

**2023-2024****Grade 8 Mathematics: Pre-Algebra****Pacing Calendar****Unit 1: Foundations**

Day	Date	Week	Focus Benchmark(s)	Lesson/Topic
M	8/14	1	MA.7.NSO.1.2 (Review)	1.1 Rewriting Rational Numbers in Equivalent Forms
T	8/15	1	MA.7.NSO.1.1 (Review)	1.2 Applying the Laws of Exponents – Part 1
W	8/16	1	MA.7.NSO.1.1 (Review)	1.3 Applying the Laws of Exponents – Part 2
TH	8/17	1	MA.7.NSO.2.1 (Review)	1.4 Evaluating Numeric Expressions – Part 1
F	8/18	1	MA.7.NSO.2.1 (Review)	1.5 Evaluating Numeric Expressions – Part 2
M	8/21	2	MA.7.AR.2.2 (Review)	1.6 Writing and Solving Two-Step Equations
T	8/22	2		Review Unit 1
W	8/23	2		Unit 1 Assessment

**Unit 2: Rational and Irrational Numbers**

Day	Date	Week	Focus Benchmark(s)	Lesson/Topic
TH	8/24	2	MA.8.AR.2.3	2.1 Square Values
F	8/25	2	MA.8.NSO.1.1, MA.8.AR.2.3	2.2 Square Values and Square Roots
M	8/28	3	MA.8.AR.2.3	2.3 Cube Values
T	8/29	3	MA.8.NSO.1.1, MA.8.AR.2.3	2.4 Square Roots and Cube Roots
W	8/30	3	MA.8.NSO.1.1, MA.8.NSO.1.2	2.5 Approximating Irrational Numbers
TH	8/31	3	MA.8.NSO.1.2	2.6 Rational and Irrational Numbers on the Number Line
F	9/1	3	MA.8.NSO.1.2	2.7 Plotting, Ordering, and Comparing Real Numbers
T	9/5	4		Review Unit 2
W	9/6	4		Unit 2 Assessment

**Unit 3: Scientific Notation**

Day	Date	Week	Focus Benchmark(s)	Lesson/Topic
TH	9/7	4	MA.8.NSO.1.3	3.1 Powers of 10
F	9/8	4	MA.8.NSO.1.4	3.2 Writing Large Numbers Using Scientific Notation

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M	9/11	5	MA.8.NSO.1.3	3.3 More with Powers of 10
T	9/12	5	MA.8.NSO.1.4	3.4 Writing Small Numbers in Scientific Notation
W	9/13	5	MA.8.NSO.1.5, MA.8.NSO.1.6	3.5 Adding and Subtracting Numbers Expressed in Scientific Notation
TH	9/14	5	MA.8.NSO.1.5	3.6 Multiplying Numbers Expressed in Scientific Notation
F	9/15	5	MA.8.NSO.1.5, MA.8.NSO.1.6	3.7 Dividing Numbers Expressed in Scientific Notation
M	9/18	6	MA.8.NSO.1.6	3.8 Solving Real-World Problems Involving Numbers Expressed in Scientific Notation
T	9/19	6		Review Unit 3
W	9/20	6		Unit 3 Assessment

**Unit 4: Equivalent Numerical Expressions**

Day	Date		Focus Benchmark(s)	Lesson/Topic
TH	9/21	6	MA.8.NSO.1.3	4.1 Negative Exponent Law
F	9/22	6	MA.8.NSO.1.3	4.2 Generating Equivalent Numerical Expressions
M	9/25	7	MA.8.NSO.1.3	4.3 Applying Exponent Laws
T	9/26	7	MA.8.NSO.1.3	4.4 Evaluating Numerical Expressions with Integer Exponents – Part 1
W	9/27	7	MA.8.NSO.1.3	4.5 Evaluating Numerical Expressions with Integer Exponents – Part 2
TH	9/28	7	MA.8.NSO.1.3	4.6 Equivalent Expressions
F	9/29	7	MA.8.AR.1.1	4.7 Applying Exponent Laws to Algebraic Expressions – Part 1
M	10/2	8	MA.8.AR.1.1	4.8 Applying Exponent Laws to Algebraic Expressions – Part 2
T	10/3	8	MA.8.AR.1.1	4.9 Algebraic Expressions with Negative Exponents
W	10/4	8	MA.8.AR.1.1	4.10 Applying Multiple Laws of Exponents - Part 1
TH	10/5	8	MA.8.AR.1.1	4.11 Applying Multiple Laws of Exponents - Part 2
F	10/6	8		Review Unit 4
M	10/9	9		Unit 4 Assessment

