## Please Note:

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Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

## **Publisher Resource:**

<u>Pearson</u> (use your active directory)

## **Other Course Supplemental Resources:**

Khan Academy (Algebra 2; does not support Internet Explorer)

Math Nation (Clever – use your active directory; does not support Internet Explorer)

Math Planet (Algebra 2)

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	Week	Major Concepts / Topics	Possible Resources
	1	1-1 Key Features of Functions	Transformations of Functions – Khan Academy
	8/10 – 8/14	1-2 Transformations of Functions	
	2	1-3 Piecewise Defined Functions	Arithmetic Sequences - Khan Academy
	8/17 – 8/21	Assessment	Arithmetic Series – <u>Khan Academy</u>
	0/1/ - 0/21	1-4 Arithmetic Sequences and Series	
	3	1-4 Arithmetic Sequences and Series	Arithmetic Sequences - Khan Academy
	8/24 – 8/28	Review	Arithmetic Series – <u>Khan Academy</u>
	0/24 0/20	Assessment	
	4	1-5 Solving Equations and Inequalities by Graphing	
	8/31 – 9/4	1-6 Linear Systems	
		Labor Day Holiday – 9/7	
	5 9/7 – 9/11	Mathematical Modeling in 3 Acts: Current Events	
Quarter 1		enVision STEM Project	
Aug 10 – Oct 9		Assessment	
		2-1 Vertex Form of a Quadratic Function	
	6	2-1 Vertex Form of a Quadratic Function	
	9/14 – 9/18	2-2 Standard Form of a Quadratic Function	
	-,-: 0,-0	2-3 Factored Form of a Quadratic Function	
	7 9/21 – 9/25	2-3 Factored Form of a Quadratic Function	
		Assessment	
		2-4 Complex Numbers and Operations	
	8 9/28 – 10/2	2-4 Complex Numbers and Operations	
		Mathematical Modeling in 3 Acts: Swift Kick	
		2-5 Completing the Square	
		2-6 The Quadratic Formula and the Discriminant	
	9 10/5 – 10/9	2-6 The Quadratic Formula and the Discriminant	
		Assessment	
	, , , , ,	2-7 Geometric Properties of Parabolas	

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	1 10/12 – 10/16	<ul> <li>Teacher Planning Day 10/12</li> <li>PSAT 10/142-7</li> <li>Geometric Properties of Parabolas</li> </ul>	
		<ul> <li>2.8 Linear-Quadratic Systems</li> <li>Assessment</li> </ul>	Cranking Dalumanials Whom Academy
	2 10/19 – 10/23	<ul> <li>3-1 Graphing Polynomial Functions</li> <li>3-2 Adding, Subtracting, and Multiplying Polynomials</li> <li>Assessment</li> </ul>	Graphing Polynomials – Khan Academy
	3 10/26 – 10/30	<ul><li>3-3 Polynomial Identities</li><li>3-4 Dividing Polynomials</li></ul>	Polynomial Identities – <u>Khan Academy</u>
Quarter 2	4 11/2 – 11/6	<ul> <li>3-5 Zeros of Polynomial Functions</li> <li>Mathematical Modeling in 3 Acts: What are the Rules?</li> <li>3-7 Transformations of Polynomial Functions</li> </ul>	Zeros of Polynomials – <u>Khan Academy</u>
Oct 12 – Dec 18	5 11/9 – 11/13	<ul> <li>Veterans Day 11/11</li> <li>Assessment</li> <li>4-1 Inverse Variation and the Reciprocal Function</li> </ul>	
	6 11/16 – 11/20	<ul> <li>4-2 Graphing Rational Functions</li> <li>Assessment</li> <li>Factoring Review</li> </ul>	
	7 11/23 – 11/24	<ul> <li>Factoring Review</li> <li>Thanksgiving Holiday 11/25 - 11/27</li> </ul>	
	8 11/30 – 12/4	<ul> <li>4-5 Solving Rational Equations</li> <li>Assessment</li> </ul>	
	9 12/7 – 12/11 10	<ul> <li>5-1 Nth Roots, Radicals, and Rational Exponents</li> <li>Review for Midterm</li> <li>Review for Midterm</li> </ul>	
	12/14 – 12/18	Midterm Assessment	

