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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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Pre-Calculus Honors 2020-2021

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 9	1 8/10 – 8/14	***Unit 1 – Chapter 4 – Trigonometric Functions*** • Introductions/Syllabus • Section 4.1 – Radian and Degree Measure • Section 4.1 – Arc Length, Terminal and Coterminal angles • Section 4.3 – Right Triangle Trigonometry • Section 4.2 – Unit Circle	Radians and Degrees - Khan Academy Special Right Triangles Proof - Khan Academy Deprecated Radians on the Unit Circle - Khan Academy
	2 8/17 – 8/21	***Unit 1 – Chapter 4 – Trigonometric Functions*** • Section 4.2 – Unit Circle • Section 4.3 – Identities • Section 4.4 – Trigonometric Functions of Any Angle	Deprecated Radians on the Unit Circle - Khan Academy Special Right Triangles Proof - Khan Academy
	3 8/24 – 8/28	***Unit 1 – Chapter 4 – Trigonometric Functions*** • Section 4.4 – Trigonometric Functions of Any Angle Assessment • Section 4.5 – Graphs of Sine and Cosine Functions	Graph Sinusoidal Functions - Khan Academy
	4 8/31 – 9/4	***Unit 1 – Chapter 4 – Trigonometric Functions*** • Section 4.5 – Graphs of Sine and Cosine Functions • Section 4.6 – Graphs of Other Trigonometric Functions	Graph Sinusoidal Functions - Khan Academy - Graph sinusoidal functions Graph of y=tan(x) - Khan Academy
	5 9/7 – 9/11	• Labor Day Holiday – 9/7 ***Unit 1 – Chapter 4 – Trigonometric Functions*** • Section 4.7 – Inverse Trigonometric Functions • Section 4.8 – Applications and Models Assessment	Trigonometric Equations and Identities - Khan Academy
	6 9/14 – 9/18	***Unit 1 – Chapter 4 – Trigonometric Functions***	Trigonometric Equations and Identities - Khan Academy

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		• Section 4.8 – Applications and Models Assessment	
	7 9/21 – 9/25	***Unit 1 – Chapter 4 – Trigonometric Functions*** • Section 5.1 – Using Fundamental Identities • Section 5.2 – Verifying Trigonometric Identities	See links for Khan Academy, Sections 4.1 - 4.7
	8 9/28 – 10/2	***Unit 2 – Chapter 5 – Analytic Trigonometry*** • Section 5.2 – Verifying Trigonometric Identities • Section 5.3 – Solving Trigonometric Equations Assessment	Proof of the Sine Angle Addition Identity - Khan Academy
	9 10/5 – 10/9	***Unit 2 – Chapter 5 – Analytic Trigonometry*** • Section 5.3 – Solving Trigonometric Equations Assessment	Proof of the Cosine Angle Additional Identity - Khan Academy

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Pre-Calculus Honors 2020-2021

	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 12 – Dec 18	1 10/12 – 10/16	• Teacher Planning Day 10/12 • PSAT 10/14 ***Unit 2 – Chapter 5 – Analytic Trigonometry*** • Section 5.4 – Sum and Difference Formulas • Section 5.5 – Multiple Angle Formulas: Double-Angle and Half-Angle Assessment	Solving Trigonometric Equations - SOS Math
	2 10/19 – 10/23	***Unit 2 – Chapter 5 – Analytic Trigonometry*** • Section 5.5 – Multiple Angle Formulas: Double-Angle and Half-Angle Assessment	Using Trigonometric Addition Identities: Finding Side Length - Khan Academy Using the Cosine Double-Angle Identity - Khan Academy
	3 10/26 – 10/30	***Unit 3 – Chapter 6 – Additional Topics in Trigonometry*** • Section 6.1 – Law of Sines • Section 6.2 – Law of Cosines	Using the Cosine Double-Angle Identity - Khan Academy
	4 11/2 – 11/6	***Unit 3 – Chapter 6 – Additional Topics in Trigonometry*** • Section 6.2 – Law of Cosines Assessment • Section 6.3 – Vectors in the Plane	Solving for a Side with the Laws of Sines - Khan Academy
	5 11/9 – 11/13	• Veterans Day 11/11 ***Unit 3 – Chapter 6 – Vectors*** • Section 6.3 – Vectors in the Plane • Section 6.4 – Vectors and Dot Product Assessment	Solving Triangle Using the Law of Cosines - Khan Academy
	6 11/16 – 11/20	***Unit 3– Chapter 6 – Vectors*** • Section 6.4 – Vectors and Dot Product • Section 6.5 - Trigonometric Form of a Complex Number	Vector Intro for Linear Algebra - Khan Academy

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	7 11/23 – 11/24	***Unit 3 – Chapter 6 – Vectors*** Assessment • Thanksgiving Holiday 11/25 - 11/27	Vector Dot Product and Vector Length - Khan Academy
	8 11/30 – 12/4	***Unit 4– Chapter 8 – Binomial Theorem*** • Section 8.4 – The Binomial Theorem • Review Assessment	Vector Dot Product and Vector Length - Khan Academy
	9 12/7 – 12/11	• Review semester content	
	10 12/14 – 12/18	• Review semester content • District exams	

