

# Grade 8 Math Curriculum Map

Grade 8 mathematics is about:

- (1) Formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations
- (2) Grasping the concept of a function and using functions to describe quantitative relationships
- (3) Analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem

- [Arizona Mathematics Standards Grade 8](#)
- The standard number is designed for recording purposes and does not imply instructional sequence or importance.
- Our governing board adopted curriculum resources are Open Up Resources 6-8 Math and Zearn Math.

Unit #	Unit Name	Key Content	Standards
0	Beginning of Year	<ul style="list-style-type: none"> <li>• Up to five days may be spent focusing on routines, expectations, and building classroom community.</li> </ul>	
1	Rigid Transformations and Congruence	<ul style="list-style-type: none"> <li>• Rigid transformations</li> <li>• Properties of rigid transformations</li> <li>• Congruence</li> <li>• Angles in a triangle</li> </ul>	8.G.A 8.G.A.1 8.G.A.1a 8.G.A.1b 8.G.A.1c 8.G.A.2 8.G.A.3 8.G.A.5
2	Dilations, Similarity, and Introducing Slope	<ul style="list-style-type: none"> <li>• Dilations</li> <li>• Similarity</li> <li>• Slope</li> </ul>	8.EE.B.6 8.G.A 8.G.A.1 8.G.A.2 8.G.A.3 8.G.A.4 8.G.A.5
3	Linear Relationships	<ul style="list-style-type: none"> <li>• Proportional relationships</li> <li>• Representing linear relationships</li> <li>• Finding slopes</li> <li>• Linear equations</li> </ul>	8.EE.B 8.EE.B.5 8.EE.B.6 8.EE.C 8.EE.C.8 8.EE.C.8a 8.G.A.1
4	Linear Equations and Linear Systems	<ul style="list-style-type: none"> <li>• Linear equations in one variable</li> <li>• Systems of linear equations</li> </ul>	8.EE.C 8.EE.C.7 8.EE.C.7a 8.EE.C.7b 8.EE.C.8 8.EE.C.8a 8.EE.C.8b

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5	Functions and Volumes	<ul style="list-style-type: none"> <li>• Inputs and outputs</li> <li>• Representing and interpreting functions</li> <li>• Linear functions and rates of change</li> <li>• Cylinders and cones</li> <li>• Dimensions and spheres</li> </ul>	8.F.A 8.F.A.1 8.F.A.2 8.F.A.3 8.F.B 8.F.B.4 8.F.B.5 8.G.C 8.G.C.9
6	Associations in Data	<ul style="list-style-type: none"> <li>• Associations in numerical data</li> <li>• Associations in categorical data</li> </ul>	8.SP.A 8.SP.A.1 8.SP.A.2 8.SP.A.3 8.SP.A.4
7	Exponents and Scientific Notation	<ul style="list-style-type: none"> <li>• Exponent review</li> <li>• Exponent rules</li> <li>• Scientific notation</li> </ul>	8.EE.A.1 8.EE.A.3 8.EE.A.4
8	Pythagorean Theorem and Irrational Numbers	<ul style="list-style-type: none"> <li>• The size of shapes</li> <li>• Side length and areas of squares</li> <li>• The Pythagorean Theorem</li> <li>• Side lengths of volumes and cubes</li> <li>• Decimal representation of rational and irrational numbers</li> </ul>	8.NS.A 8.NS.A.1 8.NS.A.2 8.EE.A 8.EE.A.2 8.F.B 8.G.B 8.G.B.6 8.G.B.7 8.G.B.8
9	Putting it All Together	<ul style="list-style-type: none"> <li>• Synthesize and apply concepts of eighth grade math</li> </ul>	8.F.A.1 8.F.B 8.SP.A 8.G.A 8.G.A.5