

**Please Note:**

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**Publisher Resource:**

[Precalculus with Limits](#) (student logins will be provided)

[Videos by Chapter and Section](#)

**Other Course Supplemental Resources:**

[LarsonPrecalculus.com](#) (videos, pre- and post- tests by chapter)

[Khan Academy Pre-Calculus](#)

[Free Pre-Calculus Math Videos](#)

[IXL Pre-Calculus](#)

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 12 – Oct 11	1 8/12 – 8/16	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Introductions/Syllabus</li> <li>• Section 4.1 – Radian and Degree Measure</li> <li>• Section 4.1 – Arc Length, Terminal and Coterminal angles</li> <li>• Section 4.3 – Right Triangle Trigonometry</li> <li>• Section 4.2 – Unit Circle</li> </ul>	Radians and Degrees - <a href="#">Khan Academy</a> Special Right Triangles Proof - <a href="#">Khan Academy</a> Deprecated Radians on the Unit Circle - <a href="#">Khan Academy</a>
	2 8/19 – 8/23	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Section 4.2 – Unit Circle</li> <li>• Section 4.3 – Identities</li> <li>• Assessment</li> </ul>	Deprecated Radians on the Unit Circle - <a href="#">Khan Academy</a> Special Right Triangles Proof - <a href="#">Khan Academy</a>
	3 8/26 – 8/30	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Section 4.4 – Trigonometric Functions of Any Angle</li> <li>• Assessment</li> </ul>	Graph Sinusoidal Functions - <a href="#">Khan Academy</a>
	4 9/2 – 9/6	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Section 4.5 – Graphs of Sine and Cosine Functions</li> <li>• Section 4.6 – Graphs of Other Trigonometric Functions</li> <li>• Assessment</li> </ul>	Graph Sinusoidal Functions - <a href="#">Khan Academy - Graph sinusoidal functions</a> Graph of $y=\tan(x)$ - <a href="#">Khan Academy</a>
	5 9/9 – 9/13	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Section 4.6 – Graphs of Other Trigonometric Functions</li> <li>• Section 4.7 – Inverse Trigonometric Functions</li> <li>• Assessment</li> </ul>	Trigonometric Equations and Identities - <a href="#">Khan Academy</a>
	6 9/16 – 9/20	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Section 4.7 – Inverse Trigonometric Functions</li> <li>• Section 4.8 – Applications and Models</li> <li>• Assessment</li> </ul>	Trigonometric Equations and Identities - <a href="#">Khan Academy</a>
	7 9/23 – 9/27	<b>Unit 1 – Chapter 4 – Trigonometric Functions</b> <ul style="list-style-type: none"> <li>• Review</li> <li>• Assessment</li> <li>• Section 5.1 – Using Fundamental Identities</li> </ul>	See links for Khan Academy, Sections 4.1 - 4.7
	8 9/30 – 10/4	<b>Unit 2 – Chapter 5 – Analytic Trigonometry</b> <ul style="list-style-type: none"> <li>• Section 5.1 – Using Fundamental Identities</li> <li>• Section 5.2 – Verifying Trigonometric Identities</li> <li>• Assessment</li> </ul>	Proof of the Sine Angle Addition Identity - <a href="#">Khan Academy</a>