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Quarter 3 Jan 5 – Mar 11	1 1/5– 1/8	***Unit 5 – Chapter 1 – Functions and Their Graphs*** • Section 1.2 – Functions • Section 1.3 – Graphs of Functions Assessment	Deprecated Domain and Range of Piece-Wise Functions - Khan Academy Shifting and Reflecting Functions - Khan Academy
	2 1/11 – 1/15	***Unit 5 – Chapter 1 – Functions and Their Graphs*** • Section 1.4 – Shifting, Reflecting, and Stretching Graphs • Section 1.5 – Combinations of Functions • Section 1.6 – Inverse Functions Assessment	Adding Functions - Khan Academy Verifying Inverse Functions by Composition - Khan Academy
	3 1/18 – 1/22	• Martin Luther King Jr. Holiday 1/18 ***Unit 6 – Chapter 2 – Polynomial and Rational Functions*** • Section 2.1 – Quadratics Assessment	Vertex and Axis of Symmetry of a Parabola - Khan Academy
	4 1/25 – 1/29	***Unit 6 – Chapter 2 – Polynomial and Rational Functions*** • Section 2.1 – Quadratics • Section 2.2 - Polynomial Functions of Higher Degree • Section 2.3 – Real Zeros of Polynomial Functions Assessment • Teacher Inservice 1/29	The Parts of Polynomial Expressions - Khan Academy Zeros of Polynomials and Their Graphs - Khan Academy
	5 2/1 – 2/5	***Unit 6 – Chapter 2 – Polynomial and Rational Functions*** • Section 2.3 – Real Zeros of Polynomial Functions	Classify Complex Numbers - Khan Academy The Fundamental Theorem of Algebra - Khan Academy Graphing Rational Functions 2 - Khan Academy

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		• Section 2.4 – Complex Numbers • Section 2.5 – The Fundamental Theorem of Algebra	
	6 2/8 – 2/12	***Unit 6 – Chapter 2 – Polynomial and Rational Functions*** • Section 2.6 – Rational Functions and Asymptotes • Section 2.7 – Slant Asymptotes & Graphs of Rational Functions • Review Assessment	Graphing Rational Functions 3 - Khan Academy
	7 2/15 – 2/19	• Presidents Day Holiday 2/15 **Unit 7 – Chapter 11-Limits** • Section 11.1 – Introduction to Limits • Section 11.2 – Techniques for Evaluating Limits	Intro to Limits - Khan Academy One-Sided Limits from Graphs - Khan Academy
	8 2/22 – 2/26	***Unit 7 – Chapter 11 – Limits*** • Section 11.2 – Techniques for Evaluating Limits • Section 11.3 – The Tangent Line Problem • Section 11.4 – Limits at Infinity and Limits of Sequences	Derivative as a Limit - Khan Academy Infinite Limits Introduction - Khan Academy
	9 3/1 – 3/5	***Unit 7 – Chapter 11 – Limits*** • Section 11.3 – The Tangent Line Problem • Section 9.1 - Circles Assessment	
	10 3/8 – 3/11	***Unit 8 – Chapter 9 – Conics*** • Section 9.1 – Parabolas • Section 9.2 – Ellipses	Introduction to the Binomial Theorem - Khan Academy

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Quarter 4 Mar 15 – May 25	1 3/15 – 3/19	• **SPRING BREAK – NO SCHOOL**	
	2 3/22 – 3/26	***Unit 8 – Chapter 9 – Conics/Trig. Form of Complex Numbers and Polar Coordinates*** • Section 9.3 – Hyperbolas • Section 9.5 – Polar Coordinates Assessment	Features of a Circle From its Standard Equation - Khan Academy Equation of a Parabola From Focus and Directrix - Khan Academy Foci of an Ellipse - Khan Academy
	3 3/29 – 4/2	***Unit 8 – Chapter 9 – Conics*** • Review Assessment • Holiday 4/2	Foci of an Ellipse - Khan Academy Foci of a Hyperbola - Khan Academy
	4 4/5 – 4/9	***Unit 9 – Chapter 3 – Exponential and Logarithmic Functions*** • Section 3.1 – Exponential Functions and Their Graphs • Section 3.2 – Logarithmic Functions and Their Graphs	
	5 4/12 – 4/16	***Unit 9 – Chapter 3 – Exponential and Logarithmic Functions*** • Section 3.3 – Properties of Logarithms (change of base only) Assessment • Section 3.3 – Properties of Logarithms (complete)	Exponential and Logarithmic Functions - Khan Academy Properties of Logarithms - Khan Academy
	6 4/19 – 4/23	***Unit 9 – Chapter 3 – Exponential and Logarithmic Functions*** • Section 3.4 – Solving Exponential and Logarithmic Equations • Section 3.5 – Exponential and Logarithmic Models	Properties of Logarithms - Khan Academy

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	7 4/26 – 4/30	***Unit 9 – Chapter 3 – Exponential and Logarithmic Functions*** Assessment • ***Course Review and AP Calculus Preparation***	Exponential Logarithmic Functions - Khan Academy
	8 5/3 – 5/7	• ***Course Review and AP Calculus Preparation***	
	9 5/10 – 5/14	• ***Course Review and AP Calculus Preparation***	
	10 5/17 – 5/21	• ***District Exams***	
	11 5/24 – 5/25	• ***District Exams***	

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