

**Please Note:**

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**Publisher Resource:**

[HMH \(Holt McDougal\)](#) (use student Active Directory)

**Other Course Supplemental Resources:**

[Math Nation](#) (use student Active Directory)

[Algebra 2](#) - Khan Academy

[IXL Math – High School Standards](#)

**Standards Practice: (Although the Algebra 2 FSA EOC will not be administered, these links help students practice the rigor of the course standards and how they will be assessed.)**

[Mathematics Practice Tests and Answer Keys – PARCC \(Partnership for Assessment of Readiness for College and Careers\)](#)

[Additional Practice of Course Standards](#)

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# Algebra 2

2018 – 2019

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 13	1 8/10	<ul style="list-style-type: none"> <li>Syllabus, Class Intro, Books, Etc.</li> </ul>	
	2 8/13 – 8/17	<ul style="list-style-type: none"> <li><b>Unit 1 – Linear Function and Arithmetic Sequences and Series</b></li> <li>Rate of Change/Slope &amp; Writing Linear Equations &amp; Graphing</li> <li>Linear Equations Review</li> </ul>	Rate of Change <a href="#">Khan Academy</a> Linear Equations <a href="#">Khan Academy</a>
	3 8/20 – 8/24	<ul style="list-style-type: none"> <li>Lesson 9.1 Introduction to Sequences</li> <li>Lesson 9.2 Arithmetic Series and Summation notation</li> <li>Lesson 9.3 Arithmetic Sequences and Series</li> <li>Assessment</li> </ul>	Lesson 9.1 <a href="#">Khan Academy</a> Lesson 9.2 <a href="#">Khan Academy</a> Lesson 9.3 <a href="#">Khan Academy</a>
	4 8/27 – 8/31	<ul style="list-style-type: none"> <li>Solving Systems of Equations Graphically and Algebraically</li> <li>Solving Systems of Inequalities</li> <li>Solving Systems of Equations in Three Variables</li> </ul>	Solving Systems of Equations Graphically <a href="#">Khan Academy</a> Solving Systems of Equations Algebraically <a href="#">Khan Academy</a> Solving Systems of Equations in Three Variables
	5 9/4 – 9/7	<ul style="list-style-type: none"> <li>Lesson 6.3 Piece-wise Functions</li> <li>Lesson 1.2 Parent Functions</li> <li>Absolute Value Function</li> <li>Graphing Linear and Absolute Value Inequalities</li> </ul>	Lesson 1.2 <a href="#">Virtual Nerd</a> <a href="#">Khan Academy- Absolute Value</a> <a href="#">Khan Academy- Graphing Non-linear Piecewise Functions</a>
	6 9/10 – 9/14	<ul style="list-style-type: none"> <li>Review and Assessment of UNIT 1</li> <li><b>Unit 2 – Quadratic Functions</b></li> <li>Lesson 2.1 Transformations of Quadratic Functions</li> <li>Lesson 2.2 Properties of Quadratic Functions in Standard Form</li> </ul>	Lesson 2.1 <a href="#">Youtube</a> Lesson 2.2 <a href="#">Khan Academy</a> Lesson 2.3 <a href="#">Solving Quadratics by Graphing and Factoring</a>
	7 9/17 – 9/21	<ul style="list-style-type: none"> <li>Lesson 2.3 Solving Quadratics by Graphing and Factoring</li> <li>Assessment</li> <li>Lesson 2.4 Completing the Square</li> </ul>	<a href="#">Khan Academy -Solving Quadratics by Factoring</a> Lesson 2.4 <a href="#">Completing the Square</a>
	8 9/24 – 9/28	<ul style="list-style-type: none"> <li>Lesson 2.4 Completing the Square</li> <li>Lesson 2.5 Complex Numbers</li> <li>Lesson 2.9 Operations on Complex Numbers</li> </ul>	Lesson 2.4 <a href="#">Completing the Square</a> Lesson 2.5 <a href="#">Khan Academy</a> Lesson 2.9 <a href="#">Khan Academy</a>
	9 10/1 – 10/5	<ul style="list-style-type: none"> <li>Lesson 2.6 The Quadratic Formula</li> <li>Lesson 2.7 Quadratic Inequalities</li> </ul>	Lesson 2.6 <a href="#">Khan Academy</a> Lesson 2.7 <a href="#">Quadratic Inequalities</a>

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2018 – 2019

		<ul style="list-style-type: none"> <li>• Review</li> </ul>	
	<p style="text-align: center;">10 10/8 – 10/12</p>	<ul style="list-style-type: none"> <li>• Assessment</li> <li>• Lesson 12.7 Solving Non-Linear Systems</li> </ul>	Lesson 12.7 <a href="#">Khan Academy</a>