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	9 10/7 – 10/11	<b><i>Unit 2 – Chapter 5 – Analytic Trigonometry</i></b> <ul style="list-style-type: none"><li>• Section 5.2 – Verifying Trigonometric Identities</li><li>• Assessment</li></ul>	Proof of the Cosine Angle Additional Identity - <a href="#">Khan Academy</a>
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Quarter 2 Oct 15 – Dec 20	1 10/14 – 10/18	<b>Unit 2 – Chapter 5 – Analytic Trigonometry</b> <ul style="list-style-type: none"> <li>Section 5.3 – Solving Trigonometric Equations</li> <li>Assessment</li> </ul>	Solving Trigonometric Equations - <a href="#">SOS Math</a>
	2 10/21 – 10/25	<b>Unit 2 – Chapter 5 – Analytic Trigonometry</b> <ul style="list-style-type: none"> <li>Section 5.3 – Solving Trigonometric Equations</li> <li>Section 5.4 – Sum and Difference Formulas</li> <li>Section 5.5 – Multiple Angle Formulas: Double-Angle and Half-Angle</li> <li>Assessment</li> </ul>	Using Trigonometric Addition Identities: Finding Side Length - <a href="#">Khan Academy</a> Using the Cosine Double-Angle Identity - <a href="#">Khan Academy</a>
	3 10/28 – 11/1	<b>Unit 2 – Chapter 5 – Analytic Trigonometry</b> <ul style="list-style-type: none"> <li>Section 5.5 – Multiple Angle Formulas: Double-Angle and Half-Angle</li> <li>Assessment</li> </ul>	Using the Cosine Double-Angle Identity - <a href="#">Khan Academy</a>
	4 11/4 – 11/8	<b>Unit 3 – Chapter 6 – Additional Topics in Trigonometry</b> <ul style="list-style-type: none"> <li>Section 6.1 – Law of Sines</li> <li>Assessment</li> </ul>	Solving for a Side with the Laws of Sines - <a href="#">Khan Academy</a>
	5 11/11 – 11/15	<b>Unit 3 – Chapter 6 – Additional Topics in Trigonometry</b> <ul style="list-style-type: none"> <li>Section 6.2 – Law of Cosines</li> <li>Assessment</li> </ul>	Solving Triangle Using the Law of Cosines - <a href="#">Khan Academy</a>
	6 11/18 – 11/22	<b>Unit 3– Chapter 6 – Vectors</b> <ul style="list-style-type: none"> <li>Assessment 6.1 – 6.2</li> <li>Section 6.3 – Vectors in the Plane</li> </ul>	Vector Intro for Linear Algebra - <a href="#">Khan Academy</a>
	7 11/25 – 11/26	<b>Unit 3 – Chapter 6 – Vectors</b> <ul style="list-style-type: none"> <li>Section 6.4 – Vectors and Dot Product</li> <li>Assessment</li> </ul>	Vector Dot Product and Vector Length - <a href="#">Khan Academy</a>
	8 12/2 – 12/6	<b>Unit 3 – Chapter 6 – Vectors</b> <ul style="list-style-type: none"> <li>Section 6.4 – Vectors and Dot Product</li> <li>Assessment</li> </ul>	Vector Dot Product and Vector Length - <a href="#">Khan Academy</a>
	9 12/9 – 12/13	<b>Unit 3 – Chapter 6 – Vectors</b> <ul style="list-style-type: none"> <li>Review semester content</li> <li>Assessment</li> </ul>	

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	<p>10 12/16– 12/20</p>	<ul style="list-style-type: none"> <li>• Review semester content</li> <li>• District exams</li> </ul>	
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Quarter 3 Jan 6 – Mar 12	1 1/6– 1/10	<b>Unit 4 – Chapter 1 – Functions and Their Graphs</b> <ul style="list-style-type: none"> <li>Section 1.2 – Functions</li> <li>Section 1.3 – Graphs of Functions</li> <li>Assessment</li> </ul>	Deprecated Domain and Range of Piece-Wise Functions - <a href="#">Khan Academy</a> Shifting and Reflecting Functions - <a href="#">Khan Academy</a>
	2 1/13 – 1/17	<b>Unit 4 – Chapter 1 – Functions and Their Graphs</b> <ul style="list-style-type: none"> <li>Section 1.4 – Shifting, Reflecting, and Stretching Graphs</li> <li>Section 1.5 – Combinations of Functions</li> <li>Section 1.6 – Inverse Functions</li> <li>Assessment</li> </ul>	Adding Functions - <a href="#">Khan Academy</a> Verifying Inverse Functions by Composition - <a href="#">Khan Academy</a>
	3 1/21 – 1/24	<b>Unit 5 – Chapter 2 – Polynomial and Rational Functions</b> <ul style="list-style-type: none"> <li>Section 2.1 – Quadratics</li> <li>Assessment</li> </ul>	Vertex and Axis of Symmetry of a Parabola - <a href="#">Khan Academy</a>
	4 1/27 – 1/30	<b>Unit 5 – Chapter 2 – Polynomial and Rational Functions</b> <ul style="list-style-type: none"> <li>Section 2.2 – Polynomial Functions of Higher Degree</li> <li>Section 2.3 – Real Zeros of Polynomial Functions</li> <li>Assessment</li> </ul>	The Parts of Polynomial Expressions - <a href="#">Khan Academy</a> Zeros of Polynomials and Their Graphs - <a href="#">Khan Academy</a>
	5 2/3 – 2/7	<b>Unit 5 – Chapter 2 – Polynomial and Rational Functions</b> <ul style="list-style-type: none"> <li>Section 2.4 – Complex Numbers</li> <li>Section 2.5 – The Fundamental Theorem of Algebra</li> <li>Section 2.6 – Rational Functions and Asymptotes</li> <li>Review</li> <li>Assessment</li> </ul>	Classify Complex Numbers - <a href="#">Khan Academy</a> The Fundamental Theorem of Algebra - <a href="#">Khan Academy</a> Graphing Rational Functions 2 - <a href="#">Khan Academy</a>
	6 2/10 – 2/14	<b>Unit 5 – Chapter 2 – Polynomial and Rational Functions</b> <ul style="list-style-type: none"> <li>Section 2.6 – Rational Functions and Asymptotes</li> <li>Section 2.7 – Slant Asymptotes &amp; Graphs of Rational Functions</li> <li>Review</li> <li>Assessment</li> </ul>	Graphing Rational Functions 3 - <a href="#">Khan Academy</a>
	7 2/17 – 2/21	<b>Unit 6 – Chapter 11-Limits</b> <ul style="list-style-type: none"> <li>Section 11.1 – Introduction to Limits</li> <li>Section 11.2 – Techniques for Evaluating Limits</li> <li>Assessment</li> </ul>	Intro to Limits - <a href="#">Khan Academy</a> One-Sided Limits from Graphs - <a href="#">Khan Academy</a>
	8 2/24 – 2/28	<b>Unit 6 – Chapter 11 – Limits</b> <ul style="list-style-type: none"> <li>Section 11.2 – Techniques for Evaluating Limits</li> <li>Section 11.3 – The Tangent Line Problem</li> </ul>	Derivative as a Limit - <a href="#">Khan Academy</a> Infinite Limits Introduction - <a href="#">Khan Academy</a>

