

CP Geometry

Week of Jan 3-5, 2024

College Prep Class Period 3

Last Week Overview

Congruent Triangles from 3 elements: SSS, SAS, AAS, ASA, or HL

Mainly from chapter 5 in our textbook.

This Week Overview

Congruent Polygons versus Similar Triangles from 3 elements: SSS, SAS, AAA

Mainly from chapter 5 & 8 in our textbook.

Objectives

Textbook sections

Chapter 8 Sections 1 thru 3

Geometry Lesson 8.1 – Day 1: Similar Polygons

Essential Question: How are similar polygons related?

Lesson Objective(s): Students will use similarity statements.
Students will find corresponding lengths in similar polygons.
Students will find perimeters and areas of similar polygons.
Students will decide whether polygons are similar.

Lesson Objective(s): Students will use the Side-Side-Side Similarity Theorem.
Students will use the Side-Angle-Side Similarity Theorem.
Students will prove slope criteria using similar triangles.
Previous Learning: Students have proven triangles similar by using the definition of similarity and by using the Angle-Angle Similarity Theorem.

Wednesday - Review the previous day's work

Warmup: Congruence in Polygons student journal section 5.2 pg 131-132 -- guided notes

Then discuss similarity in polygons and specifically triangles by AAA.

Student Journal Notes: **8.1 pg 220 # 1-6**

8.1 Pg 225 -- guided notes

8.2 Pg. 229

Congruent vs Similar is the difference in finding the sides, not the angles

Congruent = in every way (angles and sides) by orientation

Similar = fractions, proportions, scale factors (new to old)

Perimeter is same scale factor but Area is squared scale factor

Thursday

Watch the Edpuzzle on learning about similar polygons.

<https://edpuzzle.com/assignments/657662d331bbc741792d113d/students>

Complete the following online bigideasmath.com 8.1 Practice

Complete worksheets Practice A

8.1 and 8.2

1	2	3*	4	5*	6	7*	8	9*	10
11	12	13	14	15	16	17*	18	19*	20
21*	22	23	24	25*	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60

Friday - Similar Triangles need only 3 elements to check

NOTES: 8.3 Section on proofs for similar triangles

- AAA - works only on triangles that all angles match up congruent, then sides in proportion
- SAS - included angle with its 2 sides proportional
- SSS- 3 proportional sides

Use student journal pg 229, 230, 234, 235 for guided notes

Continue on review from yesterday on 8.1 and 8.2