# **Geometry - September 2025**

# Office Hours: Tuesday/Wednesday / Friday, A Lunch in room C201

Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5 Day 1 Day 1-Intro/Syllabus Algebra Review
8 Benchmark A Algebra Review	9 1.1 D1 Notes	10 1.1 D2 Notes	11 1.2 Notes	12 1.3 Notes
15 1.1 - 1.3 Review	<sup>16</sup> 1.1 - 1.3 Quiz	17 2.1 Notes	18 2.2 Notes Back to School Night 6:30pm - 8:30pm	19 2.3 Notes
22 2.4 Notes	No School	No School	25 Topic 2 Review	Topic 2 Quiz
29 3.1 Notes	30 3.2 Notes	1 3.3 Notes	No School	3 3.4 Notes

# **Standards & Objectives**

# Topic 1

#### Students will be able to:

- Communicate precise definitions of angle and segment using the undefined terms: point, line, and plane.
- Use absolute value and the Segment Addition Postulate.
- Use the Protractor Postulate and the Angle Addition Postulate.
- Construct copies of segments and angles.
- Construct segments and bisectors of angles.
- Apply construction to problems involving portions of segments and angles.
- Identify congruent segments and congruent angles.
- Use the midpoint formula to find the midpoint of a segment drawn on a coordinate plane.
- Use the distance formula to find the length of a segment drawn on the coordinate plane.

## Topic 2

#### Students will be able to:

- Use indirect reasoning to prove theorems about lines and angles.
- Use proof by contradiction and proof by contrapositive to prove conditional statements.
- Define parallel lines using the undefined terms point and line.
- Prove theorems about lines and angles.
- Use theorems to find the measures of angles formed by parallel lines and a transversal.
- Prove that two lines cut by a transversal are parallel using the converses of parallel line angle relationship theorems.
- Use properties of parallel lines and transversals to solve real-world and mathematical problems.

## Topic 3

#### Students will be able to:

- Find a reflected image and write a rule for a reflection.
- Define reflection as a transformation across a line of reflection with given properties and perform reflections on and off a coordinate grid.
- Translate a figure and write a rule for a translation.
- Find the image of a figure after a composition of rigid motions.
- Prove that a translation is a composition of two reflections.
- Rotate a figure and write a rule for a rotation.
- Prove that a rotation can be written as the composition of two reflections.
- Specify a sequence of transformations that will carry a given figure onto another.
- Use geometric descriptions of rigid motions to transform figures.
- Describe the rotations and/or reflections that carry a polygon onto itself.
- Predict the effect of a given rigid motion on a figure.
- Identify types of symmetry in a figure.

#### **See Atlas for Standards**

• Essentials of Geometry