Please Note:

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Publisher Resource:

Pearson (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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Algebra 2 Honors   2021-2022

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 16 – Oct 15	1 8/16 – 8/20	• 1-1 Key Features of Functions	*Unit: functions - Khan Academy*
	2 8/23 – 8/27	• 1-2 Transformations of Functions • 1-3 Piecewise Defined Functions	Identifying function transformations - Khan Academy Shifting functions - Khan Academy
	3 8/30 – 9/3	• 1-4 Arithmetic Sequences and Series • 1-5 Solving Equations and Inequalities by Graphing	Introduction to piecewise functions - Khan Academy Graphs of nonlinear piecewise functions - Khan Academy Intro to arithmetic sequences - Khan Academy
	4 9/6 – 9/10	• Labor Day Holiday – 9/6 • 1-6 Linear Systems	Solving equations by graphing - Khan Academy
	5 9/13 – 9/17	• Interims Issued – 9/14 • Remediate • Review	
	6 9/20 – 9/24	• Assess • 2-1 Vertex Form of a Quadratic Function • 2-2 Standard Form of a Quadratic Function	Vertex form - Khan Academy Graphing quadratics: standard form - Khan Academy
	7 9/27 – 10/1	• 2-3 Factored Form of a Quadratic Function • 2-4 Complex Numbers and Operations	Graphing quadratics in factored form - Khan Academy Unit: Complex numbers - Khan Academy Intro to complex numbers - Khan Academy
	8 10/4 – 10/8	• 2-5 Completing the Square • 2-6 The Quadratic Formula and the Discriminant	Completing the square - Khan Academy Quadratic formula - Khan Academy Using the quadratic formula - Khan Academy
	9 10/11 – 10/15	• PSAT/NMSQT – 10/13 • 2-7 Geometric Properties of Parabolas • 2-8 Linear-Quadratic Systems	Intro to parabolas - Khan Academy

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Algebra 2 Honors 2021-2022

	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 18 – Dec 21	1 10/18 – 10/22	• Teacher Planning Day – 10/18 • Remediate • Review • Assess • 3-1 Graphing Polynomial Functions	*Unit: Polynomial graphs* - *Khan Academy* Graphing polynomials (practice) - Khan Academy
	2 10/25 – 10/29	• Report Cards – 10/26 • 3-2 Adding, Subtracting, and Multiplying Polynomials • 3-3 Polynomial Identities	Adding polynomials - Khan Academy Subtracting polynomials - Khan Academy Multiplying monomials by polynomials - Khan Academy Polynomial identities - Khan Academy
	3 11/1 – 11/5	• 3-4 Dividing Polynomials • 3-5 Zeros of Polynomial Functions	*Unit: Polynomial division* - *Khan Academy* Zeros of polynomials intro - Khan Academy
	4 11/8 – 11/12	• Veterans Day 11/11 • 3-6 Theorems about Roots of Polynomial Equations • 3-7 Transformations of Polynomial Functions	*Unit: Transformations of functions* - *Khan Academy*
	5 11/15 – 11/19	• Interims Issued – 11/16 • Remediate • Review • Assess	
	6 11/22 – 11/26	• Thanksgiving Holiday 11/24 – 11/26 • 4-1 Inverse Variation and the Reciprocal Function	Intro to direct and inverse variation - Khan Academy
	7 11/29 – 12/3	• 4-2 Graphing Rational Functions • 4-3 Multiplying and Dividing Rational Expressions	*Unit: Rational functions* - *Khan Academy*
	8 12/6 – 12/10	• 4-4 Adding and Subtracting Rational Expressions • 4-5 Solving Rational Equations • Remediate • Review	
	9 12/13 – 12/17	• Assess • Standards Review	
	10 12/20 – 12/24	• Second Quarter/First Semester Ends – 12/21 • Winter Break – 12/22 –1/4 • Midterm Assessment	

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Algebra 2 Honors   2021-2022

