Please Note:

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Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

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)

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	Week	Major Concepts / Topics	Possible Resources
	. 1	Understanding Polynomial Expressions	Combining Like Terms
	8/10	, , , , , , , , , , , , , , , , , , ,	Parts of an Expression
		Unit 1: Using Expressions to Represent Real-Word Situations	Combining Like Terms
		Understanding Polynomial Expressions	Parts of an Expression
	2	Algebraic Expressions Using the Distributive Property	Closure Property
	8/13 – 8/17	Algebraic Expressions Using the Communitive and Associative	<u>Introduction to Polynomials and Operations</u>
		Properties	with Polynomials
		Formative Assessment	
		Properties of Exponents	<u>Properties of Exponents</u>
	3	Radical Expressions and Expressions with Rational Exponents	Rational Exponents
	8/20 – 8/24	Adding Expressions with Radicals and Rational Exponents	
	8/20 - 8/24	More Operations with Radicals and Radical Exponents	
		Operations with Rational and Irrational Numbers	
Quarter 1		Review	Solving Equations with Variables on Both Sides
Aug 10 – Oct 12		Summative Assessment	Solving Equations with Variables on Both Sides
Aug 10 – Oct 12	4 8/27 – 8/31	Unit 2: Equations and Inequalities	<u>Using Distributive Property</u>
		Equations: True or False?	
		Identifying Properties When Solving Equations	
		Solving Equations	
	5 9/3 – 9/7	Solving Equations Using Zero Product Property	Solving Multistep Inequalities
		Formative Assessment	Compound Inequalities
		Solving Inequalities Part 1 and 2	
		Solving 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

	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 	Deriving the Quadratic Formula Solving Quadratics by Using the Quadratic Formula
		 Summative Assessment Unit 6: Quadratic Equations and Functions - Part 2 	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 Symmetr Direction of Opening Quadratic Functions Written in 3 Diff 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	ReviewDistrict Formative Assessment	

	Week	Major Concepts / Topics	Possible Resources
		Unit 7: Exponential Functions	Geometric Sequences
		Geometric Sequences	Writing Exponential Equation Given a
	1	Exponential Functions	<u>Table</u>
	1/7-1/11	Graphs of Exponential Functions – Part 1	Exponential Functions
		Graphs of Exponential Functions – Part 2	Finding Domain and Range From
		Formative Assessment	Graphs of Exponential Functions
		Growth and Decay Rates of Exponential Functions	Exponential Real World Applications
	2	Transformations of Exponential Functions	Compound Interest
	2 1/14 – 1/18	 Formula for Geometric Series (Honors Only) 	
		Review	
		Summative Assessment	
		Unit 8: Summary of Functions	<u>Transformations of Quadratics</u>
	3 1/21 – 1/25	Comparing Linear, Quadratic, and Exponential Functions Part 1	<u>Transformations of Square Roots</u>
Quarter 3		 Comparing Linear, Quadratic, and Exponential Functions Part 2 	<u>Transformations of Cube Roots</u>
Jan 7 – Mar 14		Comparing Arithmetic and Geometric Sequences	Graphing Polynomial Functions in
		Exploring Non-Arithmetic, Non-Geometric Sequences	<u>Factored Form</u>
	4 1/28 – 2/1	Modeling with Functions	<u>Piecewise Functions</u>
		• Review	
		Formative Assessment	<u>Transformations of Absolute Value</u>
		Understanding Piecewise-Defined Functions	
		Absolute Value Functions	
	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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	Unit 9: Statistics	<u>Histograms</u>
	• Dot Plots	<u>Box Plots</u>
7	Histograms	<u>IQR</u>
2/18 – 2/22	Box Plots - Part 1	<u>Standard Deviation</u>
	Box Plots - Part 2	
	 Measures of Center and Shapes of Distributions 	
	Measures of Spread - Part 1	Empirical Rule
0	 Measures of Spread - Part 2 	
8 2/25 – 3/1	The Empirical Rule	
2/25 - 3/1	Outliers in Data Sets	
	Formative Assessment	
	Marginal and Joint Relative Frequency - Part 1	Two-Way Tables and Two-Way
0	 Marginal and Joint Relative Frequency - Part 2 	<u>Frequency Tables</u>
9 3/4 – 3/8	Conditional Relative Frequency	<u>Scatter Plots</u>
3/4 - 3/8	Scatter Plots and Function Models	<u>Correlation Coefficients</u>
	 Residuals and Residual Plots - Part 1 	<u>Residuals</u>
	Residuals and Residual Plots - Part 2	Line of Best Fit
10	Examining Correlation	Interpreting Trend Lines
3/11 – 3/14	• Review	Comparing Models
	Summative Assessment	

	Week	Major Concepts / Topics	Possible Resources
	1	SPRING BREAK – NO SCHOOL	
	3/18 – 3/22		
	2	Unit 10 – Standards Review	
	3/25 – 3/29		
	3	Standards Review	
	4/1 – 4/5		
	4	Math Nation Boot Camp	
	4/8 – 4/12		
Quarter 4	5	Math Nation Boot Camp	
Mar 18 – May 24	4/15 – 4/19		
	6	Standards-Based Tasks	
	4/22 – 4/26		
	7	Standards-Based Tasks	
	4/29 – 5/3	Characteristic Description	
	8	Standards-Based Tasks	
	5/6 – 5/10 9	a Chandards Dasad Tasks	
	5/13 – 5/17	Standards-Based Tasks	
	10	Final Exams	
	5/20 – 5/24	Filidi Exdilis	