

Geometry

Week of
October 30- Nov 3, 2023

General Class Periods 4&5

Week Overview

Monday: Review for test - answer any questions and organize notes

Complete in groups the “security camera” problem which places a 360 degree camera on a C shape grid of a store to maximum area covered by the projection of the view. Students use area of rectangles and triangles to determine the percent covered and uncovered.

Tuesday: TEST on Chapter 3 with lines and angles with transversal

Wednesday: **Introduce** using notes from **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

Thursday: Work on handout of Practice A/B/Puzzletime for sections 5.1 & 5.4

Friday: No class as teacher inservice

Next week sections 6.5 & 9.1 for a triangle unit

Geometry Lesson 3.1: Pairs of Lines and Angles

Essential Question: What does it mean when two lines are parallel, intersecting, coincident, or skew?

Lesson Objective(s): Students will identify lines and planes.

Students will identify parallel and perpendicular lines.

Students will identify pairs of angles formed by transversals.

Previous Learning: In grade 8, students were introduced to the angles formed when a transversal intersects two other lines.

New Vocabulary: parallel lines, skew lines, parallel planes, transversal, corresponding angles, alternate interior angles, alternate exterior angles, consecutive interior angles

Previous Vocabulary: perpendicular lines

CC State Standards

HSG-CO.A.1

Geometry Lesson 3.2 – Day 1: Parallel Lines and Transversals

Essential Question: When two parallel lines are cut by a transversal, which of the resulting pairs of angles are congruent?

Lesson Objective(s): Students will use properties of parallel lines.

Students will prove theorems about parallel lines.

Students will solve real-life problems.

Previous Learning: Students learned about the angles formed by a transversal in the previous lesson.

Previous Vocabulary: corresponding angles, parallel lines, supplementary angles, vertical angles

CC State Standards

HSG-CO.C.9

CC Mathematical Practice Focus

MP3, MP6

2 sections from chapter 5 on TRIANGLES

5.1

Lesson Objective(s): Students will classify triangles by sides and angles.

Students will find interior and exterior angle measures of triangles.

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.

New Vocabulary: interior angles, exterior angles, corollary to a theorem

CC State Standards

HSG-CO.C.10
HSG-MG.A.1

5.4

Lesson Objective(s): Students will use the Base Angles Theorem.

Students will use isosceles and equilateral triangles.

Previous Learning: Students previously learned about isosceles and equilateral triangles.

New Vocabulary: legs, vertex angle, base, base angles

Materials for Teacher: none

Materials for Students: graph paper, dynamic geometry software

CC State Standards

HSG-CO.C.10
HSG-CO.D.13
HSG-MG.A.1