CP Geometry

Week of Dec 4-8, 2023

College Prep Class Period 3

Last Weeks Overview --- see previous slideshow

Last Week --Student journal pgs. 125-127, 140-142

- Chapter 5 Section 1 on Triangle classification and sum 180 degrees
- Chapter 5 Section 4 on ISOSCELES triangle relationships and EQUIlateral/angular triangles
- Watch short video song https://www.youtube.com/watch?v=JQUTVgT9RXY
- Kuta Finding missing angles in triangles worksheet

HW weekend -- Puzzletime for sections 5.1 & 5.4

Overview for week

Monday: Section 6.5 Side Angle relationship of Triangles

Tuesday: Online Practice Reviews

Wednesday: Review Practice Reviews and worksheets

Thursday: Test on Triangles (5.1, 5.4, & 6.5)

Friday: Section 5.3 Congruence in Triangles - Online Lab started

Monday
Chapter 6.5 --- Angle to Opposite side of triangle relationship

- Warmup w/ START thinking, WARMUP, & REVIEW pg. 214 Resource section 6.5
- Check and review the puzzletime worksheet from homework
- Notes on the relationship of angle and opposite sides of triangle from smallest to largest. Sketch or draw to scale a few examples to demonstrate concept.
- Watch video to demonstrate Triangle Inequality: https://www.youtube.com/watch?v=oNR7wtdJhYk
- Student journal pg. 187-188 for notes and examples
- Complete Practice A Section 6.5 #1-6

Tuesday - online assignments

SECTION 5.1 EXERCISES	**5.1 Practice** Geometry: CC 2015 Problem Set: Custom (35/57) Start: 12/04/2023 12:00PM	Angles of Triangles Students: All Due: 12/06/2023 8:30AM
SECTION 5.4 EXERCISES	**5.4 Practice** Geometry: CC 2015 Problem Set: Custom (14/44) Start: 12/04/2023 12:00PM	Equilateral and Isosceles Triangles Students: All Due: 12/06/2023 9:30AM
SECTION 6.5 EXERCISES	**6.5 Practice** Geometry: CC 2015 Problem Set: Custom (17/53) Start: 12/04/2023 12:30PM	Indirect Proof and Inequalities in One Triangle Students: All Due: 12/06/2023 9:31AM

35+14+17 = 66 problems but some are 5 second problem identifications.

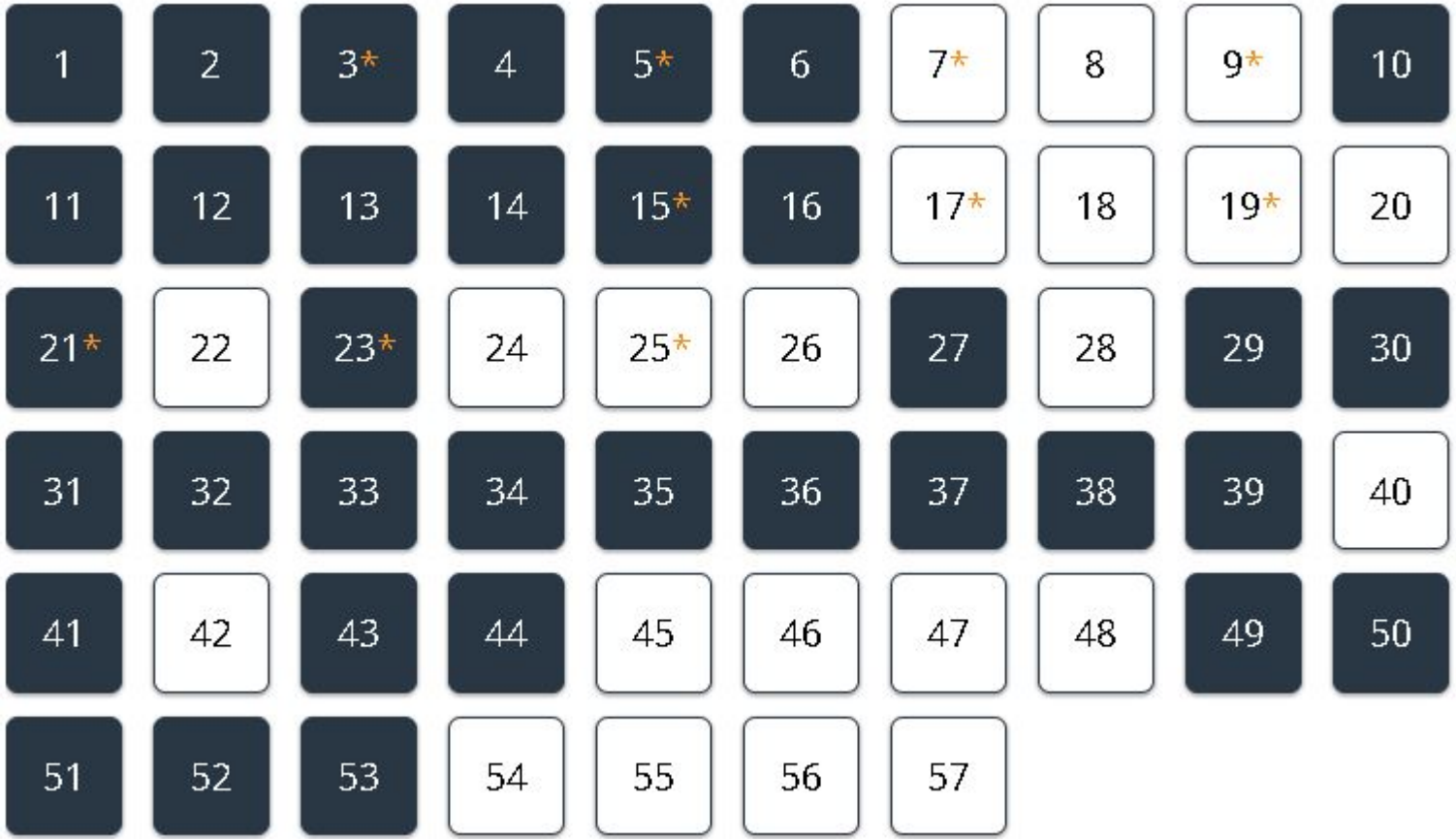
Finish for homework for Wednesday, then study for test Thursday.

