

**Please Note:**

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**Publisher Resource:**

[Math Nation](#)

**Other Course Supplemental Resources:**

[Khan Academy - Geometry](#)

[Khan Academy - Algebra 2](#)

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 12 – Oct 11	1 8/12 – 8/16	<b>Unit 1: Linear Functions, Equations, &amp; Inequalities</b> <ul style="list-style-type: none"> <li>Linear Equations and Inequalities in Two Variables</li> <li>Arithmetic Sequences</li> </ul>	Slope <a href="#">Khan Academy</a> Slope-Intercept Form <a href="#">Khan Academy</a> Standard Form <a href="#">Khan Academy</a> Sequences <a href="#">Khan Academy</a> Arithmetic Sequences <a href="#">Khan Academy</a>
	2 8/19 – 8/23	<ul style="list-style-type: none"> <li>Parallel and Perpendicular Lines – Part 1</li> <li>Parallel and Perpendicular Lines – Part 2</li> <li>Quadrilaterals in Coordinate Geometry – Part 1</li> </ul>	Point-Slope Form <a href="#">Khan Academy</a> Parallel & Perpendicular Lines <a href="#">Khan Academy</a> Graphing Linear Inequalities <a href="#">Khan Academy</a>
	3 8/26 – 8/30	<ul style="list-style-type: none"> <li>Quadrilaterals in Coordinate Geometry – Part 2</li> <li>Review</li> <li>Assessment</li> </ul>	Linear Equations <a href="#">Khan Academy</a> Writing Equations Given 2 Points <a href="#">Khan Academy</a>
	4 9/3 – 9/6	Labor Day Holiday – 9/2 <b>Unit 2: Piecewise-Defined Functions</b> <ul style="list-style-type: none"> <li>Introduction to Piecewise-Defined Functions – Part 1</li> <li>Introduction to Piecewise-Defined Functions – Part 2</li> </ul>	Piecewise Functions <a href="#">Khan Academy</a>
	5 9/9 – 9/13	<ul style="list-style-type: none"> <li>Absolute Value Functions</li> <li>Review</li> <li>Assessment</li> </ul>	Absolute Value Functions <a href="#">Khan Academy</a>
	6 9/16 – 9/20	<b>Unit 3: Quadratic Equations and Functions – Part 1</b> <ul style="list-style-type: none"> <li>Solving Quadratic Equations by Factoring</li> <li>Solving Quadratic Equations by Factoring Special Cases – Part 1</li> </ul>	Factoring Quadratics <a href="#">Khan Academy</a>
	7 9/23 – 9/27	<ul style="list-style-type: none"> <li>Solving Quadratic Equations by Factoring Special Cases – Part 2</li> <li>Complex Numbers – Part 1</li> </ul>	Complex Numbers <a href="#">Khan Academy</a> Operations with Complex Numbers <a href="#">Khan Academy</a>
	8 9/30 – 10/4	<ul style="list-style-type: none"> <li>Complex Numbers – Part 2</li> <li>Solving Quadratic Equations by Completing the Square</li> </ul>	Completing the Square <a href="#">Khan Academy</a>
	9 10/7 – 10/11	<ul style="list-style-type: none"> <li>Solving Quadratic Equations Using the Quadratic Formula – Part 1</li> <li>Solving Quadratic Equations Using the Quadratic Formula – Part 2</li> </ul>	Quadratic Formula <a href="#">Khan Academy</a>