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	Week	Major Concepts / Topics	Possible Resources
	1 1/5– 1/8	<ul> <li>5-2 Properties of Exponents and Radicals</li> <li>5-3 Graphing Radical Functions</li> <li>Assessment</li> </ul>	Graphs of Radical Functions – Khan Academy
	2 1/11 – 1/15	<ul> <li>5-4 Solving Radical Functions</li> <li>Mathematical Modeling in 3 Acts: The Snack Shack</li> <li>Assessment</li> </ul>	Solving Square Root Equations – Khan Academy Solving Cube Root Equations – Khan Academy
	3 1/18 – 1/22	<ul> <li>Martin Luther King Jr. Holiday 1/18</li> <li>5-5 Function Operations</li> <li>5-6 Inverse Relations and Functions</li> </ul>	Introduction to Inverse Relationships and Functions – Khan Academy
Quarter 3	4 1/25 – 1/29	<ul> <li>Teacher Inservice 1/29</li> <li>5-6 Inverse Relations and Functions</li> <li>enVision STEM Project</li> <li>Assessment</li> </ul>	Introduction to Inverse Relationships and Functions – <u>Khan Academy</u>
Jan 5 – Mar 11	5 2/1 – 2/5	<ul> <li>6-1 Key Features of Exponential Functions</li> <li>6-2 Exponential Models</li> <li>Asssessment</li> <li>6-7 Geometric Sequences and Series</li> </ul>	Exponential functions – <u>Khan Academy</u> Exponential Models – <u>Khan Academy</u> Geometric Sequence – <u>Khan Academy</u> Geometric Series – <u>Khan Academy</u>
	6 2/8 – 2/12	<ul> <li>6-7 Geometric Sequences and Series</li> <li>Assessment</li> <li>6-3 Logarithms</li> </ul>	Geometric Sequence – <u>Khan Academy</u> Geometric Series – <u>Khan Academy</u> Introduction to Logarithms – <u>Khan Academy</u>
	7 2/15 – 2/19	<ul> <li>Presidents Day Holiday 2/15</li> <li>6-3 Logarithms</li> <li>6-4 Logarithm Functions</li> <li>Assessment</li> </ul>	Introduction to Logarithms – <u>Khan Academy</u> Logarithmic Functions – <u>Khan Academy</u>
	8 2/22 – 2/26	<ul><li>6-5 Properties of Logarithms</li><li>6-6 Exponential and Logarithmic Equations</li></ul>	Graphs of Radical Functions – Khan Academy
	9 3/1 – 3/5	<ul> <li>Assessment</li> <li>9-1 Probability Events</li> <li>9-2 Conditional Probability</li> </ul>	

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	10	•	9-2 Conditional Probability	
	3/8 – 3/11	•	Assessment	

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	Week	Major Concepts / Topics	Possible Resources
	1 3/15 – 3/19	SPRING BREAK – NO SCHOOL	
	2 3/22 – 3/26	<ul> <li>8-1 Statistical Questions and Variables</li> <li>8-2 Statistical Studies and Sampling Methods</li> <li>8-3 Data Distributions</li> <li>8-4 Normal Distribution</li> </ul>	
	3 3/29 – 4/2	<ul> <li>8-4 Normal Distribution</li> <li>Assessment</li> <li>8-5 Margin of Error</li> <li>8-6 Testing Hypothesis From Experiments</li> <li>Holiday 4/2</li> </ul>	
Quarter 4 Mar 15 – May 25	4 4/5 – 4/9	<ul> <li>Mathematical Modeling in 3 Acts: Mark and Recapture</li> <li>enVision STEM Project</li> <li>Assessment</li> </ul>	
	5 4/12 – 4/16	<ul> <li>7-1 Trigonometric Functions and Acute Angles</li> <li>7-2 Angles and the Unit Circle</li> </ul>	Angles and Unit Circle – Khan Academy
	6 4/19 – 4/23	<ul> <li>7-3 Trigonometric Functions and Real Numbers</li> <li>Assessment</li> <li>7-4 Graphing Sine and Cosine Functions</li> </ul>	Trigonometric Functions – Khan  Academy  Graphing Sine and Cosine Functions –  Khan Academy
	7 4/26 – 4/30	<ul> <li>7-4 Graphing Sine and Cosine Functions</li> <li>Mathematical Modeling in 3 Acts: What Note was That?</li> <li>7-6 Translating Trigonometric Functions</li> </ul>	Translating Trigonometric Functions – <u>Khan Academy</u>
	8 5/3 – 5/7	Remediation	
	9 5/10 – 5/14	Course Standards Review	

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10	•	Course Standards Review	
5/17 – 5/21	•	Final Exams	
11	•	Final Exams	
5/24 – 5/25			

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