

Scope and Sequence

Integrated I • Integrated II • Integrated III



Scan the QR code or visit
mhecalifornia.com/reveal
to learn more about
California Reveal Math.

Unit 1 – Using Expressions and Equations	
Big Ideas: Modeling with Functions; Systems of Equations	
Essential Question: How can writing and solving equations help you solve problems in the real world?	
Lesson 1-1	Properties of Real Numbers
1-2	Descriptive Modeling with Expressions
1-3	Solving Equations in One Variable
Math Probe	Solving for a Variable
1-4	Absolute Value Expressions and Equations
1-5	Using Formulas
Unit 2 – Relations and Functions	
Big Idea: Modeling with Functions	
Essential Question: Why are representations of relations and functions useful?	
Lesson 2-1	Representing Relations
Math Probe	Graphical Representations
2-2	Functions
2-3	Linearity and Continuity of Graphs
2-4	Intercepts of Graphs
2-5	Shapes of Graphs
2-6	Sketching Graphs and Comparing Functions
Unit 3 – Linear and Nonlinear Functions	
Big Ideas: Modeling with Functions; Composing Functions	
Essential Question: What can a function tell you about the relationship that it represents?	
Lesson 3-1	Graphing Linear Functions
3-2	Rate of Change and Slope
3-3	Slope-Intercept Form
3-4	Transformations of Linear Functions
3-5	Arithmetic Sequences
3-6	Piecewise and Step Functions
3-7	Absolute Value Functions
Math Probe	Absolute Value Functions

Unit 4 – Creating Linear Equations	
Big Ideas: Comparing Models; Correlation and Causation	
Essential Question: How can creating a linear function to model real-world situations be useful?	
Lesson 4-1	Writing Equations in Slope-Intercept Form
4-2	Writing Equations in Standard and Point-Slope Forms
4-3	Scatter Plots and Lines of Fit
4-4	Linear Regression
Math Probe	Modeling with Linear Equations
4-5	Inverses of Linear Functions
Unit 5 – Linear Inequalities	
Big Idea: Systems of Equations	
Essential Question: How can writing and solving inequalities help you solve problems in the real world?	
Lesson 5-1	Solving One-Step Inequalities
5-2	Solving Multi-Step Inequalities
5-3	Solving Compound Inequalities
5-4	Solving Absolute Value Inequalities
5-5	Graphing Inequalities in Two Variables
Math Probe	Graphs of Linear Inequalities
Unit 6 – Systems of Linear Equations and Inequalities	
Big Idea: Systems of Equations	
Essential Question: How are systems of equations useful in the real world?	
Lesson 6-1	Graphing Systems of Equations
6-2	Substitution
6-3	Elimination Using Addition and Subtraction
6-4	Elimination Using Multiplication
Math Probe	Systems of Linear Equations
6-5	Systems of Inequalities
Unit 7 – Exponential Functions	
Big Ideas: Comparing Models; Composing Functions	
Essential Question: When and how can exponential functions represent real-world situations?	
Lesson 7-1	Exponential Functions
7-2	Transformations of Exponential Functions

Unit 7 – Exponential Functions	
7-3	Writing Equations for Exponential Functions
Math Probe	Exponential Growth and Decay
7-4	Transforming Exponential Expressions
7-5	Geometric Sequences
7-6	Recursive Formulas
Unit 8 – Statistics	
Big Idea: Variability	
Essential Question: How do you summarize and interpret data?	
Lesson 8-1	Representing Data
8-2	Measures of Center and Spread
Math Probe	Comparing Data in Box Plots
8-3	Distributions of Data
8-4	Comparing Sets of Data
8-5	Summarizing Categorical Data
Unit 9 – Tools of Geometry	
Big Ideas: Shapes in Structures; Transformations and Congruence	
Essential Question: How are points, lines, line segments, and two- and three-dimensional figures used to model the real world?	
Lesson 9-1	Points, Lines, and Planes
9-2	Line Segments and Distance
9-3	Locating Points
9-4	Midpoints and Bisectors
9-5	Angle Relationships
9-6	Two-Dimensional Figures
9-7	Three-Dimensional Figures
Math Probe	Name the Shape
9-8	Precision and Accuracy
Unit 10 – Logical Arguments	
Big Ideas: Transformations and Congruence	
Essential Question: What makes a logical argument, and how are logical arguments used to solve problems in the real world?	
Lesson 10-1	Conjectures and Counterexamples
Math Probe	Conjectures
10-2	Statements, Conditionals, and Biconditionals