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Quarter 2 Oct 15 – Dec 20	1 10/15 – 10/18	<ul style="list-style-type: none"> <li>• Teacher Planning – 10/14</li> <li>• PSAT – 10/16</li> <li>• Review</li> <li>• Assessment</li> </ul>	
	2 10/21 – 10/25	<b>Unit 4: Quadratic Equations and Functions – Part 2</b> <ul style="list-style-type: none"> <li>• Graphing Quadratic Functions in Standard Form</li> <li>• Graphing Quadratic Functions in Vertex Form – Part 1</li> </ul>	Parabolas in Standard Form <a href="#">Khan Academy</a> Transformations of Quadratics <a href="#">Youtube</a> Parabolas in Vertex Form <a href="#">Khan Academy</a>
	3 10/28 – 11/1	<ul style="list-style-type: none"> <li>• Graphing Quadratic Functions in Vertex Form – Part 2</li> <li>• Writing Quadratic Equations in Vertex Form from a Graph</li> </ul>	
	4 11/4 – 11/8	<ul style="list-style-type: none"> <li>• Converting Quadratic Equations</li> <li>• Writing Quadratic Equations When Given a Focus and Directrix</li> </ul>	Completing the Square <a href="#">Khan Academy</a> Focus and Directrix <a href="#">Khan Academy</a>
	5 11/12 – 11/15	<ul style="list-style-type: none"> <li>• Veterans Day 11/11</li> <li>• Circles in the Coordinate Plane: Standard Form</li> <li>• Circles in the Coordinate Plane: General Form</li> </ul>	Circles <a href="#">Khan Academy</a>
	6 11/18 – 11/22	<ul style="list-style-type: none"> <li>• Systems of Equations with Quadratics – Part 1</li> <li>• Systems of Equations with Quadratics – Part 2</li> <li>• Systems of Equations with Other Quadratic Equations</li> </ul>	Solving Non-Linear Systems <a href="#">Khan Academy</a>
	7 11/25 – 11/26	Thanksgiving Holiday 11/27 - 11/29 <ul style="list-style-type: none"> <li>• Review</li> <li>• Assessment</li> </ul>	
	8 12/2 – 12/6	<b>Unit 5: Polynomial Functions</b> <ul style="list-style-type: none"> <li>• Polynomial Identities – Part 1</li> <li>• Polynomial Identities – Part 2</li> <li>• Understanding Zeros of Polynomials</li> <li>• Factoring Polynomials</li> </ul>	Long Division <a href="#">Khan Academy</a> Synthetic Division <a href="#">Khan Academy</a> Factoring Sum of Cubes <a href="#">Khan Academy</a> Factoring Difference of Cubes <a href="#">Khan Academy</a>
	9 12/9 – 12/13	<ul style="list-style-type: none"> <li>• Sketching Graphs of Polynomials</li> <li>• Review</li> <li>• Assessment</li> <li>• Standards Review</li> </ul>	Graphs of Polynomials <a href="#">Khan Academy</a>
	10 12/16 – 12/20	<ul style="list-style-type: none"> <li>• Standards Review</li> <li>• Midterm Exams</li> </ul>	

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Quarter 3 Jan 6 – Mar 12	1 1/6– 1/10	<b>Unit 6: Functions</b> <ul style="list-style-type: none"> <li>Using Division to Rewrite Rational Expressions</li> <li>Using Synthetic Division to Rewrite Rational Expressions</li> <li>Assessment</li> </ul>	Long Division <a href="#">Khan Academy</a> Synthetic Division <a href="#">Khan Academy</a> Graphing Rational Functions <a href="#">Khan Academy</a>
	2 1/13 – 1/17	<b>Unit 7: Rational Expressions and Equations</b> <ul style="list-style-type: none"> <li>The Remainder Theorem</li> <li>Graphing Rational Functions</li> </ul>	
	3 1/21 – 1/24	Martin Luther King Jr. Holiday 1/20 <ul style="list-style-type: none"> <li>Review</li> <li>Assessment</li> </ul> <b>Unit 8: Expressions and Equations with Radicals and Rational Exponents</b> <ul style="list-style-type: none"> <li>Expressions with Radicals and Rational Exponents – Part 1</li> </ul>	Radical Expressions & Rational Exponents <a href="#">Khan Academy</a>
	4 1/27 – 1/30	<ul style="list-style-type: none"> <li>Expressions with Radicals and Rational Exponents – Part 2</li> <li>Graphing Square Root and Cube Root Functions – Part 1</li> </ul> Teacher Inservice 1/31	Radical Functions <a href="#">Khan Academy</a>
	5 2/3 – 2/7	<ul style="list-style-type: none"> <li>Graphing Square Root and Cube Root Functions – Part 2</li> <li>Review</li> <li>Assessment</li> </ul>	Square Root <a href="#">Youtube</a> Cube Root <a href="#">Youtube</a>
	6 2/10 – 2/14	<b>Unit 9: Exponential &amp; Logarithmic Functions</b> <ul style="list-style-type: none"> <li>Real-World Exponential Growth and Decay – Part 1</li> <li>Real-World Exponential Growth and Decay – Part 2</li> <li>Interpreting Exponential Equations</li> </ul>	Exponential Growth/Decay Functions <a href="#">Khan Academy</a>
	7 2/18 – 2/21	Presidents Day Holiday 2/17 <ul style="list-style-type: none"> <li>Common and Natural Logarithms</li> <li>Comparing Functions</li> </ul>	Graphing Exponential <a href="#">Khan Academy</a> Logarithmic Functions <a href="#">Khan Academy</a> Properties of Logs <a href="#">Khan Academy</a> Exponential/Log Equations <a href="#">Khan Academy</a> Natural Base, $e$ <a href="#">Khan Academy</a>
	8 2/24 – 2/28	<ul style="list-style-type: none"> <li>Comparing Linear, Quadratic, and Exponential Functions – Part 1</li> <li>Comparing Linear, Quadratic, and Exponential Functions – Part 2</li> </ul>	
	9 3/2 – 3/6	<ul style="list-style-type: none"> <li>Review</li> <li>Assessment</li> </ul>	
	10 3/9 – 3/12	<b>Unit 10: Sequences and Series</b> <ul style="list-style-type: none"> <li>Geometric Sequences</li> <li>Comparing Arithmetic and Geometric Sequences</li> </ul>	