	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 6 – Mar 10	1 1/5 – 1/7	• Teacher Planning Day – 1/5 • 5-1 Nth Roots, Radicals, and Rational Exponents	*Unit: Rational exponents and radicals* - *Khan Academy* Rewriting quotient of powers - Khan Academy Rewriting mixed radical and exponential expressions - Khan Academy
	2 1/10 – 1/14	• 5-2 Properties of Exponents and Radicals • 5-3 Graphing Radical Functions	Graphs of square root functions - Khan Academy
	3 1/17 – 1/21	• Martin Luther King Jr. Holiday – 1/17 • Report Cards – 1/19 • 5-4 Solving Radical Functions	Intro to square-root equations and extraneous solutions - Khan Academy
	4 1/24 – 1/28	• 5-5 Function Operations • 5-6 Inverse Relations and Functions	
	5 1/31 – 2/4	• Remediate • Review • Assess • 6-1 Key Features of Exponential Functions	
	6 2/7 – 2/11	• Teacher Inservice – 2/7 • Interims Issued – 2/8 • 6-2 Exponential Models	*Unit: Exponential models* - *Khan Academy*
	7 2/14 – 2/18	• 6-3 Logarithms • 6-4 Logarithm Functions	*Unit: Logarithms* - *Khan Academy* Intro to logarithms - Khan Academy
	8 2/21 – 2/25	• Presidents Day Holiday – 2/21 • 6-5 Properties of Logarithms • 6-6 Exponential and Logarithmic Equations	Intro to logarithm properties part 1 - Khan Academy Intro to logarithm properties part 2 - Khan Academy
	9 2/28 – 3/4	• 6-7 Geometric Sequences and Series • Remediate • Review	Geometric sequences (advanced) - Khan Academy

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	10 3/7 – 3/11	• Teacher Planning Day – 3/11 • Assess • 7-1 Trigonometric Functions and Acute Angles • 7-2 Angles and the Unit Circle	Trig values of special angles - Khan Academy Unit circle - Khan Academy

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Quarter 4 Mar 14 – May 31	1 3/14 – 3/18	• **SPRING BREAK – NO SCHOOL**	
	2 3/21 – 3/25	• 7-3 Trigonometric Functions and Real Numbers • 7-4 Graphing Sine and Cosine Functions	Trig functions and right triangle ratios - Khan Academy Graph of y = sin(x) - Khan Academy Intersection points of y = sin(x) and y = cos(x) - Khan Academy
	3 3/28 – 4/1	• Report Cards – 3/29 • 7-5 Graphing Other Trigonometric Functions	Graph of y = tan(x) - Khan Academy
	4 4/4 – 4/8	• 7-6 Translating Trigonometric Functions • Remediate • Review	Transforming sinusoidal graphs - Khan Academy
	5 4/11 – 4/15	• Holiday – 4/15 • Assess • 8-1 Statistical Questions and Variables • 8-2 Statistical Studies and Sampling Methods	Statistical questions - Khan Academy Reasonable samples - Khan Academy
	6 4/18 – 4/22	• Holiday – 4/18 • 8-3 Data Distributions • 8-4 Normal Distributions	*Unit: data distributions - Khan Academy* Normal distribution: Empirical rule - Khan Academy
	7 4/25 – 4/29	• Interims Issued – 4/26 • 8-5 Margin of Error • 8-6 Testing Hypotheses from Experiments • Remediate • Review	Margin of error part 1 - Khan Academy Margin of error part 2 - Khan Academy Simple hypothesis testing - Khan Academy
	8 5/2 – 5/6	• Assess • 9-1 Probability Events	*Unit: Probability - Khan Academy*

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		• 9-2 Conditional Probability	Calculating conditional probability - [Khan Academy](#)
	9 5/9 – 5/13	• 9-3 Permutations and Combinations • 9-4 Probability Distributions • 9-5 Expected Value	Permutation formula - [Khan Academy](#) Intro to combinations - [Khan Academy](#) Probability distribution for random variable - [Khan Academy](#) Mean (expected value) - [Khan Academy](#)
	10 5/16 – 5/20	• 9-6 Probability and Decision Making • Remediate • Review • Assess	
	11 5/23 – 5/27	• Standards Review • Final Exams	
	12 5/30 – 6/2	• Memorial Day Holiday – 5/30 • Standards Review • Final Exams	

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