PreAlgebra Curriculum Map

8th Grade

Unit 1 – Real Numbers and Exponents

1-1   **Rational Numbers**

CCSS.MATH.CONTENT.8.NS.A.1

1-2   **Operations with Rational Numbers**

CCSS.MATH.CONTENT.8.NS.A.1

1-3   **Converting Fractions and Decimals**

CCSS.MATH.CONTENT.8.NS.A.1

1-4   **Identifying Irrational Numbers**

CCSS.MATH.CONTENT.8.NS.A.2

CCSS.MATH.CONTENT.8.NS.A.1

1-5   **Properties of Irrational Numbers**

CCSS.MATH.CONTENT.8.NS.A.1

CCSS.MATH.CONTENT.8.NS.A.2

1-6   **Comparing and Ordering Irrational Numbers on a Number Line**

CCSS.MATH.CONTENT.8.NS.A.2

1-7   **Evaluation and Approximation of Square and Cube Roots**

CCSS.MATH.CONTENT.8.NS.A.2

CCSS.MATH.CONTENT.8.EE.A.2

1-8   **Negative Exponents**

CCSS.MATH.CONTENT.8.EE.A.1

Unit 2 – Equations and Expressions

2-1   Expressions with Radicals Exponents

CCSS.MATH.CONTENT.8.EE.A.2

2-2   Expressions with Integer Exponents

CCSS.MATH.CONTENT.8.EE.A.1

2-3   Creating Linear Equations

CCSS.MATH.CONTENT.8.EE.B.5

CCSS.MATH.CONTENT.8.EE.B.6

2-4   Solving Equations with Variables on Both Sides

CCSS.MATH.CONTENT.8.EE.C.7

CCSS.MATH.CONTENT.8.EE.C.7.B

2-5   Solving Equations with Distributive Property

CCSS.MATH.CONTENT.8.EE.C.7

CCSS.MATH.CONTENT.8.EE.C.7.B

2-6   Solving Equations by Combining Like Term

CCSS.MATH.CONTENT.8.EE.C.7

CCSS.MATH.CONTENT.8.EE.C.7.B

2-7   One/Infinite/No solutions of Equation

CCSS.MATH.CONTENT.8.EE.C.7.A

2-8   Solving Exponent Equations

CCSS.MATH.CONTENT.8.EE.C.7

CCSS.MATH.CONTENT.8.EE.C.7.B

Unit 3 – Linear and Functional Relationships

3-1   Intro to Functions/Graphing and Writing a Function Rule

CCSS.MATH.CONTENT.8.F.A.1

CCSS.MATH.CONTENT.8.F.B.4

CCSS.MATH.CONTENT.8.F.B.5

3-2   Graphing Functions

CCSS.MATH.CONTENT.8.F.A.1

CCSS.MATH.CONTENT.8.F.A.2

CCSS.MATH.CONTENT.8.F.B.5

3-3   Linear or Non Linear Functions

CCSS.MATH.CONTENT.8.F.A.3

CCSS.MATH.CONTENT.8.F.B.5

3-4   Exploring Linear Functions

CCSS.MATH.CONTENT.8.F.A.2

CCSS.MATH.CONTENT.8.F.B.4

CCSS.MATH.CONTENT.8.F.B.5

3-5   Equations of Linear Functions

CCSS.MATH.CONTENT.8.F.A.3

CCSS.MATH.CONTENT.8.F.B.4

3-6   Graphs of Linear Functions

CCSS.MATH.CONTENT.8.F.A.1

CCSS.MATH.CONTENT.8.F.A.2

CCSS.MATH.CONTENT.8.F.A.3

CCSS.MATH.CONTENT.8.F.B.4

CCSS.MATH.CONTENT.8.F.B.5

Unit 4– Systems of Linear Equations

4-1   Graphing with Slope – Intercept Form

CCSS.MATH.CONTENT.8.F.A.3

CCSS.MATH.CONTENT.8.EE.C.8.A

CCSS.MATH.CONTENT.8.EE.C.8.C

4-2   Solving Systems by Graphing

CCSS.MATH.CONTENT.8.EE.C.8.A

CCSS.MATH.CONTENT.8.EE.C.8.C

4-3   Solving Systems Using Substitution

CCSS.MATH.CONTENT.8.EE.C.8

CCSS.MATH.CONTENT.8.EE.C.8.B

CCSS.MATH.CONTENT.8.EE.C.8.C

4-4   Solving Systems Using Elimination

CCSS.MATH.CONTENT.8.EE.C.8

CCSS.MATH.CONTENT.8.EE.C.8.B

CCSS.MATH.CONTENT.8.EE.C.8.C

