

# SUMMER 305 2024: EXPLORE, EXPERIENCE AND EXCEL B.E.S.T. Algebra 1 EOC Self-Prep Camp.



June 11, 2024 – July 25, 2024

	Monday Tuesday		Wednesday	Thursday	
	Solving Equations and Inequalities – Lesson(s) Resources		Linear Functions – <u>Lesson(s) Resources</u>		
Recess		<ul> <li>Writing and Solving One-variable Linear Equations.</li> <li>Solving Absolute Value Equations.</li> <li>Writing and Solving One-variable Inequalities</li> </ul>	<ul> <li>Graphing and Identifying Key Features of Linear Functions.</li> <li>Writing a linear two-variable equation to represent relationships.</li> </ul>	<ul> <li>Writing equations of parallel and perpendicular lines.</li> <li>Simple Interest.</li> </ul>	
		Functions – Less	on(s) Resources  Systems of Equations and Inequalities – Lesson(s) Resources		
17	Cumulative Review # 1 Cumulative Review # 1_Answer Key	<ul> <li>Evaluating and Interpreting functions.</li> <li>Parent functions.</li> <li>Transformations of functions.</li> <li>Average rate of change</li> </ul>	Legal Holiday	<ul> <li>Solving systems of two-variable linear equations algebraically or graphically.</li> <li>Writing systems of two-variable linear equations.</li> </ul>	
	Systems of Equations and Inec	qualities – <u>Lesson(s) Resources</u>	Exponents and Radicals – <u>Lesson(s) Resources</u>		
24	Graphing the solution set of two-variable linear inequalities. Writing two-variable linear inequalities to represent relationships.	Graphing the solution set of a system of two-variable linear inequalities.      Cumulative Review # 2     Cumulative Review # 2 Answer Key	Evaluate numerical expressions and generate equivalent numerical expressions involving rational exponents.	<ul> <li>Generate equivalent algebraic expressions using the properties of exponents.</li> <li>Operations with radicals.</li> </ul>	
Exponential Functions – <u>Lesson(s) Resources</u>			Polynomials – <u>Lesson(s) Resources</u>		
1	Growth and decay functions. Key features of exponential functions. Graphing Exponential functions. Writing exponential functions to represent a relationship.	Compound Interest.  Cumulative Review # 3 Cumulative Review # 3 Answer Key	<ul> <li>Adding, subtracting, and multiplying polynomials.</li> <li>Dividing polynomials.</li> </ul>	Legal Holiday	



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Polynomials – <u>Lesson(s) Resources</u>		uadratic Functions – <u>Lesson(s) Resources</u>		
<ul> <li>Factoring polynomials.</li> <li>Solving quadratics by factoring.</li> </ul>	Determining Key Features of quadratic functions.     Graphing quadratic functions.	<ul> <li>Writing quadratic functions to represent relationships.</li> <li>Writing and solving one-variable quadratic equations over the real number system.</li> </ul>	Cumulative Review # 4 Cumulative Review # 4 Answer Key	
Categorical and Numerical Data – <u>Lesson(s) Resources</u>		Algebra 1 EOC Test Prep Resources		
<ul> <li>Representing numerical and categorical data.</li> <li>Interpreting data distributions.</li> </ul>	Fitting a linear function to bivariate numerical data.	17	18	
Estimate a population total, mean or	Scatter plots and residuals.	BEST Algebra	1 EOC Review	
<ul> <li>percentage using data from a sample survey.</li> <li>Two-ways frequency tables.</li> </ul>	Cumulative Review # 5 Cumulative Review # 5_Answer Key			
22	23	24	25	
BEST Algebra 1 EOC Test		BEST Algebra 1 E	OC Test – Make-Up	

