Geometry

Week of Dec 4-8, 2023

General Class Periods 4&5

Last Week Overview

Drew Triangles from 3 pieces of information

       --- adjusted material from sections 5.3, 5.5, and 5.6

- Use site and online document for making screen shots of work from site
- https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Congruence-Theorems/

Students complete practice from Kuta software pages on SSS, SAS, ASA, and AAS Congruence

Overview for Week.

Monday: Continue/Review work on Congruent Triangles

Tuesday & Wednesday:

        Literature Keystone TEST for many in period 4

        Remaining students work on the describing triangle lab

                drawing triangles based on the given conditions

Thursday: Present lab to all students and review for tomorrow's test

Friday: TEST on Congruent Triangles

Monday:

- Watch video: https://www.youtube.com/watch?v=vGuiy7NnJlM&t=191s
- Review and make a reference sheet
- Finish Packet of worksheets include Kuta place the side needed.
- Complete any other worksheets such as practice test or puzzletime

Literature test tomorrow takes over half class out for the next two days.

Therefore Test will be FRIDAY on these concepts.

3 sections from chapter 5 on TRIANGLE Congruence (3,5,6)

Geometry Lesson 5.3: Proving Triangle Congruence by SAS
Essential Question: What can you conclude about two triangles when you know that two pairs of corresponding sides and the corresponding included angles are congruent?

	CC State Standards	CC Mathematical Practice Focus
Lesson Objective(s): Students will use the Side-Angle-Side (SAS) Congruence Theorem. Students will solve real-life problems. **Previous Learning:** Students are familiar with congruent figures. They have learned that all pairs of corresponding parts must be congruent in order to show figures are congruent.	HSG-CO.B.8 HSG-MG.A.1	MP3, MP5

Geometry Lesson 5.5 – Day 1: Proving Triangle Congruence by SSS
Essential Question: What can you conclude about two triangles when you know the corresponding sides are congruent?

	CC State Standards	CC Mathematical Practice Focus
Lesson Objective(s): Students will use the Side-Side-Side (SSS) Congruence Theorem. Students will use the Hypotenuse-Leg (HL) Congruence Theorem. **Previous Learning:** Students previously proved triangles congruent using the SAS Congruence Theorem. The terminology and notation should be familiar. **New Vocabulary:** legs, hypotenuse **Previous Vocabulary:** congruent figures, rigid motion	HSG-CO.B.8 HSG-MG.A.1 HSG-MG.A.3	MP3, MP5

Geometry Lesson 5.6 – Day 1: Proving Triangle Congruence by ASA and AAS
Essential Question: What information is sufficient to determine whether two triangles are congruent?

	CC State Standards	CC Mathematical Practice Focus
Lesson Objective(s): Students will use the ASA and AAS Congruence Theorems. **Previous Learning:** Students previously learned how to prove triangles congruent using SAS, SSS, and HL. The terminology and notation should be familiar. **Previous Vocabulary:** congruent figures, rigid motion	HSG-CO.B.8	MP3, MP5

Describing Triangles

Uses this site:

Groups of students will draw to scale each triangle

based on given conditions such as

$$AB = 4 \text{ cm},$$
$$AC = 4 \text{ cm},$$
$$\text{Angle } B = 40°$$

- A (one) triangle may exist
- Multiple non-congruent triangles may exist and there need to be shown at least 2.
- Or NO triangle can be determined.

A final poster of each category needs to be clearly present to discuss for Thursday's review for the test on Friday