# Geometry

**Quarter I Unit 3: Perpendicular and Parallel Lines** 



"It's not that I'm so smart, it's just that I stay with problems longer." –Albert Einstein

## overview

In the previous unit we were introduced to the justification process and proving statements. In this unit, we will analyze linear patterns including parallel, intersecting, coincident, and skew lines. Furthermore, we will explore the angels created when a line cuts through parallel lines. All throughout, we will continue to prove statements.

## guiding question 3: What type of angles are created when lines intersect?

## lessons

Monday 10/29 Tuesday 10/30	<ul> <li>No section: Finding the Slope of a Line and writing Linear Equations (Review)</li> <li>3.1 Lines and Angles <ul> <li>Objectives: Students will:</li> <li>Identify lines and planes.</li> <li>Identify parallel and perpendicular lines.</li> <li>Identify pairs of angles formed by transversals.</li> </ul> </li> <li>Practice Set: 3.1 Puzzle Time</li> </ul>
Thursday 11/01 Friday 11/02	<ul> <li>3.2: Parallel Lines and Transversals</li> <li>Objectives: Students will: <ul> <li>Use properties of parallel lines.</li> <li>Prove theorems about parallel lines.</li> <li>Solve real-life problems.</li> <li>Practice Set: 3.2 Extra Practice</li> </ul> </li> </ul>
Monday 11/05 Tuesday 11/06	<ul> <li>3.3:Proofs with Parallel Lines</li> <li>Objectives: Students will: <ul> <li>use the Corresponding Angles Converse.</li> <li>will construct parallel lines.</li> <li>prove theorems about parallel lines.</li> <li>use the Transitive Property of Parallel lines.</li> </ul> </li> <li>Practice Set: 3.3 Extra Practice</li> </ul>
Thursday 11/08 Friday 11/09	<ul> <li>3.4: Proofs with Perpendicular Lines</li> <li>Objectives: Students will: <ul> <li>find the distance from a point to a line.</li> <li>construct perpendicular lines.</li> <li>prove theorems about perpendicular lines.</li> <li>will solve real-life problems about perpendicular lines.</li> <li>Construction: Parallel line and Perpendicular line construction</li> <li>Practice Set: 3.4 Extra Practice</li> </ul> </li> </ul>
Monday 11/12 Tuesday 11/13	<ul> <li>3.5: Equations of Parallel and Perpendicular Lines</li> <li>Objectives: Students will: <ul> <li>use slope to partition directed line segments.</li> <li>identify parallel and perpendicular lines.</li> <li>write equations of parallel and perpendicular lines.</li> <li>use slope to find the distance from a point to a line.</li> </ul> </li> <li>Practice Set: 3.5 Extra Practice</li> </ul>

Thursday 11/15 Friday 11/16	Vocabulary due today!
	Review for Test
	Assessment Unit 3: Perpendicular and Parallel Lines

### Assignment Guidelines:

## Individual Work

*Vocabulary:* (Create a Graphic Organizer, Mind Map, or Flash Cards for the vocab words of each section.)

• Due on the day of the Assessment

*Practice Sets:* You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set and include a a reflection for full credit.

- Due the class after it is assigned
- Note: Late assignments are subject to 25% penalty. Assignments older than two weeks will not be accepted.

Warm Ups: In class the first five minutes of class.

### <u>Group</u>

*Construction:* Complete the activities and write out the steps for future reference.

• Due at the end of class

Tasks: Due as set by deadline