

Please Note:

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Publisher Resource:

[Mathematics Vision Project](#)

Other Course Supplemental Resources:

[Khan Academy](#)

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

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 12	1 8/10	<ul style="list-style-type: none"> Course Introduction, Policies & Procedures Order of Operations 	
	2 8/13 – 8/17	Unit 1: Linear Functions – Graphing Equations & Inequalities <ul style="list-style-type: none"> Slope Slope-Intercept Form Standard Form 	Slope Khan Academy Slope-Intercept Form Khan Academy Standard Form Khan Academy
	3 8/20 – 8/24	<ul style="list-style-type: none"> Point-Slope Form Graphing Systems of Equations Graphing Inequalities 	Point-Slope Form Khan Academy Systems of Equations Khan Academy Solving Systems of Equations Graphically Khan Academy Graphing Linear Inequalities Khan Academy
	4 8/27 – 8/31	<ul style="list-style-type: none"> Graphing Real-World Applications Comparing Linear Functions (Graphs and Tables) Review Assessment 	Linear Equations Khan Academy
	5 9/4 – 9/7	Unit 2: Linear Functions – Writing Equations & Inequalities <ul style="list-style-type: none"> Slope-Intercept Form Point-Slope Form Standard Form (used in word problem applications) 	Writing Equations Given 2 Points Khan Academy
	6 9/10 – 9/14	<ul style="list-style-type: none"> Real-World Applications Parallel & Perpendicular Lines Arithmetic Sequences 	Parallel & Perpendicular Lines Khan Academy Sequences Khan Academy Arithmetic Sequences Khan Academy
	7 9/17 – 9/21	<ul style="list-style-type: none"> Arithmetic Series Review Assessment 	Arithmetic Series Khan Academy
	8 9/24 – 9/28	Unit 3: Absolute Value & Piecewise Functions <ul style="list-style-type: none"> Graphing Absolute Value Functions (using transformations) Graph Piecewise & Step Functions 	Absolute Value Functions Khan Academy Piecewise Functions Khan Academy
	9 10/1 – 10/5	<ul style="list-style-type: none"> Review Assessment Unit 4: Quadratic Functions – Graphing <ul style="list-style-type: none"> Vertex Form (include transformations) 	Transformations of Quadratics Youtube Parabolas in Vertex Form Khan Academy
	10 10/8 – 10/12	<ul style="list-style-type: none"> Standard Form PSAT Graphing Real-World Applications 	Parabolas in Standard Form Khan Academy

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Quarter 2 Oct 16 – Dec 21	1 10/16 – 10/19	<ul style="list-style-type: none"> • Derive Equation Given Focus and Directrix • Review • Assessment 	Focus and Directrix Khan Academy
	2 10/22 – 10/26	Unit 5: Quadratic Functions – Complex Numbers & Solving Quadratic Equations <ul style="list-style-type: none"> • Operations with Complex Numbers • Solving Quadratic Equations using Square Roots • Review Factoring 	Complex Numbers Khan Academy Operations with Complex Numbers Khan Academy
	3 10/29 – 11/2	<ul style="list-style-type: none"> • Review Factoring • Solving Quadratic Equations by Factoring 	Factoring Quadratics Khan Academy
	4 11/5 – 11/9	<ul style="list-style-type: none"> • Solving Quadratic Equations by Factoring • Solving Quadratic Equations by Completing the Square 	Completing the Square Khan Academy
	5 11/12 – 11/16	<ul style="list-style-type: none"> • Solving Quadratic Equations by Completing the Square • Solving Quadratic Equations using the Quadratic Formula • Review Solving Quadratic Equations by factoring, completing the square, and using the quadratic Formula 	Quadratic Formula Khan Academy
	6 11/19 – 11/20	<ul style="list-style-type: none"> • Review • Assessment 	
	7 11/26 – 11/30	Unit 6: Polynomial Functions <ul style="list-style-type: none"> • Fundamental Theorem of Algebra • Factoring Polynomials to Find Zeros 	Factoring Sum of Cubes Khan Academy Factoring Difference of Cubes Khan Academy
	8 12/3 – 12/7	<ul style="list-style-type: none"> • Dividing Polynomials to Find Zeros (Long Division) • Dividing Polynomials to Find Zeros (Synthetic Division) • End Behavior of Polynomials 	Long Division Khan Academy Synthetic Division Khan Academy Graphs of Polynomials Khan Academy
	9 12/10 – 12/14	<ul style="list-style-type: none"> • Write Polynomial Equations Given Zeros/Graph • Review • Assessment • Standards Review 	
	10 12/17 – 12/21	<ul style="list-style-type: none"> • Midterm Exams 	