Unit 10 – Logical Arguments	
10-3	Deductive Reasoning
10-4	Writing Proofs
10-5	Proving Segment Relationships
10-6	Proving Angle Relationships
Unit 11 – Parallel and Perpendicular Lines	
Big Idea: Transformations and Congruence	
Essential Question: How can real-world situations be modeled using parallel or perpendicular lines?	
Lesson 11-1	Parallel Lines and Transversals
11-2	Slope and Equations of Lines
11-3	Proving Lines Parallel
Math Probe	Proving Lines Parallel
11-4	Perpendiculars and Distance
Unit 12 – Transformations and Symmetry	
Big Ideas: Shapes in Structures; Transformations and Congruence	
Essential Question: How are rigid motions used to investigate and prove geometric relationships?	
Lesson 12-1	Reflections
12-2	Translations
12-3	Rotations
12-4	Compositions of Transformations
Math Probe	Transformations
12-5	Symmetry
Unit 13 – Triangles and Congruence	
Big Ideas: Shapes in Structures; Building with Triangles	
Essential Question: How can proving triangle congruence help solve problems in the real world?	
Lesson 13-1	Angles of Triangles
13-2	Congruent Triangles
13-3	Proving Triangles Congruent: SSS, SAS
13-4	Proving Triangles Congruent: ASA, AAS
13-5	Proving Right Triangles Congruent
13-6	Isosceles and Equilateral Triangles
Math Probe	Congruent Triangles
13-7	Triangles and Coordinate Proof
13-8	Proving the Slope Criteria
13-9	Constructing Inscribed Polygons

Unit 1 – Relations and Functions	
Big Idea: Functions Representations	
Essential Question: How can analyzing a function help you understand the situation it models?	
Lesson 1-1	Functions and Continuity
1-2	Linearity, Intercepts, and Symmetry
1-3	Extrema and End Behavior
1-4	Sketching Graphs and Comparing Functions
Math Probe	Interpreting Functions
1-5	Graphing Linear Functions and Inequalities
1-6	Piecewise and Absolute Value Functions
1-7	Transformations of Functions
Unit 2 – Linear Equations, Inequalities, and Systems	
Big Ideas: Equations to Predict and Model	
Essential Question: How are equations, inequalities, and systems of equations or inequalities best used to model to real-world situations?	
Lesson 2-1	Solving Linear Equations and Inequalities
2-2	Solving Absolute Value Equations and Inequalities
2-3	Forms of Linear Equations
2-4	Solving Systems of Equations
2-5	Systems of Inequalities and Linear Programming
Math Probe	Systems of Linear Inequalities
2-6	Systems of Equations in Three Variables
Unit 3 – Exponents and Roots	
Big Idea: Expressions and Number System	
Essential Question: How do you perform operations and represent real-world situations with exponents?	
Lesson 3-1	Properties of Exponents
3-2	Operations with Negative Exponents
3-3	Rational Exponents
Math Probe	Rational Exponents
3-4	Simplifying Radical Expressions
3-5	Operations with Radical Expressions
3-6	Solving Equations Involving Exponents
3-7	Graphing Radical Functions