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2018 – 2019

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Quarter 2 Oct 17 – Dec 21	1 10/16 – 10/19	<ul style="list-style-type: none"> <li>• Lesson 12.5 Parabolas (Focus and Directrix)</li> <li>• Review</li> <li>• Cumulative Assessment Unit 2 Quadratics</li> </ul>	Lesson 12.5 <a href="#">Khan Academy</a>
	2 10/22 – 10/26	<ul style="list-style-type: none"> <li>• <b>Unit 3 – Polynomial Functions</b></li> <li>• Lesson 3.1 Polynomials</li> <li>• Lesson 3.2 Multiplying Polynomials</li> <li>• Lesson 3.3 Dividing Polynomials</li> </ul>	Lesson 3.1 <a href="#">Khan Academy</a> Lesson 3.2 <a href="#">Khan Academy</a> Lesson 3.3 <a href="#">Khan Academy</a>
	3 10/29 – 11/2	<ul style="list-style-type: none"> <li>• Assessment</li> <li>• Lesson 3.4 Factoring Polynomials</li> </ul>	Lesson 3.4 <a href="#">Khan Academy</a>
	4 11/5 – 11/9	<ul style="list-style-type: none"> <li>• Lesson 3.5 Finding Real Roots of Polynomial Functions</li> <li>• Lesson 3.7 Investigating Graphs of Polynomial Functions</li> </ul>	Lesson 3.5 <a href="#">Youtube</a> Lesson 3.7 <a href="#">Khan Academy</a>
	5 11/13 – 11/16	<ul style="list-style-type: none"> <li>• Review</li> <li>• Assessment Unit 3</li> <li>• <b>Unit 4 – Rational Functions</b></li> <li>• Lesson 5.2 Multiplying and Dividing Rational Functions</li> </ul>	<a href="#">Lesson 5.2 Multiplying and Dividing Rational Functions</a>
	6 11/19 – 11/20	<ul style="list-style-type: none"> <li>• Lesson 5.2 Multiplying and Dividing Rational Functions</li> </ul>	<a href="#">Lesson 5.2 Multiplying and Dividing Rational Functions</a>
	7 11/26 – 11/30	<ul style="list-style-type: none"> <li>• Lesson 5.3 Adding and Subtracting Rational Functions</li> <li>• Lesson 5.4 Rational Functions</li> </ul>	Lesson 5.3 <a href="#">Khan Academy</a> Lesson 5.4 <a href="#">Khan Academy</a>
	8 12/3 – 12/7	<ul style="list-style-type: none"> <li>• Lesson 5.4 Rational Functions</li> <li>• Lesson 5.5 Solving Rational Equations and Inequalities</li> </ul>	Lesson 5.4 <a href="#">Khan Academy</a> Lesson 5.5 <a href="#">Khan Academy</a>
	9 12/10 – 12/14	<ul style="list-style-type: none"> <li>• Review</li> <li>• Unit 4 Assessment</li> <li>• Standards Review</li> </ul>	
	10 12/17 – 12/21	<ul style="list-style-type: none"> <li>• Midterm Exams</li> </ul>	

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	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 8 – Mar 15	1 1/7 – 1/11	<ul style="list-style-type: none"> <li>• <b>Unit 5 – Properties of Functions, Rational Exponents &amp; Radical Functions</b></li> <li>• Lesson 6.5 Operations with Functions</li> <li>• Lesson 6.4 Transforming Functions</li> <li>• Lesson 6.6 Functions and Their Inverses</li> </ul>	Lesson 6.5 <a href="#">Youtube</a> Lesson 6.4 <a href="#">Youtube</a> Lesson 6.6 <a href="#">Khan Academy</a>
	2 1/14 – 1/18	<ul style="list-style-type: none"> <li>• Review</li> <li>• Assessment</li> <li>• Lesson 5.6 Radical Expressions and Rational Exponents</li> </ul>	Lesson 5.6 <a href="#">Radical Expressions and Radical Exponents</a>
	3 1/22 – 1/25	<ul style="list-style-type: none"> <li>• Lesson 5.6 Radical Expressions and Rational Exponents</li> <li>• Assessment</li> <li>• Lesson 5.7 Radical Functions (Graphing with Transformations)</li> </ul>	Lesson 5.6 <a href="#">Radical Expressions and Radical Exponents</a>  Lesson 5.7 <a href="#">Khan Academy</a>
	4 1/28 – 2/1	<ul style="list-style-type: none"> <li>• Lesson 5.8 Solving Radical Equations</li> <li>• Assessment Unit 5</li> <li>• <b>Unit 6 – Exponential and Logarithmic Functions (Include Geometric Sequences and Series)</b></li> <li>• Lesson 4.1 Exponential Functions, Growth and Decay</li> </ul>	Lesson 5.8 <a href="#">Khan Academy</a>  <a href="#">Lesson 4.1</a>
	5 2/4 – 2/8	<ul style="list-style-type: none"> <li>• Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Exponential functions)</li> <li>• Lesson 9.4 Geometric Sequences and Series</li> </ul>	Lesson 4.7 <a href="#">Youtube</a>  Lesson 9.4 <a href="#">Khan Academy</a>
	6 2/11 – 2/14	<ul style="list-style-type: none"> <li>• Lesson 9.4 Geometric Sequences and Series</li> <li>• Lesson 4.5 Exponential Functions</li> <li>• Assessment</li> </ul>	Lesson 9.4 <a href="#">Khan Academy</a> Lesson 4.5 <a href="#">Khan Academy</a>
	7 2/19 – 2/22	<ul style="list-style-type: none"> <li>• Lesson 4.2 Inverses of Relations and Functions</li> <li>• Lesson 4.3 Logarithmic Functions</li> <li>• Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Logarithmic Functions)</li> </ul>	Lesson 4.2 <a href="#">Khan Academy</a> Lesson 4.3 <a href="#">Khan Academy</a> Lesson 4.7 <a href="#">Youtube</a>
	8 2/25 – 3/1	<ul style="list-style-type: none"> <li>• Lesson 4.4 Properties of Logarithms</li> <li>• Lesson 4.5 Exponential and Logarithmic Functions</li> <li>• Lesson 4.6 The Natural Base E</li> </ul>	Lesson 4.4 <a href="#">Khan Academy</a> Lesson 4.5 <a href="#">Khan Academy</a> <a href="#">Lesson 4.6</a>
	9 3/4 – 3/8	<ul style="list-style-type: none"> <li>• Lesson 4.6 The Natural Base E</li> <li>• Review</li> <li>• Assessment Unit 6</li> <li>• <b>Unit 7 - Probability</b></li> </ul>	<a href="#">Lesson 4.6</a>