4-5   Solving Systems via Inspection

CCSS.MATH.CONTENT.8.EE.C.8.A

CCSS.MATH.CONTENT.8.EE.C.8.B

CCSS.MATH.CONTENT.8.EE.C.8.C

4-6   Applications of Systems of Linear Equations

CCSS.MATH.CONTENT.8.EE.C.8

CCSS.MATH.CONTENT.8.EE.C.8.C

Unit 5 – Patterns and Bivariate Data

5-1   Constructing Scatter Plots

CCSS.MATH.CONTENT.8.SP.A.1

CCSS.MATH.CONTENT.8.SP.A.2

CCSS.MATH.CONTENT.8.SP.A.3

5-2   Analyzing Scatter Plots

CCSS.MATH.CONTENT.8.SP.A.1

CCSS.MATH.CONTENT.8.SP.A.2

CCSS.MATH.CONTENT.8.SP.A.3

5-3   Linear or Nonlinear Correlation

CCSS.MATH.CONTENT.8.SP.A.1

CCSS.MATH.CONTENT.8.SP.A.2

CCSS.MATH.CONTENT.8.SP.A.3

5-4   The Line of Best Fit

CCSS.MATH.CONTENT.8.SP.A.1

CCSS.MATH.CONTENT.8.SP.A.2

CCSS.MATH.CONTENT.8.SP.A.3

5-5   Constructing a Two-Way Tables

CCSS.MATH.CONTENT.8.SP.A.4

5-6   Interpret a Two-Way Tables

CCSS.MATH.CONTENT.8.SP.A.4

Unit 6 – Congruency and Similarity

6-1   Identifying Transformations

CCSS.MATH.CONTENT.8.G.A.1

CCSS.MATH.CONTENT.8.G.A.1.A

CCSS.MATH.CONTENT.8.G.A.1.B

CCSS.MATH.CONTENT.8.G.A.1.C

CCSS.MATH.CONTENT.8.G.A.2

6-2   Constructing Rotations/Properties of Rotations

CCSS.MATH.CONTENT.8.G.A.1

CCSS.MATH.CONTENT.8.G.A.1.A

CCSS.MATH.CONTENT.8.G.A.1.B

CCSS.MATH.CONTENT.8.G.A.1.C

CCSS.MATH.CONTENT.8.G.A.2

CCSS.MATH.CONTENT.8.G.A.3

CCSS.MATH.CONTENT.8.G.A.4

6-3   Constructing Reflections/Properties of Reflections

CCSS.MATH.CONTENT.8.G.A.1

CCSS.MATH.CONTENT.8.G.A.1.A

CCSS.MATH.CONTENT.8.G.A.1.B

CCSS.MATH.CONTENT.8.G.A.1.C

CCSS.MATH.CONTENT.8.G.A.2

CCSS.MATH.CONTENT.8.G.A.3

CCSS.MATH.CONTENT.8.G.A.4

6-4   Constructing Translations/Properties of Translations

CCSS.MATH.CONTENT.8.G.A.1

CCSS.MATH.CONTENT.8.G.A.1.A

CCSS.MATH.CONTENT.8.G.A.1.B

CCSS.MATH.CONTENT.8.G.A.1.C

CCSS.MATH.CONTENT.8.G.A.2

CCSS.MATH.CONTENT.8.G.A.3

CCSS.MATH.CONTENT.8.G.A.4

6-5 Constructing Dilatations/Properties of Dilatations

CCSS.MATH.CONTENT.8.G.A.3

CCSS.MATH.CONTENT.8.G.A.4

6-6 Identifying a Series and Determining Congruence or Similarity

CCSS.MATH.CONTENT.8.G.A.2

CCSS.MATH.CONTENT.8.G.A.4

6-7 The Sum of Angles in a Triangle

CCSS.MATH.CONTENT.8.G.A.4

CCSS.MATH.CONTENT.8.G.A.5

6-8 Similar Triangles

CCSS.MATH.CONTENT.8.G.A.5

6-9 Parallel Lines Cut by a Transversal

CCSS.MATH.CONTENT.8.G.A.5

Unit 7 - Geometry

7-1   Pythagorean Theorem and its Converse

CCSS.MATH.CONTENT.8.G.B.6

7-2   2D Applications of Pythagorean Theorem

CCSS.MATH.CONTENT.8.G.B.7

7-3   3D Applications of Pythagorean Theorem

CCSS.MATH.CONTENT.8.G.B.7

7-4   Pythagorean Theorem and Distance Between Points in a Coordinate System

CCSS.MATH.CONTENT.8.G.B.8

7-5   Volume of Cylinders, Cones, and Spheres

CCSS.MATH.CONTENT.8.G.C.9

7-6   Solving for a Missing Dimension

CCSS.MATH.CONTENT.8.G.C.9

7-7   Volume of Composite Shapes

CCSS.MATH.CONTENT.8.G.C.9