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		<ul style="list-style-type: none"> <li>Section 11.4 – Limits at Infinity and Limits of Sequences</li> </ul>	
	<p>9 3/2 – 3/6</p>	<p><b>Unit 6 – Chapter 11 – Limits</b></p> <ul style="list-style-type: none"> <li>Section 11.3 – The Tangent Line Problem</li> <li>Review</li> <li>Assessment</li> </ul>	
	<p>10 3/9 – 3/12</p>	<p><b>Unit 7 – Chapter 8 – Binomial Theorem</b></p> <ul style="list-style-type: none"> <li>Section 8.4 – The Binomial Theorem</li> <li>Review</li> <li>Assessment</li> </ul>	<p>Introduction to the Binomial Theorem - <a href="#">Khan Academy</a></p>

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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	<p><b>Unit 8 – Chapter 9 – Conics</b></p> <ul style="list-style-type: none"> <li>• Section 9.1 – Circles</li> <li>• Section 9.1 – Parabolas</li> <li>• Assessment</li> </ul>	Features of a Circle From its Standard Equation - <a href="#">Khan Academy</a> Equation of a Parabola From Focus and Directrix - <a href="#">Khan Academy</a> Foci of an Ellipse - <a href="#">Khan Academy</a>
	3 3/30 – 4/3	<p><b>Unit 8 – Chapter 9 – Conics</b></p> <ul style="list-style-type: none"> <li>• Section 9.2 – Ellipses</li> <li>• Section 9.3 – Hyperbolas</li> <li>• Review</li> <li>• Assessment</li> </ul>	Foci of an Ellipse - <a href="#">Khan Academy</a> Foci of a Hyperbola - <a href="#">Khan Academy</a>
	4 4/6 – 4/9	<p><b>Unit 9 – Trig. Form of Complex Numbers and Polar Coordinates</b></p> <ul style="list-style-type: none"> <li>• Section 9.5 – Polar Coordinates</li> <li>• Assessment</li> <li>• Review course standards</li> </ul>	
	5 4/14 – 4/17	<p><b>Unit 10 – Chapter 3 – Exponential and Logarithmic Functions</b></p> <ul style="list-style-type: none"> <li>• Section 3.1 – Exponential Functions and Their Graphs</li> <li>• Section 3.2 – Logarithmic Functions and Their Graphs</li> <li>• Section 3.3 – Properties of Logarithms</li> </ul>	Exponential and Logarithmic Functions - <a href="#">Khan Academy</a> Properties of Logarithms - <a href="#">Khan Academy</a>
	6 4/20 – 4/24	<p><b>Unit 10 – Chapter 3 – Exponential and Logarithmic Functions</b></p> <ul style="list-style-type: none"> <li>• Section 3.3 – Properties of Logarithms</li> <li>• Section 3.4 – Solving Exponential and Logarithmic Equations</li> <li>• Assess</li> </ul>	Properties of Logarithms - <a href="#">Khan Academy</a>
	7 4/27 – 5/1	<p><b>Unit 10 – Chapter 3 – Exponential and Logarithmic Functions</b></p> <ul style="list-style-type: none"> <li>• Section 3.5 – Exponential and Logarithmic Models</li> <li>• Assess</li> </ul>	Exponential Logarithmic Functions - <a href="#">Khan Academy</a>

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	8 5/4 – 5/8	<i>Review for District Exam</i>	
	9 5/11 – 5/15	<i>District Exams</i>	
	10 5/18 – 5/22	<ul style="list-style-type: none"> <li>Assess</li> </ul>	
	11 5/25 – 5/27	<ul style="list-style-type: none"> <li>Assess</li> </ul>	

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