Tuesday Assignment into homework #1

5.1 online

Darkened

ones



Tuesday Assignment into homework #2

5.4 online

Darkened

ones

Tuesday Assignment into homework #3

6.5 online

Darkened

ones

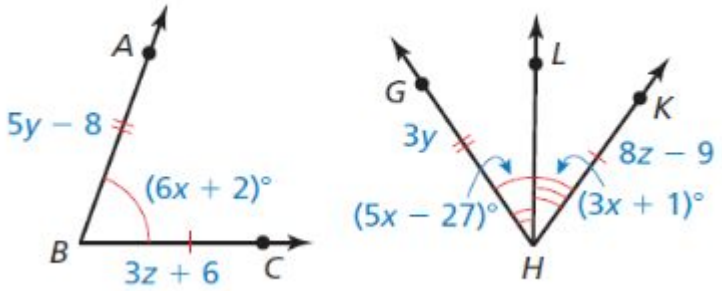
Challenge for Wednesday as opener

Check and review online problems and worksheets.

Study for test today --- make summary notes to keep for midterm exam.

Do this one

Use the diagram to find the length of $\overline{BC}$.



Thurs. Test on sections:

5.1

Lesson Objective(s):	Students will classify triangles by sides and angles. Students will find interior and exterior angle measures of triangles.	**CC State Standards**
Previous Learning:	Students should be familiar with both theorems presented in this lesson. There are many explorations students may have done in middle school to discover that the sum of interior angles of a triangle is 180° and that the measure of an exterior angle of a triangle is equal to the sum of the two nonadjacent interior angles.	HSG-CO.C.10 HSG-MG.A.1
New Vocabulary:	interior angles, exterior angles, corollary to a theorem	

5.4

Lesson Objective(s):	Students will use the Base Angles Theorem. Students will use isosceles and equilateral triangles.	**CC State Standards**
Previous Learning:	Students previously learned about isosceles and equilateral triangles.	
New Vocabulary:	legs, vertex angle, base, base angles	HSG-CO.C.10
Materials for Teacher:	none	HSG-CO.D.13
Materials for Students:	graph paper, dynamic geometry software	HSG-MG.A.1

6.5

Lesson Objective(s):	Students will list sides and angles of a triangle in order by size. Students will use the Triangle Inequality Theorem to find possible side lengths of triangles.	**CC State Standards** HSG-CO.C.10

Friday:

Drawing 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/

FRIDAY start:

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?

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.	**CC State Standards** HSG-CO.B.8 HSG-MG.A.1	**CC Mathematical Practice Focus** 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?

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	**CC State Standards** HSG-CO.B.8 HSG-MG.A.1 HSG-MG.A.3	**CC Mathematical Practice Focus** 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?

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	**CC State Standards** HSG-CO.B.8	**CC Mathematical Practice Focus** MP3, MP5