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Publisher Resource:

HMH (Holt McDougal) (use student Active Directory)

Other Course Supplemental Resources:

Math Nation (use student Active Directory)

Algebra 1 (Khan Academy)

IXL Math – High School Standards

FSA Practice: (Please Note: these links work best in Firefox or Chrome)

Algebra 1 FSA EOC Mathematics Computer-Based PRACTICE TEST
      Algebra 1 FSA Computer-Based Practice Test Answer Key

Mathematics Practice Tests and Answer Keys – PARCC (Partnership for Assessment of Readiness for College and Careers)

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 12	1 8/10	• Understanding Polynomial Expressions	Combining Like Terms Parts of an Expression
	2 8/13 – 8/17	**Unit 1: Using Expressions to Represent Real-Word Situations** • Understanding Polynomial Expressions • Algebraic Expressions Using the Distributive Property • Algebraic Expressions Using the Communitive and Associative Properties • Formative Assessment	Combining Like Terms Parts of an Expression Closure Property Introduction to Polynomials and Operations with Polynomials
	3 8/20 – 8/24	• Properties of Exponents • Radical Expressions and Expressions with Rational Exponents • Adding Expressions with Radicals and Rational Exponents • More Operations with Radicals and Radical Exponents • Operations with Rational and Irrational Numbers	Properties of Exponents Rational Exponents
	4 8/27 – 8/31	• Review • Summative Assessment **Unit 2: Equations and Inequalities** • Equations: True or False? • Identifying Properties When Solving Equations • Solving Equations	Solving Equations with Variables on Both Sides Solving Equations with Variables on Both Sides Using Distributive Property
	5 9/3 – 9/7	• Solving Equations Using Zero Product Property • Formative Assessment • Solving Inequalities Part 1 and 2 • Solving Compound Inequalities	Solving Multistep Inequalities Compound Inequalities
	6 9/10 – 9/14	• Solving Compound Inequalities (Day 2) • Rearranging Formulas • Solution Sets to Equations with Two Variables	
	7 9/17 – 9/21	• Review • Summative Assessment **Unit 3: Introduction to Functions** • Input and Output Values • Representing, Naming and Evaluating Functions	

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		• Adding and Subtracting Functions	
	8 9/24 – 9/28	• Multiplying Functions • Closure Property • Real World Combinations and Compositions of Functions • Key Features of Graphs of Functions - Part 1 • Formative Assessment	
	9 10/1 – 10/5	• Key Features of Graphs of Functions - Part 2 • Average Rate of Change Over an Interval • Transformations of Functions • Review • Summative Assessment	
	10 10/8 – 10/12	**Unit 4: Linear Equations, Functions and Inequalities** • Arithmetic Sequences • Rate of Change of Linear Functions • (PSAT) • Interpreting Rate of Change and y-intercept in a Real-World Context – Part 1	Arithmetic Sequences

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	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 16 – Dec 21	1 10/16 – 10/19	• Interpreting Rate of Change and y-intercept in a Real-World Context Part 2 • Formative Assessment • Introduction to Systems of Equations	Slope
	2 10/22 – 10/26	• Finding Solution Sets to Systems of Equations Using Substitution and Graphing • Using Equivalent Systems of Equations • Finding Solution Sets to Equations Using Elimination • Formative Assessment	Solving Systems of Equations by Graphing Solving Systems of Equations by Substitution Solving Systems of Equations by Elimination
	3 10/29 – 11/2	• Solution Sets to Inequalities with Two Variables • Finding Solution Sets to Systems of Linear Inequalities	Solving Systems of Equations Word Problems Graphing Systems of Inequalities
	4 11/5 – 11/9	• Review • Summative Assessment **Unit 5: Quadratic Equations and Functions - Part 1** • Real-World Examples of Quadratic Functions • Factoring Quadratic Expressions • Solving Quadratic Equations by Factoring	Zero Property Factoring Quadratics All Methods Solving Polynomial Equations by Grouping Solving Quadratics By Factoring Solving Quadratics By Factoring a Is NOT Equal to Zero
	5 11/13 – 11/16	• Solving Quadratic Equations by Factoring (cont.) • Solving Other Quadratic Equations by Factoring • Solving Quadratic Equations by Factoring – Special Cases • Solving Quadratic Equations by Taking Square Roots • Formative Assessment	Solving Quadratics when the Quadratic is a Difference of Squares Solving Quadratics when the Quadratic is a Perfect Square Trinomial Solving Quadrics by Taking the Square Root
	6 11/19 – 11/20	• Solving Quadratic Equations by Completing the Square	Solving Quadratics by Completing the Square
	7 11/26 – 11/30	• Deriving the Quadratic Formula • Solving Quadratic Equations Using the Quadratic Formula • Quadratic Functions in Action • Review • Summative Assessment **Unit 6: Quadratic Equations and Functions - Part 2**	Deriving the Quadratic Formula Solving Quadratics by Using the Quadratic Formula Quadratic Word Problems