**Unit 5: Relationships in Triangles**

Day	Date		Focus Benchmark(s)	Lesson/Topic
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T	10/10	9	MA.8.AR.2.2	5.1 Determining Solutions to Inequalities
W	10/11	9	MA.8.AR.2.2	5.2 Solving Inequalities – Part 1
TH	10/12	9	MA.8.AR.2.2	5.3 Solving Inequalities – Part 2
F	10/13	9	MA.8.GR.1.3	5.4 The Triangle Inequality Theorem and the Converse of the Pythagorean Theorem
T	10/17	10	MA.8.GR.1.3	5.5 Applying the Triangle Inequality Theorem
W	10/18	10	MA.8.GR.1.1	5.6 Pythagorean Theorem
TH	10/19	10	MA.8.GR.1.1	5.7 Using the Pythagorean Theorem to Solve Real-World Problems
F	10/20	10	MA.8.GR.1.2	5.8 Triangles on the Coordinate Plane
M	10/23	11	MA.8.GR.1.2	5.9 Finding Distances on a Coordinate Plane
T	10/24	11	MA.8.GR.1.2	5.10 Solving Real-World Problems on a Coordinate Plane with the Pythagorean Theorem
W	10/25	11		Review Unit 5
TH	10/26	11		Unit 5 Assessment

**Unit 6: Linear Relationships**

Day	Date		Focus Benchmark(s)	Lesson/Topic
F	10/27	11	MA.8.AR.3.1	6.1 Proportional Relationships
M	10/30	12	MA.8.AR.3.1	6.2 Graphs of Proportional Relationships
T	10/31	12	MA.8.AR.3.1	6.3 Determining Proportional Relationships
W	11/1	12	MA.8.AR.3.2	6.4 Exploring Slope
TH	11/2	12	MA.8.GR.2.4	6.5 Proportional Relationships and Similar Triangles
F	11/3	12	MA.8.GR.2.4	6.6 Solving Real-World Problems Using Similar Triangles
M	11/6	13	MA.8.GR.2.4	6.7 Applying Similar Triangles to Solve Real-World Problems
T	11/7	13		Review Unit 6
W	11/8	13		Unit 6 Assessment

**Unit 7: Key Features of Linear Equations**

Day	Date		Focus Benchmark(s)	Lesson/Topic
TH	11/9	13	MA.8.AR.3.2	7.1 Finding Slope Using Graphs and Tables

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M	11/13	14	MA.8.AR.3.2, MA.8.AR.3.5	7.2 Slope in Real-World Contexts
T	11/14	14	MA.8.AR.3.2, MA.8.AR.3.4	7.3 Exploring Equations of Lines and Their Corresponding Graphs
W	11/15	14	MA.8.AR.3.4	7.4 Graphing Lines from Slope-Intercept Form
TH	11/16	14	MA.8.AR.3.4	7.5 Graphing Lines for Real-World Contexts
F	11/17	14	MA.8.AR.3.5	7.6 Interpreting Linear Relationships from Graphs and Equations
M	11/20		MA.8.AR.3.5	7.7 Interpreting Linear Relationships from Tables and Written Descriptions
T	11/21		MA.8.AR.3.2, MA.8.AR.3.3	7.8 Writing Equations of Linear Relationships
M	11/27	15	MA.8.AR.3.3	7.9 Writing Equations for Real-World Contexts
T	11/28	15		Review Unit 7
W	11/29	15		Unit 7 Assessment