Course Benchmarks

Solving Equations and Inequalities	Linear Functions			
Math Nation Videos & Check Your Understanding Writing and Solving One-variable Linear Equations Video - 5.4.2 Guided Instruction: Solving Real-World Problems by Writing and Solving Equations Video - 5.4.3 Guided Practice: Solving Real-World Problems by Writing and Solving Equations Video - 5.4.4 Try It: Solving Real-World Problems by Writing and Solving Equations Check Your Understanding Solving Absolute Value Equations Video - 10.4.3 Guided Instruction: Solving Multi-Step Absolute Value Equations Check Your Understanding Writing and Solving One-variable Inequalities Video - 6.1.3 Guided Instruction: Multi-Step Linear Inequalities Check Your Understanding Video - 6.2.3 Guided Instruction: Compound Inequalities Video - 6.2.5 Guided Practice: Compound Inequalities in the Real World Video - 6.2.6 Your Turn! Check Your Understanding	Math Nation Videos & Check Your Understanding Graphing and Identifying Key Features of Linear Functions Video - 4.3.3 Guided Instruction: Different Forms of a Line Video - 4.3.4 Your Turn! Check Your Understanding Video - 4.5.2 Guided Instruction: Graphing a Line and Interpreting Key Features Video - 4.5.3 Try It: Graphing and Interpreting Key Features Video - 4.5.4 Your Turn! Check Your Understanding Writing a linear two-variable equation to represent relationships. Video - 3.2.4 Guided Instruction: Writing the Equation of a Line from a Graph Video - 3.2.5 Try It: Writing the Equation of a Line from a Graph Check Your Understanding Video - 3.3.3 Guided Instruction: Writing Equations of Lines from Tables in a Real-World Context Video - 3.3.4 Guided Practice: Writing Equations of Lines from Graphs and Tables Check Your Understanding Video - 3.4.3 Guided Instruction: Writing Equations of Lines from Descriptions Video - 3.4.4 Guided Practice: Writing Equations of Lines from Descriptions Check Your Understanding Writing equations of parallel and perpendicular lines Video - 4.10.3 Guided Instruction: Parallel Lines Video - 4.10.3 Guided Instruction: Parallel Lines Video - 4.11.2 Guided Instruction: Writing Equations of Perpendicular Lines Through a Point Video - 4.11.2 Guided Instruction: Writing Equations of Perpendicular Lines Through a Point Video - 4.11.3 Guided Practice: Writing Equations of Perpendicular Lines Through a Point Video - 4.11.4 Your Turn! Check Your Understanding Simple Interest Video - 13.1.2 Guided Instruction: Simple Interest Video - 13.1.3 Guided Practice: Calculating Simple Interest Video - 13.1.4 Your Turn! Check Your Understanding			
NOTE: To ensure that the resource links open correctly, you must be logged in to the student portal using Google Chrome.				

Math Nation Videos & Check Your Understanding	Math Nation Videos & Check Your Understanding
Evaluating and Interpreting Functions	Solving systems of two-variable linear equations algebraically or graphically
Video - 1.2.4 Guided Instruction: Evaluating Functions	Video - 5.7.3 Guided Instruction: Solving Systems of Equations by Graphing and Interpreting Solutions
Video - 1.2.5 Try It: Function Notation	Video - 5.7.4 Guided Practice: Solving Systems by Graphing and Interpreting Solutions
Video - 1.2.6 Your Turn!	Video - 5.7.5 Try It: Solving Systems by Graphing and Interpreting Solutions
Check Your Understanding	Check Your Understanding
Video - 1.3.2 Guided Instruction: Interpreting Functions	Video - 5.8.2 Guided Instruction: Writing and Solving Systems of Equations Using Substitution
Video - 1.3.3 Guided Practice: Interpreting Functions	Video - 5.8.3 Guided Practice: Writing and Solving Systems of Equations Using Substitution
Video - 1.3.4 Try It: Evaluating and Interpreting Functions	Video - 5.8.5 Your Turn!
Video - 1.3.5 Your Turn!	Check Your Understanding
Check Your Understanding	Video - 5.9.2 Guided Instruction: Solving Systems of Linear Equations using Elimination
Parent Functions  Video 4.4.2 Oxided Practices Classified Functions	Video - <u>5.9.3 Guided Practice: Solving Systems of Linear Equations using Elimination</u> Video - <u>5.9.4 Your Turn!</u>
Video - 1.1.3 Guided Practice: Classifying Functions	Check Your Understanding
Video - 1.1.4 Your Turn! Check Your Understanding	Writing systems of two-variable linear equations
Transformations of Functions	Video - 5.11.2 Guided Practice: Writing Systems of Equations
Video - 13.5.3 Guided Instruction: Writing Transformations using Function Notation	Video - 5.11.2 Guided Fractice: Writing Systems of Equations  Video - 5.11.4 Your Turn!
Check Your Understanding	Check Your Understanding
Video - 13.6.4 Guided Practice: Describing Transformations	Graphing the solution set of two-variable linear inequalities.
Check Your Understanding	Video - 6.5.3 Guided Instruction: Two-Variable Linear Inequalities in Standard and Point-Slope Forms
Video - 13.7.4 Guided Practice: Describing Transformations	Check Your Understanding
Check Your Understanding	Video - 6.6.3 Guided Instruction: Connecting Real World Contexts and Two-Variable Linear Inequalities
Average Rate of Change	Video - 6.6.4 Guided Practice: Two-Variable Linear Inequalities in Real-World Contexts
Video - 13.11.2 Guided Instruction: Average Rate of Change	Video - 6.6.5 Try It: Representing Real-World Contexts with Two-Variable Inequalities
Video - 13.11.3 Try It: Average Rate of Change	Check Your Understanding
Check Your Understanding	Writing two-variable linear inequalities to represent relationships.
	Video - 6.7.3 Guided Instruction: Writing Two-Variable Linear Inequalities in Different Forms
	Video - 6.7.4 Guided Practice: Writing Inequalities Given the Graph of the Solution Set
	Check Your Understanding
	Video - 6.8.3 Guided Instruction: Writing Linear Inequalities in Two Variables to Represent Real-World
	<u>Contexts</u>
	Video - 6.8.4 Guided Practice: Writing Linear Inequalities in Two Variables to Represent Real-World
	<u>Contexts</u>
	Video - 6.8.5 Try It: Qualifying for a Loan
	Check Your Understanding
	Graphing the solution set of a system of two-variable linear inequalities.  Video 6.40.3 Cylided Practice Craphing Systems of Linear Inequalities.
	Video - 6.10.3 Guided Practice: Graphing Systems of Linear Inequalities Video - 6.10.5 Your Turn!
	Check Your Understanding
	Check Four onderstanding

