

Teacher / Team Name: Geometry Regular

Topic: Unit 3: Parallel and Perpendicular Lines (REG)

Days: 12

Subject(s): Math

Grade(s): 9th, 10th, 11th, 12th

Know:

Understand:

Do:

<p>Key Vocabulary</p> <p>Slope formula</p> <p>Slope intercept form</p> <p>Point-slope form</p>	<p>Parallel and perpendicular lines will be used to determine angle relationships.</p>	<p>Identify the relationship between two lines and planes.</p> <p>Name angle pairs formed by parallel lines and transversals.</p> <p>Use theorems to determine the relationships between specific pairs of angles.</p> <p>Use algebra to find angle measures.</p> <p>Find slopes of lines.</p> <p>Use slope to identify parallel and perpendicular lines.</p> <p>Write an equation of a line given information about the graph.</p> <p>Solve problems by writing equations.</p> <p>Recognize angle pairs that occur with parallel lines.</p> <p>Prove that two lines are parallel.</p> <p>Find the distance between a point and a line.</p>
--	--	---

Topic: Unit 3: Parallel and Perpendicular Lines (REG)**Days:** 12**Subject(s):** Math**Grade(s):** 9th, 10th, 11th, 12th**Which standards are students learning in this unit?**

MA.912.G.1.2: Construct congruent segments and angles, angle bisectors, and parallel and perpendicular lines using a straight edge and compass or a drawing program, explaining and justifying the process used.

MA.912.G.1.3: Identify and use the relationships between special pairs of angles formed by parallel lines and transversals.

MA.912.G.8.2: Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.

MA.912.G.8.3: Determine whether a solution is reasonable in the context of the original situation.

MA.912.G.3.3: Use coordinate geometry to prove properties of congruent, regular, and similar quadrilaterals.

MA.912.G.8.2: Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.

MA.912.G.8.4: Make conjectures with justifications about geometric ideas. Distinguish between information that supports a conjecture and the proof of a conjecture.

MA.912.G.8.5: Write geometric proofs, including proofs by contradiction and proofs involving coordinate geometry. Use and compare a variety of ways to present deductive proofs, such as flow charts, paragraphs, two-column, and indirect proofs.

MA.912.D.6.4: Use methods of direct and indirect proof and determine whether a short proof is logically valid.