MP4d-Angle Relationships in Parallel Lines and Triangles

Content Area: Mathematics

Course(s): Math 7 Pre-Algebra Honors

Time Period: Marking Period 4

Length: WK 6-7 Go Math! Advanced 2 Module 19

Status: Published

Essential Questions

- What can you conclude about the angles formed by parallel lines that are cut by a transversal?
- What can you conclude about the measures of the angles of a triangle?
- How can you determine when two triangles are similar?

Big Ideas

• Special angle relationships are formed when parallel lines are cut by a transversal.

Technology Connection

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

Mathematical Practices Focus

- 1. Make sense of problems and persevere in solving them. Lesson 19.3
- 2. Reason abstractly and quantitatively. Lesson 19.1, 19.2, 19.3
- 3. Construct viable arguments and critique the reasoning of others. Lesson 19.1, 19.2, 19.3
- 4. Model with mathematics. Lesson 19.1, 19.3
- 5. Use appropriate tools strategically. Lesson 19.2
- 6. Attend to precision. Lesson 19.1, 19.2, 19.3
- 8. Look for and express regularity in repeated reasoning. Lesson 19.2

Enduring Understandings

Geometry

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.