Exponents and Radicals	Exponential Functions
Equivalent numerical expressions using the properties of exponents.  Video - 1.4.3 Guided Instruction: Building on Square Roots and Cube Roots  Video - 1.4.4 Your Turn!  Check Your Understanding  Video - 1.6.2 Guided Practice: Writing Equivalent Expressions  Video - 1.6.5 Try It: Writing Equivalent Expressions  Video - 1.6.6 Your Turn!  Check Your Understanding  Equivalent algebraic expressions using the properties of exponents.  Video - 2.1.2 Guided Instruction: Equivalent Algebraic Expressions  Video - 2.1.3 Guided Practice: Products of Monomials  Video - 2.1.5 Your Turn!  Check Your Understanding  Video - 2.2.2 Guided Instruction: Quotient of Powers  Video - 2.2.3 Guided Practice: Generating Equivalent Algebraic Expressions Using Quotient of Powers  Video - 2.2.4 Guided Instruction: Power of a Quotient  Video - 2.2.5 Your Turn!  Check Your Understanding  Video - 2.3.2 Guided Practice: Using Different Methods to Generate Equivalent Expressions  Video - 2.3.3 Try It: Generating Equivalent Algebraic Expressions  Video - 2.3.5 Your Turn!  Check Your Understanding  Video - 2.3.5 Your Turn!  Check Your Understanding  Operations with radicals  Video - 1.8.3 Guided Instruction: Equivalent Radical Expressions  Video - 1.8.3 Guided Instruction: Equivalent Radical Expressions	th Nation Videos & Check Your Understanding Growth and decay functions.  ee - 11.1.5 Your Turn!  eek Your Understanding  Key features of exponential functions.  ee - 11.2.3 Guided Instruction: Determining Key Features of Exponential Graphs  ee - 11.2.4 Your Turn!  eek Your Understanding  Graphing Exponential functions.  ee - 11.3.2 Guided Instruction: Graphing an Exponential Equation  ee - 11.3.5 Your Turn!  eek Your Understanding  ee - 11.4.2 Guided Instruction: Graphing Exponential Functions from a Written Description and uation  eek Your Understanding  Writing exponential functions to represent a relationship.  ee - 11.5.2 Guided Instruction: Writing an Exponential Function from Graphs and Tables  ee - 11.5.3 Guided Practice: Writing Exponential Functions  eek Your Understanding  eo - 11.6.3 Try It: Writing Exponential Functions  eek Your Understanding  Compound Interest and its relationship to exponential functions.  eo - 13.2.3 Guided Instruction: Compound Interest  eck Your Understanding

