

Mrs. Logan Advanced Math
Week 13: November 6-10

Module 3: Two-Dimensional Geometry
Topic B: Rigid Motions and Congruence
Topic C: Applications of Congruence

| | Monday November 6th | Tuesday November 7th | Wednesday November 8th | Thursday November 9th | Friday November 10th |
|-------------|---|---|---|---|-----------------------------------|
| Lesson | Lesson 11: Showing Figures are Congruent | Module 3 Topic B Quiz | Lesson 12: Lines Cut by a Transversal | Lesson 13: Angle Sum of a Triangle | No School for Veterans Day |
| Pages | 173-193 | 97-193 | 197-214 | 215-232 | |
| We will... | use rigid motions to show whether two figures are identical. | perform rigid motions and sequences of rigid motions of the plane. | use rigid motions to establish facts about the angles created when one line intersects two other lines. | explore angle measures in triangles and use angle measures to determine whether two lines are parallel. | |
| Bell Ringer | Make a Guess | Quiz Prep | Congruent Angles | Triangle Formation | |
| Exit Ticket | Sequence and Congruency | Quiz Feedback | Angle Measures and Rigid Motions | Determining if Parallel | |
| I will... | show figures are congruent by describing a sequence of rigid motions that maps one figure onto the other. | apply individual and sequences of rigid motions and determine if two figures are congruent. | use informal arguments to establish facts about the angle created when pairs of lines are cut by a transversal. | use informal arguments to verify that the sum of the interior angle measures of a triangle are 180 and conclude that lines cut by a transversal are parallel when corresponding angles are congruent. | |
| Reminders | Apply Rigid Motions worksheet due for a grade. | M3TB Quiz over Lessons 7-11. | | | |

State Standards

- 8.G.A.1 Verify experimentally the properties of rotations, reflections and translations.
- 8.G.A.1.a. Lines are taken to lines, and line segments of the same length.
- 8.G.A.1.b. Angles are taken to angles of the same measure.
- 8.G.A.1.c. Parallel lines are taken to parallel lines.
- 8.G.A.2. Explain 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 coordinates.
- 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.

8.G.B.6 Explain a proof of the Pythagorean Theorem and its converse using the area of squares.

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.

8.G.B.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.