

enVision[®] Integrated MATHEMATICS I

Visit with your student's classroom teacher for details on which lessons will be used from EnVision Math.

Topic 1 Solving Equations and Inequalities

1-1	Solving Linear Equations
1-2	Solving Equations with Variables on Both Sides
1-3	Literal Equations and Formulas
1-4	Solving Inequalities in One Variable
1-5	Compound Inequalities
1-6	Absolute Value Equations and Inequalities

Topic 2 Linear Equations

2-1	Slope-Intercept Form
2-2	Point-Slope Form
2-3	Standard Form
2-4	Parallel and Perpendicular Lines

Topic 3 Linear Functions

3-1	Relations and Functions
3-2	Linear Functions
3-3	Transforming Linear Functions
3-4	Arithmetic Sequences
3-5	Scatter Plots and Lines of Fit
3-6	Analyzing Lines of Fit

Topic 4 Systems of Linear Equations and Inequalities

4-1	Solving Systems of Equations by Graphing
4-2	Solving Systems of Equations by Substitution
4-3	Solving Systems of Equations by Elimination
4-4	Linear Inequalities in Two Variables
4-5	Systems of Linear Inequalities

Topic 5 Exponents and Exponential Functions

5-1	Rational Exponents and Properties of Exponents
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5-2	Exponential Functions
5-3	Exponential Growth and Decay
5-4	Geometric Sequences
5-5	Transformations of Exponential Functions
Topic 6 Foundations of Geometry	
6-1	Measuring Segments and Angles
6-2	Basic Constructions
6-3	Midpoint and Distance
6-4	Inductive Reasoning
6-5	Conditional Statements
6-6	Deductive Reasoning
6-7	Writing Proofs
6-8	Indirect Proof
Topic 7 Parallel and Perpendicular Lines	
7-1	Parallel Lines
7-2	Proving Lines Parallel
7-3	Parallel Lines and Triangle Angle Sums
7-4	Slopes of Parallel and Perpendicular Lines
Topic 8 Transformations	
8-1	Reflections
8-2	Translations
8-3	Rotations
8-4	Classification of Rigid Motions
8-5	Symmetry
Topic 9 Triangle Congruence	
9-1	Congruence
9-2	Isosceles and Equilateral Triangles
9-3	Proving and Applying the SAS and SSS Congruence Criteria
9-4	Proving and Applying the ASA and AAS Congruence Criteria
9-5	Congruence in Right Triangles
9-6	Congruence in Overlapping Triangles

9-7	Polygons in the Coordinate Plane
9-8	Chords
Topic 10 Statistics	
10-1	Analyzing Data Displays
10-2	Comparing Data Sets
10-3	Interpreting the Shapes of Data Displays
10-4	Standard Deviation
10-5	Two-Way Frequency Tables

enVision Integrated MATHEMATICS II

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Topic 1 Exponents and Roots

1-1	Operations on Real Numbers
1-2	Rational Exponents and Properties of Exponents
1-3	Exponential Models
1-4	The Square Root Function
1-5	The Cube Root Function

Topic 2 Polynomials and Factoring

2-1	Adding and Subtracting Polynomials
2-2	Multiplying Polynomials
2-3	Multiplying Special Cases
2-4	Factoring Polynomials
2-5	Factoring $x^2 + bx + c$
2-6	Factoring $ax^2 + bx + c$
2-7	Factoring Special Cases

Topic 3 Quadratic Functions

3-1	Key Features of a Quadratic Function
3-2	Quadratic Functions in Vertex Form
3-3	Quadratic Functions in Standard Form
3-4	Modeling with Quadratic Functions
3-5	Linear, Exponential, and Quadratic Models

Topic 4 Solving Quadratic Equations

4-1	Solving Quadratic Equations Using Graphs and Tables
4-2	Solving Quadratic Equations by Factoring
4-3	Rewriting Radical Expressions
4-4	Solving Quadratic Equations Using Square Roots
4-5	Solving Systems of Linear and Quadratic Equations

Topic 5 Quadratic Equations and Complex Numbers

5-1	Complex Numbers and Operations
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5-2	Completing the Square
5-3	The Quadratic Formula
5-4	Linear-Quadratic Systems
5-5	Polynomial Identities
5-5a	The Fundamental Theorem of Algebra
Topic 6 Working With Functions	
6-1	The Absolute Value Function
6-2	Piecewise-Defined Functions
6-3	Step Functions
6-4	Transformations of Piecewise-Defined Functions
6-5	Analyzing Functions Graphically
6-6	Translations of Functions
6-7	Compressions and Stretches of Functions
6-8	Operations With Functions
6-9	Inverse Functions
Topic 7 Relationships in Triangles	
7-1	Writing Proofs
7-2	Parallel Lines
7-3	Perpendicular and Angle Bisectors
7-4	Bisectors in Triangles
7-5	Medians and Altitudes
7-6	Inequalities in One Triangle
7-7	Inequalities in Two Triangles
Topic 8 Quadrilaterals and Other Polygons	
8-1	The Polygon Angle-Sum Theorems
8-2	Kites and Trapezoids
8-3	Properties of Parallelograms
8-4	Proving a Quadrilateral Is a Parallelogram
8-5	Properties of Special Parallelograms
8-6	Conditions of Special Parallelograms
Topic 9 Similarity and Right Triangles	
9-1	Dilations
9-2	Similarity Transformations