Categorical and Numerical Data	Algebra 1 EOC Test Prep.
Math Nation Videos & Check Your Understanding  Representing numerical and categorical data.  Check Your Understanding  Video - 12.2.3 Try It: Creating Displays for Numerical Data  Check Your Understanding  Video - 12.4.2 Guided Instruction: Displays for Categorical Data  Video - 12.4.3 Your Turn!  Check Your Understanding  Interpreting data distributions.  Video - 12.3.3 Guided Practice: Comparing Distributions  Video - 12.3.5 Guided Instruction: Summarizing Data  Video - 12.3.6 Try It: Summarizing Data  Check Your Understanding  Estimate a population total, mean or percentage using data from a sample survey.  Video - 12.6.2 Guided Instruction: Margin of Error  Video - 12.6.3 Guided Practice: Estimating for a Population  Video - 12.6.4 Your Turn!	EOC Review Printed Materials  Math Nation Test Yourself!  Unit 1: Introduction to Functions - Test Yourself! Unit 2: Algebraic Expressions - Test Yourself! Unit 3: Linear Functions - Test Yourself! Unit 4: Key Features of Linear Functions - Test Yourself! Unit 5: Solving Equations - Test Yourself! Unit 6: Linear Inequalities - Test Yourself! Unit 7: Rewriting Polynomial Expressions - Test Yourself! Unit 8: Quadratic Functions - Test Yourself! Unit 9: Writing and Solving Quadratic Equations - Test Yourself!
Check Your Understanding  Two-way Frequency Tables  Video - 14.1.2 Guided Instruction: Two-Way Frequency Tables  Video - 14.1.4 Guided Practice: Constructing a Two-Way Table  Video - 14.1.5 Try It: Constructing a Two-Way Table  Check Your Understanding  Video - 14.2.4 Your Turn!  Check Your Understanding  Video - 14.3.2 Exploration: Segmented Bar Graphs  Video - 14.3.4 Try It: Interpreting Segmented Bar Graphs	Unit 10: Absolute Value Functions - Test Yourself! Unit 11: Exponential Functions - Test Yourself! Unit 12: Data Displays - Test Yourself! Unit 13: Bring It Together - Test Yourself! Unit 14: Categorical Data - Test Yourself!  Additional Resources
Check Your Understanding  Video - 14.4.2 Guided Instruction: Finding Possible Associations in the Data  Video - 14.4.4 Try It: Possible Associations  Check Your Understanding  • Fitting a linear function to bivariate numerical data.  Video - 3.6.3 Guided Instruction: Relating the Correlation Coefficient, r, to the Slope of the Fit of the Regression Line  Video - 3.6.4 Guided Practice: Formally Fitting a Line of Best Fit to Data and Using it to Solve Problems  Check Your Understanding  • Scatter plots and residuals.  Video - 3.5.4 Guided Instruction: Interpreting the Slope and the y-intercept of the Line of Fit  Check Your Understanding  Video - 3.8.3 Guided Instruction: Analyzing Residuals  Check Your Understanding	E.S.T. EOC Algebra 1 Reference Sheet  B.E.S.T. EOC Calculator  B.E.S.T. Algebra 1 EOC CBT Sample Test Items  B.E.S.T. Algebra 1 EOC CBT Sample Test Items Answer Key  B.E.S.T. Algebra 1 EOC PBT Sample Test Materials  B.E.S.T. Algebra 1 EOC PBT Sample Test Materials Answer Key

Course Benchmarks						
Solving Equations and Inequalities		Linear Functions		Functions		
MA.912.AR.1.2 MA.912.AR.2.1 MA.912.AR.4.1 MA.912.AR.2.6		MA.912.AR.2.2 MA.912.AR.2.4 MA.912.AR.2.5 MA.912.AR.4.3		MA.912.F.1.1 MA.912.F.1.2 MA.912.F.1.5 MA.912.F.2.1		
Systems of Equations and Inequalities		Exponents a	and Radicals	Exponential Functions		
MA.912.AR.2.7 MA.912.AR.2.8 MA.912.AR.9.1	MA.912.AR.2.8 MA.912.AR.9.4		MA.912.NSO.1.1 MA.912.NSO.1.2 MA.912.NSO.1.4		MA.912.AR.1.1 MA.912.AR.5.3 MA.912.AR.5.4 MA.912.AR.5.6	
Polynomials		Quadratic Functions		Categorical and Numerical Data		
MA.912.AR.1.1 MA.912.AR.1.3 MA.912.AR.1.4	MA.912.AR.1.7 MA,912.AR.3.1	MA.912.AR.3.1 MA.912.AR.3.4 MA.912.AR.3.5	MA.912.AR.3.6 MA.912.AR.3.7 MA.912.AR.3.8	MA.912.DP.1.1 MA.912.DP.1.2 MA.912.DP.1.3 MA.912.DP.1.4	MA.912.DP.2.4 MA.912.DP.2.6 MA.912.DP.3.1	