

8th Grade Math Curriculum Map

Unit 1 – Real Numbers and Exponents (The Number System)

- 1-1** Rational Numbers
- 1-2** Operations with Rational Numbers
- 1-3** Converting Fractions and Decimals
- 1-4** Identifying Irrational Numbers
- 1-5** Properties of Irrational Numbers
- 1-6** Comparing and Ordering Irrational Numbers on a Number Line
- 1-7** Evaluation and Approximation of Square and Cube Roots
- 1-8** Negative Exponents
- 1-9** Negative Exponent Operations
- 1-10** Scientific Notation
- 1-11** Operations with Numbers in Scientific Notation



Unit 2 – Expressions and Equations

- 2-1** Expressions with Radicals Exponents.
- 2-2** Expressions with Integer Exponents.
- 2-3** Creating Linear Equations
- 2-4** Solving Equations with Variables on Both Sides
- 2-5** Solving Equations with Distributive Property
- 2-6** Solving Equations by Combining Like Term
- 2-7** One/Infinite/No solutions of Equation
- 2-8** Solving Exponent Equations

Unit 3 – Linear and Functional Relationships (Functions)

- 3-1** Intro to Functions/Graphing and Writing a Function Rule
- 3-2** Graphing Functions
- 3-3** Linear or Non Linear Functions
- 3-4** Exploring Linear Functions
- 3-5** Equations of Linear Functions
- 3-6** Graphs of Linear Functions
- 3-7** Tables of Linear Functions
- 3-8** Increasing, Decreasing, Max and Min
- 3-9** Interpret the Rate of Change
- 3-10** Contextualizing Function Qualities
- 3-11** Sketching a Piecewise Function



Unit 4– Systems of Linear Equations

- 4-1** Graphing with Slope – Intercept Form
- 4-2** Solving Systems by Graphing
- 4-3** Solving Systems Using Substitution
- 4-4** Solving Systems Using Elimination
- 4-5** Solving Systems via Inspection
- 4-6** Applications of Systems of Linear Equations



Unit 5 – Patterns and Bivariate Data (Statistics)

- 5-1** Constructing Scatter Plots
- 5-2** Analyzing Scatter Plots
- 5-3** Linear or Nonlinear Correlation
- 5-4** The Line of Best Fit
- 5-5** Constructing a Two-Way Tables
- 5-6** Interpret a Two-Way Tables

Unit 6 – Congruency and Similarity

- 6-1** Identifying Transformations
- 6-2** Constructing Rotations/Properties of Rotations
- 6-3** Constructing Reflections/Properties of Reflections
- 6-4** Constructing Translations/Properties of Translations
- 6-5** Constructing Dilatations/Properties of Dilatations
- 6-6** Identifying a Series and Determining Congruence or Similarity
- 6-7** The Sum of Angles in a Triangle
- 6-8** Similar Triangles
- 6-9** Parallel Lines Cut by a Transversal



Unit 7 - Geometry

- 7-1** Pythagorean Theorem and its Converse
- 7-2** 2D Applications of Pythagorean Theorem
- 7-3** 3D Applications of Pythagorean Theorem
- 7-4** Pythagorean Theorem and Distance Between Points in a Coordinate System
- 7-5** Volume of Cylinders, Cones, and Spheres
- 7-6** Solving for a Missing Dimension
- 7-7** Volume of Composite Shapes