**Unit 8: Solving Equations and Systems of Equations**

<b>Day</b>	<b>Date</b>		<b>Focus Benchmark(s)</b>	<b>Lesson/Topic</b>
TH	11/30	15	MA.8.AR.2.1	8.1 Solving Equations
F	12/1	15	MA.8.AR.2.1	8.2 Solving Real-World, Multi-Step Equations
M	12/4	16	MA.8.AR.2.1	8.3 Solving Equations with Variables on Both Sides
T	12/5	16	MA.8.AR.2.1	8.4 Solutions to Linear Equations
W	12/6	16	MA.8.AR.2.1	8.5 Solving Real-World Equations with Variables on Both Sides
TH	12/7	16	MA.8.AR.2.1	8.6 Solving Multi-Step Equations
F	12/8	16	MA.8.AR.4.1, MA.8.AR.4.2	8.7 Introduction to Systems of Two Linear Equations
M	12/11	17	MA.8.AR.4.1, MA.8.AR.4.2	8.8 Solutions to Systems of Equations
T	12/12	17	MA.8.AR.4.3	8.9 Solving Systems by Graphing
W	12/13	17	MA.8.AR.4.3	8.10 Solving Systems of Equations by Graphing for Real-World Contexts
TH	12/14	17		Review Unit 8
F	12/15	17		Unit 8 Assessment

**Unit 9: Transformations**

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Day	Date		Focus Benchmark(s)	Lesson/Topic
W	1/10	18	MA.8.GR.2.1	9.1 Slides, Flips, and Spins
TH	1/11	18	MA.8.GR.2.1	9.2 Reflections and Rotations
F	1/12	18	MA.8.GR.2.1, MA.8.GR.2.3	9.3 Translations
T	1/16	19	MA.8.GR.2.3	9.4 Reflections on the Coordinate Plane
W	1/17	19	MA.8.GR.2.3	9.5 Rotations on the Coordinate Plane
TH	1/18	19	MA.8.GR.2.1, MA.8.GR.2.3	9.6 Describing Rigid Transformations
F	1/19	19	MA.8.GR.2.2	9.7 Dilations
M	1/22	20	MA.8.GR.2.2, MA.8.GR.2.3	9.8 Dilations on the Coordinate Plane
T	1/23	20	MA.8.GR.2.2, MA.8.GR.2.3, MA.8.GR.2.4	9.9 Scale Factors of Dilations
W	1/24	20	MA.8.GR.2.4	9.10 Similar Triangles and Dilations in the Real World
TH	1/25	20		Review Unit 9
F	1/26	20		Unit 9 Assessment

**Unit 10: Functions**

Day	Date		Focus Benchmark(s)	Lesson/Topic
M	1/29	21	MA.8.F.1.1	10.1 Exploring Relations
T	1/30	21	MA.8.F.1.1	10.2 Identifying Domain and Range
W	1/31	21	MA.8.F.1.1	10.3 Relations and Functions
TH	2/1	21	MA.8.F.1.1	10.4 Is it a Function?
F	2/2	21	MA.8.F.1.3	10.5 Interpreting Graphs of Functions
M	2/5	22	MA.8.F.1.3	10.6 Sketching Graphs of Functions
T	2/6	22	MA.8.F.1.3	10.7 Analyzing Descriptions and Graphs
W	2/7	22	MA.8.F.1.2, MA.8.AR.2.3	10.8 Exploring Functions Using Equations, Tables, and Graphs
TH	2/8	22	MA.8.F.1.1, MA.8.F.1.2	10.9 Is it Linear?
F	2/9	23	MA.8.F.1.2	10.10 Using Tables to Determine if a Function is Linear
M	2/12	24		Review Unit 10
T	2/13	24		Unit 10 Assessment

**2023-2024****Grade 8 Mathematics: Pre-Algebra****Unit 11: Scatter Plots**

<b>Day</b>	<b>Date</b>		<b>Focus Benchmark(s)</b>	<b>Lesson/Topic</b>
W	2/14	24	MA.8.DP.1.1	11.1 Representing Bivariate Data
TH	2/15	24	MA.8.DP.1.1	11.2 Constructing Line Graphs
F	2/16	24	MA.8.DP.1.1, MA.8.DP.1.2	11.3 Constructing Scatter Plots
T	2/20	25	MA.8.DP.1.2, MA.8.DP.1.3	11.4 Informally Fitting a Line to Bivariate Data
W	2/21	25	MA.8.DP.1.2, MA.8.DP.1.3	11.5 Scatter Plots and Lines of Fit
TH	2/22	25	MA.8.AR.3.5, MA.8.DP.1.2	11.6 Interpreting Linear Equations Fit to Bivariate Data
F	2/23	25	MA.8.DP.1.1	11.7 Barbie Bungee - Part 1
M	2/26	26	MA.8.DP.1.1, MA.8.DP.1.2, MA.8.DP.1.3, MA.8.AR.3.5	11.8 Barbie Bungee - Part 2
T	2/27	26		Review Unit 11
W	2/28	26		Unit 11 Assessment

