



Dear Eighth Grade Families,

In Unit 9, students will work on the following eighth grade Common Core standards in the Geometry (G) domain.

8.G.1	Verify experimentally the properties of rotations, reflections, and translations. a. Lines are taken to lines, and line segments to line segments of the same length. b. Angles are taken to angles of the same measure. c. Parallel lines are taken to parallel lines.
8.G.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.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
8.G.4	Understand 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.

Unit 9 Concepts:

- Congruent figures
- Transformations
- Compound transformations
- Similar figures

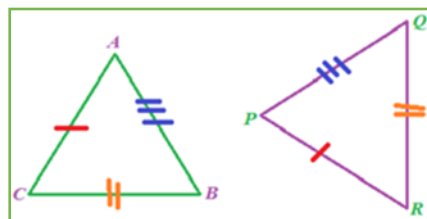
Ask questions like these to help your child as a productive mathematical thinker:

- How does the geometric representation help?
- How can you describe what you are trying to find?
- What have you learned previously that will help you will these lessons?
- What are some ways to visually represent rotations?

Unit 9 Vocabulary:

- Congruent figures
- Corresponding sides & angles
- Pre-image
- Image
- Translation
- Reflection
- Rotation
- Similar figures
- Corresponding sides
- Corresponding angles
- Dilation
- Center of dilation
- Scale factor
- Compound transformation

Congruent Figures and Corresponding Sides



Need a review? Check out our lesson videos online!

swunmath.com/student-videos

If you don't know the class's special name, ask your child's teacher.

We encourage you to talk with your child daily about what was learned in math class.
Thank you for your support!