Unit 4 – Polynomials	
Big Idea: Polynomial Identities	
Essential Question: How can you use the structure of polynomials to analyze the real-world situations they represent?	
Lesson 4-1	Adding and Subtracting Polynomials
4-2	Multiplying Polynomials by Monomials
4-3	Multiplying Polynomials
4-4	Special Products
Math Probe	Multiplying Binomials
4-5	Factoring Polynomials
4-6	Factoring Quadratic Trinomials
4-7	Factoring Special Products
Unit 5 – Quadratic Functions	
Big Idea: Functions in the World	
Essential Question: How can you apply quadratic functions to situations in the physical world?	
Lesson 5-1	Graphing and Interpreting Quadratic Functions
5-2	Solving Quadratic Equations by Graphing
5-3	Complex Numbers
5-4	Solving Quadratic Equations by Factoring
Math Probe	Factoring
5-5	Completing the Square
5-6	Using the Quadratic Formula and the Discriminant
5-7	Quadratic Inequalities
5-8	Solving Linear-Nonlinear Systems
5-9	Transformations of Quadratic Functions
5-10	Modeling and Curve Fitting
5-11	Combining Functions
Unit 6 – Relationships in Triangles	
Big Ideas: Congruence, Similarity, and Proof; Geometric Models	
Essential Question: How can relationships in triangles be used in real-world situations?	
Lesson 6-1	Perpendicular Bisectors
6-2	Angle Bisectors
6-3	Medians and Altitudes of Triangles
6-4	Indirect Proof
6-5	Inequalities in One Triangle
6-6	The Triangle Inequality
6-7	Inequalities in Two Triangles
Math Probe	Relationships in Triangles

Unit 7 – Quadrilaterals	
Big Ideas: Geospatial Data; Congruence, Similarity, and Proof	
Essential Question: How can the characteristics of the different types of quadrilaterals be used to represent real-world objects and situations?	
Lesson 7-1	Angles of Polygons
7-2	Parallelograms
7-3	Tests for Parallelograms
Math Probe	Is It a Parallelogram?
7-4	Rectangles
7-5	Rhombi and Squares
7-6	Trapezoids and Kites
Unit 8 – Similarity	
Big Idea: Transformations and Similarity	
Essential Question: What does it mean for objects to be similar, and how is similarity useful for modeling in the real world?	
Lesson 8-1	Dilations
8-2	Similar Polygons
8-3	Similar Triangles: AA Similarity
8-4	Similar Triangles: SSS and SAS Similarity
8-5	Triangle Proportionality
Math Probe	Similar Triangles
8-6	Special Segments in Similar Triangles
Unit 9 – Right Triangles and Trigonometry	
Big Idea: Trigonometry and Trig Functions	
Essential Question: How are right triangle relationships useful in solving real-world problems?	
Lesson 9-1	Geometric Mean
9-2	Pythagorean Theorem and Its Converse
9-3	Special Right Triangles
9-4	Trigonometry
Math Probe	Solving Trigonometric Equations
9-5	Applying Trigonometry
Unit 10 – Circles and Parabolas	
Big Ideas: Geospatial Data; Circle Relationships	
Essential Question: How can circles and circle relationships be used to model situations in the real world?	
Lesson 10-1	Circles and Circumference
10-2	Measuring Angles and Arcs
10-3	Arcs and Chords
10-4	Inscribed Angles and Inscribed Polygons
Math Probe	Circles and Angles
10-5	Tangents and Circumscribed Polygons

Unit 10 – Circles and Parabolas	
10-6	Tangents, Secants, and Angle Measures
10-7	Equations of Circles
10-8	Equations of Parabolas
Unit 11 – Measurement	
Big Ideas: Geospatial Data; Geometric Models	
Essential Question: How are two- and three-dimensional figures useful for modeling situations in the real world?	
Lesson 11-1	Areas of Quadrilaterals
11-2	Areas of Regular Polygons
11-3	Areas of Circles and Sectors
11-4	Surface Area
11-5	Volumes of Prisms and Pyramids
Math Probe	Heights in Solids
11-6	Volumes of Cylinders, Cones, and Spheres
11-7	Applying Similarity to Solid Figures
Unit 12 – Probability	
Big Idea: Probability Modeling	
Essential Question: How can you use data and probability to make decisions?	
Lesson 12-1	Sample Spaces
12-2	Probability and Counting
12-3	Geometric Probability
12-4	Probability with Permutations and Combinations
12-5	Probability and the Multiplication Rule
12-6	Probability and the Addition Rule
Math Probe	Probability
12-7	Conditional Probability
12-8	Two-Way Frequency Tables
Unit 13 – Trigonometric Identities	
Big Idea: Trigonometry and Trig Functions	
Essential Question: How are trigonometric identities similar to and different from other equations?	
Lesson 13-1	Trigonometric Identities
Math Probe	Equivalent Trigonometric Expressions
13-2	Verifying Trigonometric Identities
13-3	Sum and Difference Identities
13-4	Double-Angle and Half-Angle Identities