9-3	Proving Triangles Similar
9-4	Similarity in Right Triangles
9-5	Proportions in Triangles
9-6	Right Triangles and the Pythagorean Theorem
9-7	Trigonometric Ratios
9-7a	The Pythagorean Identity
Topic 10 Probability	
10-1	Two-Way Frequency Tables
10-2	Probability Events
10-3	Conditional Probability
10-4	Permutations and Combinations
10-5	Probability Distributions
10-6	Expected Value
10-7	Probability and Decision Making
Topic 11 Coordinate Geometry	
11-1	Polygons in the Coordinate Plane
11-2	Proofs Using Coordinate Geometry
11-3	Circles in the Coordinate Plane
11-4	Parabolas in the Coordinate Plane
Topic 12 Circles	
12-1	Arcs and Sectors
12-2	Tangent Lines to a Circle
12-3	Chords
12-4	Inscribed Angles
12-5	Secant Lines and Segments
Topic 13 Two- and Three-Dimensional Models	
13-1	Three-Dimensional and Cross Sections
13-2	Volumes of Prisms and Cylinders
13-3	Pyramids and Cones
13-4	Spheres

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Topic 1 Linear Functions and Systems

1-1	Key Features of Functions
1-2	Transformations of Functions
1-3	Piecewise-Defined Functions
1-4	Arithmetic Sequences and Series
1-5	Solving Equations and Inequalities by Graphing
1-6	Linear Systems

Topic 2 Polynomial Functions

2-1	Graphing Polynomial Functions
2-2	Adding, Subtracting, and Multiplying Polynomials
2-3	Polynomial Identities
2-4	Dividing Polynomials
2-5	Zeros of Polynomial Functions
2-6	Theorems About Roots of Polynomial Equations
2-7	Transformations of Polynomial Functions

Topic 3 Rational Functions

3-1	Inverse Variation and the Reciprocal Function
3-2	Graphing Rational Functions
3-3	Multiplying and Dividing Rational Expressions
3-4	Adding and Subtracting Rational Expressions
3-5	Solving Rational Equations

Topic 4 Rational Exponents and Radical Functions

4-1	n th Roots, Radicals, and Rational Exponents
4-2	Properties of Exponents and Radicals
4-3	Graphing Radical Functions
4-4	Solving Radical Equations
4-5	Function Operations
4-6	Inverse Relations and Functions

Topic 5 Exponential and Logarithmic Functions	
5-1	Key Features of Exponential Functions
5-2	Exponential Models
5-2a	Analyzing Residuals
5-3	Linear, Exponential, and Quadratic Models
5-4	Logarithms
5-5	Logarithmic Functions
5-6	Properties of Logarithms
5-7	Exponential and Logarithmic Equations
5-8	Geometric Sequences and Series
Topic 6 Trigonometric Functions	
6-1	Trigonometric Functions and Acute Angles
6-2	Angles and the Unit Circle
6-3	Trigonometric Functions and Real Numbers
6-4	Graphing Sine and Cosine Functions
6-5	Graphing Other Trigonometric Functions
6-6	Translating Trigonometric Functions
Topic 7 Trigonometric Equations and Identities	
7-1	Solving Trigonometric Equations Using Inverses
7-2	Law of Sines and Law of Cosines
7-3	Problem Solving With Trigonometry
7-4	Trigonometric Identities
Topic 8 Data Analysis and Statistics	
8-1	Statistical Questions and Variables
8-2	Statistical Studies and Sampling Methods
8-3	Data Distributions
8-4	Normal Distributions
8-5	Margin of Error
8-6	Testing Hypotheses From Testing
8-7	Probability and Decision Making
Topic 9 Coordinate Geometry	
9-1	Basic Constructions Extension: Constructions in Triangles
9-1a	Constructions in Triangles

9-2	Slopes of Parallel and Perpendicular Lines
9-3	Polygons in the Coordinate Plane
9-4	Proofs Using Coordinate Geometry
9-4a	Partitioning a Line Segment
9-5	Circles in the Coordinate Plane
9-6	Parabolas in the Coordinate Plane
Topic 10 Circles	
10-1	Arcs and Sectors
10-2	Tangent Lines to a Circle
10-3	Chords
10-4	Inscribed Angles
10-5	Secant Lines and Segments
Topic 11 Two- and Three-Dimensional Models	
11-1	Three-Dimensional Figures and Cross Sections
11-2	Volumes of Prisms and Cylinders
11-3	Pyramids and Cones
11-4	Spheres