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2018 – 2019

		<ul style="list-style-type: none"> <li>Lesson 7.1 Fundamental Counting Principle</li> </ul>	Lesson 7.1 <a href="#">Khan Academy</a>
	10 3/11 – 3/14	<ul style="list-style-type: none"> <li>Supplemental Lesson Set Theory and Venn Diagrams</li> <li>Lesson 7.2 Theoretical and Experimental Probability</li> <li>Lesson 7.3 Independent and Dependent Events</li> </ul>	Lesson 7.2 <a href="#">Khan Academy</a> Lesson 7.3 <a href="#">Khan Academy</a>

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Quarter 4 Mar 19 – May 24	1 3/18 – 3/22	<b>SPRING BREAK – NO SCHOOL</b>	
	2 3/25 – 3/29	<ul style="list-style-type: none"> <li>Lesson 7.5 Compound Events</li> <li>Lesson 7.4 Two-Way Tables</li> <li>Review</li> <li>Assessment Unit 7</li> </ul>	Lesson 7.5 <a href="#">Khan Academy</a> Lesson 7.4 <a href="#">Khan Academy</a>
	3 4/1 – 4/5	<ul style="list-style-type: none"> <li><b>Unit 8 Data Analysis and Statistics</b></li> <li>Lesson 8.2 Data Gathering</li> <li>Lesson 8.3 Surveys, Experiments, and Observational Studies</li> <li>Lesson 8.1 Measures of Central Tendency and Variation</li> <li>Supplemental lesson on Distributions of Data (Box and Whisker plot, Histograms, &amp; Skewed vs Symmetric Data)</li> </ul>	Lesson 8.2 <a href="#">Khan Academy</a> Lesson 8.3 <a href="#">Youtube</a> Lesson 8.1 <a href="#">Khan Academy</a>
	4 4/8 – 4/12	<ul style="list-style-type: none"> <li>Extension on Normal Distributions (p. 594)</li> <li>Lesson 8.7 Fitting to a Normal Distribution</li> <li>Review</li> <li>Assessment Unit 8</li> </ul>	Lesson 8.7 <a href="#">Khan Academy</a>
	5 4/15 – 4/18	<ul style="list-style-type: none"> <li><b>Unit 9 – Trigonometric Functions</b></li> <li>Lesson 10.1 Right-Angle Trigonometry</li> <li>Lesson 10.2 Angles of Rotation</li> </ul>	Lesson 10.1 <a href="#">Khan Academy</a> Lesson 10.2 <a href="#">Khan Academy</a>
	6 4/22 – 4/26	<ul style="list-style-type: none"> <li>Lesson 10.3 The Unit Circle</li> <li>Assessment</li> </ul>	Lesson 10.3 <a href="#">Khan Academy</a>
	7 4/29 – 5/3	<ul style="list-style-type: none"> <li>Lesson 11.1 Graphs of Sine and Cosine</li> <li>11.3 Fundamental Trigonometric Identities (Pythagorean Identities ONLY)</li> </ul>	Lesson 11.1 <a href="#">Khan Academy</a> Lesson 11.3 <a href="#">Khan Academy</a>
	8 5/6 – 5/10	<ul style="list-style-type: none"> <li>Review</li> <li>Assessment Unit 9</li> </ul>	
	9 5/13 – 5/17	<ul style="list-style-type: none"> <li>Standards Review</li> </ul>	
	10 5/20 – 5/24	<ul style="list-style-type: none"> <li>Final Exams</li> </ul>	

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