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		• Observations from a Graph of a Quadratic Function	
	8 12/3 – 12/7	• Nature of Solutions of Quadratic Equations and Functions • Graphing Quadratic Functions using a Table • Graphing Quadratic Functions using the Vertex and Intercepts • Graphing Quadratic Functions using Vertex Form – Part 1 • Formative Assessment	Finding the Vertex, Axis of Symmetry, and Direction of Opening Quadratic Functions Written in 3 Different Forms Converting From Standard Form to Vertex Form Domain and Range of Quadratics
	9 12/10 – 12/14	• Graphing Quadratic Functions using Vertex Form – Part 2 • Transformation of the Dependent Variable of Quadratic Functions • Transformations of the Independent Variable of Quadratic Functions • Finding Solution Sets to Systems of Equations Using Tables and Values • Summative Assessment	
	10 12/17 – 12/21	• Review • District Formative Assessment	

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Algebra 1 Honors   2018 – 2019

	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 7 – Mar 14	1 1/7– 1/11	**Unit 7: Exponential Functions** • Geometric Sequences • Exponential Functions • Graphs of Exponential Functions – Part 1 • Graphs of Exponential Functions – Part 2 • Formative Assessment	Geometric Sequences Writing Exponential Equation Given a Table Exponential Functions Finding Domain and Range From Graphs of Exponential Functions
	2 1/14 – 1/18	• Growth and Decay Rates of Exponential Functions • Transformations of Exponential Functions • Formula for Geometric Series (Honors Only) • Review • Summative Assessment	Exponential Real World Applications Compound Interest
	3 1/21 – 1/25	**Unit 8: Summary of Functions** • Comparing Linear, Quadratic, and Exponential Functions -- Part 1 • Comparing Linear, Quadratic, and Exponential Functions -- Part 2 • Comparing Arithmetic and Geometric Sequences • Exploring Non-Arithmetic, Non-Geometric Sequences	Transformations of Quadratics Transformations of Square Roots Transformations of Cube Roots Graphing Polynomial Functions in Factored Form
	4 1/28 – 2/1	• Modeling with Functions • Review • Formative Assessment • Understanding Piecewise-Defined Functions • Absolute Value Functions	Piecewise Functions Transformations of Absolute Value
	5 2/4 – 2/8	• Graphing Power Functions – Part 1 • Graphing Power Functions – Part 2 • Finding Zeros of Polynomial Functions of Higher Degree • End Behavior of Graphs of Polynomials • Graphing Polynomial Functions of Higher Degree	
	6 2/11 – 2/15	• Recognizing Even and Odd Functions • Solutions to Systems of Functions • Review • Summative Assessment	

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	7 2/18 – 2/22	• **Unit 9: Statistics** • Dot Plots • Histograms • Box Plots - Part 1 • Box Plots - Part 2 • Measures of Center and Shapes of Distributions	Histograms Box Plots IQR Standard Deviation
	8 2/25 – 3/1	• Measures of Spread - Part 1 • Measures of Spread - Part 2 • The Empirical Rule • Outliers in Data Sets • Formative Assessment	Empirical Rule
	9 3/4 – 3/8	• Marginal and Joint Relative Frequency - Part 1 • Marginal and Joint Relative Frequency - Part 2 • Conditional Relative Frequency • Scatter Plots and Function Models • Residuals and Residual Plots - Part 1	Two-Way Tables and Two-Way Frequency Tables Scatter Plots Correlation Coefficients Residuals
	10 3/11 – 3/14	• Residuals and Residual Plots - Part 2 • Examining Correlation • Review • Summative Assessment	Line of Best Fit Interpreting Trend Lines Comparing Models

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Quarter 4 Mar 18 – May 24	1 3/18 – 3/22	• **SPRING BREAK – NO SCHOOL**	
	2 3/25 – 3/29	• **Unit 10 – Functions, Rational and Radical Equations** • Dividing Rational Expressions • Composition of Functions • Inverse Functions	
	3 4/1 – 4/5	• Solving Rational Equations • Graphing Rational Equations	
	4 4/8 – 4/12	• Expressions with Radical and Rational Exponents • Solving Equations with Radical and Rational Exponents	
	5 4/15 – 4/19	• **Unit 11 – Math Nation Boot Camp**	
	6 4/22 – 4/26	• Math Nation Boot Camp	
	7 4/29 – 5/3	• Math Nation Boot Camp	
	8 5/6 – 5/10	• Standards-Based Tasks	
	9 5/13 – 5/17	• Standards-Based Tasks	
	10 5/20 – 5/24	• Final Exams	

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