

# Geometry and Probability Standards

Standards define what students should understand and be able to do. In Geometry and Probability, students will be expected to show proficiency in two standards categories, (1) **Standards of Mathematical Content** and (2) **Standards of Mathematical Practice**. Standards of Mathematical Content are a balanced combination of procedure and understanding while Standards of Mathematical Practice describe ways in which students of mathematics should engage with the subject matter. For example, a student learning the Tools of Geometry content standard will be expected to understand the procedures for creating constructions while engaging the process by attending to precision. Below is a list of mathematical standards of content and process we will be covering.

Content Standards	Standards of Mathematical Practice	
<b>Geometry</b>		
Tools of Geometry <ul style="list-style-type: none"> <li>Undefined Terms, Precision, and Linear Measure</li> <li>Properties of Angles</li> <li>Geometric Constructions</li> </ul>	<ul style="list-style-type: none"> <li>Model with mathematics</li> <li>Use appropriate tools strategically</li> <li>Attend to precision</li> </ul>	<b>T r i m e s t e r O n e</b>
Logic and Reasoning <ul style="list-style-type: none"> <li>Inductive Reasoning</li> <li>Logic</li> <li>Deductive Reasoning</li> </ul>	<ul style="list-style-type: none"> <li>Make sense of problems and persevere in solving them</li> <li>Construct viable arguments and critique the reasoning of others</li> </ul>	
Similarity <ul style="list-style-type: none"> <li>Scale Factor and Proportional Parts</li> <li>Similar Triangles</li> </ul>	<ul style="list-style-type: none"> <li>Make sense of problems and persevere in solving them</li> <li>Model with mathematics</li> <li>Use appropriate tools strategically</li> <li>Attend to precision</li> </ul>	
Quadrilaterals <ul style="list-style-type: none"> <li>Angles and Parallel Lines</li> <li>Properties of Quadrilaterals</li> </ul>	<ul style="list-style-type: none"> <li>Construct viable arguments and critique the reasoning of others</li> <li>Model with mathematics</li> <li>Attend to precision</li> </ul>	<b>T r i m e s t e r T w o</b>
Right Triangles <ul style="list-style-type: none"> <li>Pythagorean Theorem</li> <li>Trigonometry</li> </ul>	<ul style="list-style-type: none"> <li>Make sense of problems and persevere in solving them</li> <li>Use appropriate tools strategically</li> <li>Attend to precision</li> </ul>	
Area and Volume <ul style="list-style-type: none"> <li>Area of Polygons and Circles</li> <li>Volume</li> </ul>	<ul style="list-style-type: none"> <li>Make sense of problems and persevere in solving them</li> <li>Use appropriate tools strategically</li> <li>Attend to precision</li> </ul>	

## Probability and Statistics

### Descriptive Statistics

- Interpreting Categorical and Quantitative Data
- Making Inferences and Justifying Conclusions

- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Attend to precision

### Probability

- Uniform Probability, Determining Independence and the Addition Rule
- Permutations/Combinations

- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Attend to precision

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