CP Geometry

CC State Standards

HSG-CO.C.9
HSG-CO.C.10
HSG-CO.C.11
HSG-SRT.B.4

Week of
October 30-Nov 3, 2023
CP Class Period 3

Week Overview:

Monday: Practice Day
- enter answers in bigideasmath.com from handout

Start worksheets for tomorrow.

Tuesday:

- Discuss flow proof style using teacher examples.
- Discuss paragraph proof style using teacher examples.
- Construct the vertical angle theorem
- Large homework assignment -- club period tutoring available

Wednesday: Review and do more practice

Thursday: **Quiz/Test** on Proofs in Chapter 2 --- 1st grade on 2nd nine weeks

Friday: No school as teacher inservice on curriculum

Chapter 2 Sections 4-6 Objectives --- look at it as a whole

Lesson Objective(s): Students will use Algebraic Properties of Equality to justify the steps in solving an equation.
Students will use the Distributive Property to justify the steps in solving an equation.
Students will use properties of equality involving segment lengths and angle measures.

Lesson Objective(s): Students will write two-column proofs.
Students will name and prove properties of congruence.
Previous Learning: Students have already written proofs as they justified the steps in showing certain things to be true in the last lesson.
New Vocabulary: proof, two-column proof, theorem

Lesson Objective(s): Students will write flowchart proofs to prove geometric relationships.
Students will write paragraph proofs to prove geometric relationships.
Previous Learning: Students learned how to write two-column proofs in the previous lesson. They will use that skill to write flowchart and paragraph proofs.
New Vocabulary: flowchart proof, flow proof, paragraph proof

Tuesday:

Warmup: **Start and later complete for homework these:**

2.4 Puzzletime

2.4 Practice A # 3-13

2.5 Puzzletime

2.5 Practice A # 1,2

Notes: Introduce the flow chart proof style and paragraph proofs by teacher examples:

https://static.bigideasmath.com/protected/content/hs_tut/geo/c02/06/HSCC_Geom_02_06_ee1/HSCC_Geom_02_06_ee1.html

https://static.bigideasmath.com/protected/content/hs_tut/geo/c02/06/HSCC_Geom_02_06_ee5/HSCC_Geom_02_06_ee5.html

Review last quiz on sections 2.1 thru 2.3 online

Homework : Brainstorm for # 5,6 on Practice A 2.5 ---- it will help if you have thought through this prior to lecture

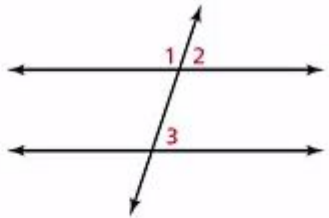
Watch example video:

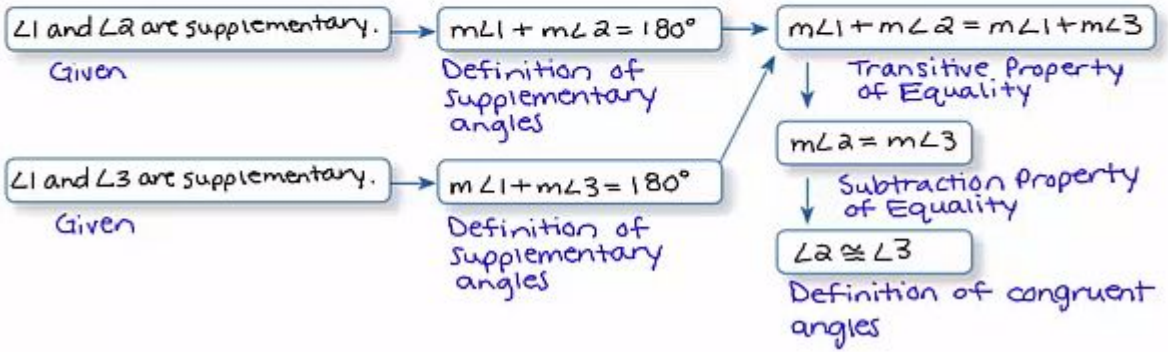
https://static.bigideasmath.com/protected/content/hs_tut/geo/c02/06/HSCC_Geom_02_06_ee2/HSCC_Geom_02_06_ee2.html

Write a flowchart proof.

Given ∠1 and ∠2 are supplementary.
∠1 and ∠3 are supplementary.

Prove ∠2 ≅ ∠3





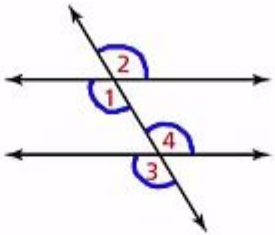
Watch video

https://static.bigideasmath.com/protected/content/hs_tut/geo/c02/06/HSCC_Geom_02_06_ee5/HSCC_Geom_02_06_ee5.html

Write a paragraph proof.

Given $\angle 1 \cong \angle 4$

Prove $\angle 2 \cong \angle 3$



It is given that $\angle 1 \cong \angle 4$. By the Vertical Angles Congruence Theorem (Thm. 2.6), $\angle 1 \cong \angle 2$. So, by the Transitive Property of Congruence (Thm. 2.2), $\angle 2 \cong \angle 4$. Also, by the Vertical Angles Congruence Theorem (Thm. 2.6), $\angle 3 \cong \angle 4$. Therefore, by the Transitive Property of Congruence (Thm. 2.2), $\angle 2 \cong \angle 3$.

Wednesday

Warmup: 2.5 Practice A # 5,6 proof writing

Check and review

2.4 Puzzletime 2.4 Practice A # 3-13

2.5 Puzzletime 2.5 Practice A # 1,2

Work and finish for homework

2.6 Practice A # 5

2.6 Practice B # 5 Flow proof style

2.6 Puzzletime

Thursday TEST

Multiple choice questions --- identify properties

Problems to solve for value --- algebra equations such as in vertical angles.

Proof --- fill in the blanks from bank

Study handout and practice problems