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Quarter 4 Mar 23 – May 27	1 3/16 – 3/20	<ul style="list-style-type: none"> <li>• <b>SPRING BREAK – NO SCHOOL</b></li> </ul>	
	2 3/23 – 3/27	<ul style="list-style-type: none"> <li>• Introduction to Geometric Series – Part 1</li> <li>• Introduction to Geometric Series – Part 2</li> <li>• Sum of Geometric Series</li> </ul>	
	3 3/30 – 4/3	<ul style="list-style-type: none"> <li>• Calculating Loan Payments</li> <li>• Review</li> <li>• Assessment</li> </ul>	
	4 4/6 – 4/9	<b>Unit 11: Probability</b> <ul style="list-style-type: none"> <li>• Probability and the Addition Rule – Part 1</li> <li>• Probability and the Addition Rule – Part 2</li> </ul> Holiday 4/10	
	5 4/14 – 4/17	Holiday 4/13 <ul style="list-style-type: none"> <li>• Standards Review</li> </ul>	
	6 4/20 – 4/24	<ul style="list-style-type: none"> <li>• DISTRICT FINAL EXAMS</li> </ul>	
	7 4/27 – 5/1	<ul style="list-style-type: none"> <li>• Probability and Independence</li> <li>• Conditional Probability</li> <li>• Two-Way Frequency Tables – Part 1</li> <li>• Two-Way Frequency Tables – Part 2</li> </ul>	Independent/Dependent Events <a href="#">Khan Academy</a> Conditional Probability <a href="#">Khan Academy</a> Two-way Tables <a href="#">Khan Academy</a>
	8 5/4 – 5/8	<ul style="list-style-type: none"> <li>• Empirical and Theoretical Probability</li> <li>• Review</li> <li>• Assessment</li> </ul>	
	9 5/11 – 5/15	<b>Unit 12: Statistics and Parameters</b> <ul style="list-style-type: none"> <li>• Statistics and Parameters</li> <li>• Statistical Studies – Part 1</li> <li>• Statistical Studies – Part 2</li> <li>• The Normal Distribution – Part 1 and 2</li> </ul>	Survey/Observational Study/Experiment <a href="#">Youtube</a>  Data Gathering <a href="#">Khan Academy</a>
	10 5/18 – 5/22	<ul style="list-style-type: none"> <li>• The Normal Distribution – Part 3</li> <li>• Estimating Means and Proportions</li> <li>• Margin of Error When Estimating Population Means</li> <li>• Comparing Treatments – Part 1 and 2</li> <li>• Interpreting Data</li> </ul>	Margin of Error <a href="#">Khan Academy</a>

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	11 5/26 – 5/27	Memorial Day – 5/25 <ul style="list-style-type: none"><li>• Review</li><li>• Assessment</li></ul>	
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