**Unit 12: Equivalent Algebraic Expressions**

<b>Day</b>	<b>Date</b>		<b>Focus Benchmark(s)</b>	<b>Lesson/Topic</b>
TH	2/29	26	MA.8.AR.1.2	12.1 Applying the Distributive Property with Variables
F	3/1	26	MA.8.AR.1.1, MA.8.AR.1.2	12.2 Multiplying Monomials by Algebraic Expressions
M	3/04	27	MA.8.AR.1.1, MA.8.AR.1.2	12.3 Multiplying Algebraic Expressions
T	3/5	27	MA.8.AR.1.3	12.4 Factoring Expressions
W	3/6	27	MA.8.AR.1.3	12.5 Factoring Common Monomial Factors
TH	3/7	27	MA.8.AR.1.3	12.6 Rewriting Expressions with Common Monomial Factors
F	3/8	27	MA.8.NSO.1.7	12.7 Evaluating Expressions with Radicals
M	3/11	28	MA.8.NSO.1.7	12.8 Evaluating Expressions Using the Order of Operations
T	3/12	28	MA.8.NSO.1.7	12.9 Evaluating Real-World Problems Using the Order of Operations – Part 1
W	3/13	28	MA.8.NSO.1.7	12.10 Evaluating Real-World Problems Using the Order of Operations – Part 2
M	3/25	29		Review Unit 12

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T	3/26	29		Unit 12 Assessment
<b>Unit 13: Properties and Theorems of Angles</b>				
<b>Day</b>	<b>Date</b>		<b>Focus Benchmark(s)</b>	<b>Lesson/Topic</b>
W	3/27	29	MA.8.GR.1.4	13.1 Angle Relationships
TH	3/28	29	MA.8.GR.1.4	13.2 Solving for Unknown Angles
F	3/29	29	MA.8.GR.1.5	13.3 Angle Relationships in Triangles
M	4/1	30	MA.8.GR.1.5	13.4 Solving for Unknown Angles in Triangles
T	4/2	30	MA.8.GR.1.6	13.5 Interior Angles of a Polygon
W	4/3	30	MA.8.GR.1.6	13.6 Interior Angles of a Regular Polygon
TH	4/4	30	MA.8.GR.1.6	13.7 Finding Missing Angles in Polygons
F	4/5	30		Review Unit 13
M	4/8	31		Unit 13 Assessment
<b>Unit 14: Probability</b>				
<b>Day</b>	<b>Date</b>		<b>Focus Benchmark(s)</b>	<b>Lesson/Topic</b>
T	4/9	31	MA.8.DP.2.1	14.1 Determining Sample Space Using Lists and Tree Diagrams
W	4/10	31	MA.8.DP.2.1	14.2 Determining Sample Space Using Outcome Tables
TH	4/11	31	MA.8.DP.2.1, MA.8.DP.2.2	14.3 Calculating Theoretical Probability
F	4/12	31	MA.8.DP.2.1, MA.8.DP.2.2	14.4 Comparing Theoretical Probability to Experimental Probability
M	4/15	32	MA.8.DP.2.2	14.5 Calculating Theoretical Probability of Compound Events
T	4/16	32	MA.8.DP.2.3	14.6 Applying Proportional Reasoning to Probability
W	4/17	32	MA.8.DP.2.1, MA.8.DP.2.2, MA.8.DP.2.3	14.7 Solving Problems Using Probability
TH	4/18	32	MA.8.DP.2.1, MA.8.DP.2.2, MA.8.DP.2.3	14.8 Making Predictions
F	4/19	32		Review Unit 14
M	4/22	33		Unit 14 Assessment