Unit 1 – Polynomials and Polynomial Functions	
Big Ideas: Investigate and Model with Functions; Expressions and Number Systems	
Essential Question: How does an understanding of polynomials and polynomial functions help us understand and interpret real-world events?	
Lesson 1-1	Operations with Polynomials
Math Probe	Subtracting Polynomials
1-2	Dividing Polynomials
1-3	Powers of Binomials
1-4	Polynomial Functions
1-5	Analyzing Graphs of Polynomial Functions
Unit 2 – Polynomial Equations	
Big Ideas: Equations to Predict and Model; Expressions and Number Systems	
Essential Question: What methods are useful for solving polynomial equations and finding zeros of polynomial functions?	
Lesson 2-1	Solving Polynomial Equations by Graphing
Math Probe	Polynomial Factors
2-2	Solving Polynomial Equations Algebraically
2-3	Proving Polynomial Identities
2-4	The Remainder and Factor Theorems
2-5	Roots and Zeros
Unit 3 – Inverse and Radical Functions	
Big Idea: Growth and Decay	
Essential Question: How can the inverse of a function be used to help interpret a real-world event or solve a problem?	
Lesson 3-1	n th Roots and Rational Exponents
3-2	Operations with Radical Expressions
3-3	Solving Radical Equations and Inequalities
3-4	Operations on Functions
3-5	Inverse Relations and Functions
Math Probe	Combining Functions

Unit 4 – Exponential Functions	
Big Idea: Equations to Predict and Model	
Essential Question: How are real-world situations involving quantities that grow or decline rapidly modeled mathematically?	
Lesson 4-1	Graphing Exponential Functions
4-2	Solving Exponential Equations and Inequalities
Math Probe	Solving Exponential Equations
4-3	Special Exponential Functions
4-4	Geometric Sequences and Series
4-5	Modeling Data
Unit 5 – Logarithmic Functions	
Big Ideas: Equations to Predict and Model; Growth and Decay	
Essential Question: How are logarithms defined and used to model situations in the real world?	
Lesson 5-1	Logarithms and Logarithmic Functions
5-2	Properties of Logarithms
Math Probe	Properties of Logarithms
5-3	Common Logarithms
5-4	Natural Logarithms
5-5	Using Exponential and Logarithmic Functions
Unit 6 – Rational Functions	
Big Ideas: Investigate and Model with Functions; Equations to Predict and Model	
Essential Question: How are the rules for operations with rational numbers applied to operations with rational expressions and equations?	
Lesson 6-1	Multiplying and Dividing Rational Expressions
6-2	Adding and Subtracting Rational Expressions
6-3	Graphing Reciprocal Functions
6-4	Graphing Rational Functions
Math Probe	Graphs of Rational Functions
6-5	Solving Rational Equations and Inequalities

Unit 7 – Inferential Statistics	
Big Ideas: Inferences and Conclusions from Data; Probability Modeling	
Essential Question: How can data be collected and interpreted so that it is useful to a specific audience?	
Lesson 7-1	Random Sampling and Studies
Math Probe	Populations and Samples
7-2	Using Statistics to Make Decisions
7-3	Analyzing Population Data
7-4	Probability Distributions
7-5	Normal Distributions
7-6	Estimating Population Parameters
Unit 8 – Advanced Geometry	
Big Ideas: Trigonometry and Trig Functions; Geometric Models	
Essential Question: How can the features of two- and three- dimensional figures be useful in solving real-world problems?	
Lesson 8-1	Cross Sections and Solids of Revolution
Math Probe	Cross Sections
8-2	Density
8-3	Trigonometry and Area
8-4	The Law of Sines
8-5	The Law of Cosines

Unit 9 – Trigonometric Functions	
Big Idea: Trigonometry and Trig Functions	
Essential Question: What are the key features of the graph of a trigonometric function and how do they represent real-world situations?	
Lesson 9-1	Angles and Angle Measure
Math Probe	Angle Measures
9-2	Trigonometric Functions of General Angles
9-3	Circular and Periodic Functions
9-4	Graphing Sine and Cosine Functions
9-5	Graphing Other Trigonometric Functions
9-6	Translations of Trigonometric Graphs