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Quarter 3 Jan 7 – Mar 14	1 1/7– 1/11	Unit 7: Rational Functions <ul style="list-style-type: none"> • Introduction to Rational Functions • Identify Asymptotes • Graphing Rational Functions (key characteristics) 	Graphing Rational Functions Khan Academy
	2 1/14 – 1/18	<ul style="list-style-type: none"> • Graphing Rational Functions • Review • Assessment 	
	3 1/21 – 1/25	Unit 8: Rational Exponents & Radical Functions <ul style="list-style-type: none"> • Review Simplifying Radicals (include operations with radicals) • Review Laws of Integer Exponents 	Radical Expressions & Rational Exponents Khan Academy
	4 1/28 – 2/1	<ul style="list-style-type: none"> • Rational Exponents • Graphing Radicals (square root and cube root) 	Radical Functions Khan Academy
	5 2/4 – 2/8	<ul style="list-style-type: none"> • Graphing Radicals (square root and cube root) • Review • Assessment 	Square Root Youtube Cube Root Youtube
	6 2/11 – 2/15	Unit 9: Exponential & Logarithmic Functions <ul style="list-style-type: none"> • Linear vs. Exponential Functions • Geometric Sequences • Geometric Series 	
	7 2/18 – 2/22	<ul style="list-style-type: none"> • Geometric Series • Graph Exponential functions 	Graphing Exponential Khan Academy
	8 2/25 – 3/1	<ul style="list-style-type: none"> • Exponential Growth/Decay • Exponential Word Problems 	Exponential Growth/Decay Functions Khan Academy
	9 3/4 – 3/8	<ul style="list-style-type: none"> • Introduction to Logarithms • Solve Exponential Equations Using Logarithms (include common and natural logs) 	Logarithmic Functions Khan Academy Properties of Logs Khan Academy Exponential/Log Equations Khan Academy Natural Base, e Khan Academy
	10 3/11 – 3/14	<ul style="list-style-type: none"> • Graph Logarithmic Functions • Review • Assessment 	

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Quarter 4 Mar 18 – May 24	1 3/18 – 3/22	<ul style="list-style-type: none"> • SPRING BREAK – NO SCHOOL 	
	2 3/25 – 3/29	Unit 10: Probability <ul style="list-style-type: none"> • Venn Diagrams • Two-Way Frequency Tables • Independent vs. Dependent Events 	Two-way Tables Khan Academy Independent/Dependent Events Khan Academy
	3 4/1 – 4/5	<ul style="list-style-type: none"> • Conditional Probability • Testing for Independence • Review • Assessment 	Conditional Probability Khan Academy
	4 4/8 – 4/12	Unit 11: Statistics <ul style="list-style-type: none"> • Observational Study, Experiments, and Surveys • Sampling Methods • Skewed Data and Bias 	Survey/Observational Study/Experiment Youtube Data Gathering Khan Academy
	5 4/15 – 4/19	<ul style="list-style-type: none"> • Margin of Error • Simulation Models • Review • Assessment 	Margin of Error Khan Academy
	6 4/22 – 4/26	Unit 12: Circles <ul style="list-style-type: none"> • Writing Equations of Circles – Standard Form • Equations of Circles – General Form (find center and radius by completing the square) • Write Equations given center and a point 	Circles Khan Academy
	7 4/29 – 5/3	<ul style="list-style-type: none"> • Graphing Circles • Graphing Non-Linear Systems • Review • Assessment 	Graphing Circles Khan Academy Solving Non-Linear Systems Khan Academy
	8 5/6 – 5/10	<ul style="list-style-type: none"> • Standards Review 	
	9 5/13 – 5/17	<ul style="list-style-type: none"> • Standards Review 	
	10 5/20 – 5/24	<ul style="list-style-type: none"> • DISTRICT FINAL EXAMS 	

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