations with various scale factors.                    | apply dilations and scale factor centered at the origin on the coordinate plane.                     | identify properties of similar figures to determine if figures are similar. |
| Reminders       |  |   |   |  |   |
| State Standards | 7.G.A.1. Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.   |   |   |  |   |
|                 | 8.G.A.3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.  |   |   |  |   |
|                 | 8.G.A.4 Explain that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. (Rotations are only about the origin, dilations only use the origin as the center of dilation, and reflections are only over the y-axis and x-axis in Grade 8.) |   |   |  |   |
|                 | 8.G.A.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, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.  |   |   |  |   |
|                 | 8.G.B.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.  |   |   |  |   |