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:

CollegePrepAlgebra.com

Other Course Supplemental Resources:

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 12 – Oct 11	1 8/12 - 8/16	 Chapter 1 – The Real Number System Lesson 1.1 - Real Numbers Lesson 1.2 - Add & Subtract Integers Lesson 1.3 - Multiplying & Dividing Integers and Lesson Lesson 1.4 - Operations with Rational Numbers Topic 20 - Real number operations Lesson 1.5 - Exponents and Properties of Real Numbers Topic 5 - Repeating Decimals Assessment 	Real Numbers - YouTube Video Real Numbers - Khan Academy Operations with Integers and Rational Numbers - YouTube Video Operations with Integers and Rational Numbers - YouTube Video Operations with Integers and Rational Numbers - Khan Academy Exponents, Properties of Real Numbers, and Repeating Decimals - YouTube Video Exponents, Properties of Real Numbers, and Repeating Decimals - Khan Academy
	2 8/19 - 8/23	 Chapter 2 - Fundamentals of Algebra Lesson 2.1 - Writing and Evaluating Algebraic Expressions Lesson 2.2 - Simplifying Algebraic Expressions Lesson 2.3 - Algebra and Problem Solving Lesson 2.4 - Introduction to Equations Assessment 	Writing and Evaluating Algebraic Expressions - <u>YouTube</u> <u>Video</u> Writing and Evaluating Algebraic Expressions - <u>Khan</u> <u>Academy</u> Simplifying Algebraic Expressions - <u>YouTube Video</u> Simplifying Algebraic Expressions <u>Khan Academy</u> Algebra and Problem Solving - <u>YouTube Video</u> Algebra and Problem Solving - <u>Khan Academy</u> Solving Linear Equations - <u>YouTube Video</u> Solving Linear Equations - <u>Khan Academy</u> Equations that Reduce to Linear Form - <u>YouTube Video</u> Equations that Reduce to Linear Form - <u>Khan Academy</u>
	3 8/26 - 8/30	 Chapter 3 - Equations, Inequalities, and Problem Solving Unit 3 - Lesson 3.1 - Solving Linear Equations Lesson 3.2 - Equations that Reduce to Linear Form Lesson 3.3 - Problem Solving with Percents Lesson 3.4 - Ratios and Proportions Review Assessment 	Solving Linear Equations - <u>YouTube Video</u> Solving Linear Equations - <u>Khan Academy</u> Equations that Reduce to Linear Form - <u>YouTube Video</u> Equations that Reduce to Linear Form - <u>Khan Academy</u> Problem Solving with Percents - <u>YouTube Video</u> Problem Solving with Percents - <u>Khan Academy</u> Ratios and Proportions - <u>YouTube Video</u> Ratios and Proportions - <u>Khan Academy</u>
	4 9/3 – 9/6	 Topic 10- Partitioning Segments Lesson 3.5 - Geometric and Scientific Applications 	Geometric and Scientific Applications - YouTube Video Geometric and Scientific Applications - Khan Academy
	5 9/9 – 9/13	 Lesson 3.6 - Linear Inequalities Lesson 3.7 - Absolute Value Equations and Inequalities Review Assessment 	Linear Inequalities - <u>YouTube Video</u> Linear Inequalities <u>Khan Academy</u> Absolute Value Equations and Inequalities - <u>YouTube</u> <u>Video</u> Absolute Value Equations and Inequalities - <u>Khan</u> <u>Academy</u>

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6 9/16 – 9/20	 Chapter 4 - Graphs and Functions Unit 4 – Lesson 4.1 - Ordered Pairs and Graphs Lesson 4.2 - Graphs of Equations in Two variables Lesson 4.3 - Relations, Functions, and Graphs Assessment 	Ordered Pairs and Graphs - <u>YouTube Video</u> Ordered Pairs and Graphs - <u>Khan Academy</u> Graphs of Equations in Two Variables - <u>YouTube Video</u> Graphs of Equations in Two Variables - <u>Khan Academy</u> Relations, Functions, and Graphs - <u>YouTube Video</u> Relations, Functions, and Graphs - <u>Khan Academy</u>
7 9/23 – 9/27	 Chapter 4 - Graphs and Functions Lesson 4.4 - Slope and Graphs of Linear Equations Topic 16 - Graphing Proportional Relationships Review Assessment 	Slope and Graphs of Linear Equations - <u>YouTube Video</u> Slope and Graphs of Linear Equations - <u>Khan Academy</u>
8 9/30 – 10/4	 Chapter 4 - Graphs and Functions Topic 9 - Step and Piecewise functions Lesson 4.5 - Equations of Lines Topic 11 - Scatterplots and lines of Fit 	Equations of Lines - <u>YouTube Video</u> Equations of Lines – <u>Khan Academy</u>
9 10/7 – 10/11	 Chapter 4 - Graphs and Functions Lesson 4.6 - Graphs of linear Inequalities Review Assessment 	Graphs of Linear Inequalities – <u>YouTube Video</u> Graphs of Linear Inequalities – <u>Khan Academy</u>

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	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 15 – Dec 20	1 10/15 - 10/18	 Chapter 5 - Exponents and Polynomials Unit 5 – Lesson 5.1 - Integer Exponents, and Scientific Notation Lesson 5.2 - Adding and Subtracting Polynomials Assessment 	Integer Exponents, and Scientific Notation - <u>YouTube</u> <u>Video</u> Integer Exponents, and Scientific Notation - <u>Khan</u> <u>Academy</u> Adding and Subtracting Polynomials – <u>YouTube</u> <u>Video</u> Adding and Subtracting Polynomials – <u>Khan</u> <u>Academy</u>
	2 10/21 - 10/25	 Chapter 5 - Exponents and Polynomials Lesson 5.3 - Multiplying Polynomials; Special Products Lesson 5.4 - Diving Polynomials and Synthetic Division Assessment 	Multiplying Polynomials - <u>YouTube Video</u> Multiplying Polynomials - <u>Khan Academy</u> Dividing Polynomials - <u>YouTube Video</u> Dividing Polynomials - <u>Khan Academy</u>
	3 10/28 – 11/1	 Chapter 6 - Factoring and Solving Equations Unit 6 – Lesson 6.1 - Factoring Polynomials with Common Factors Lesson 6.2 - Factoring Trinomials 	Factoring Polynomials with Common Factors - <u>YouTube Video</u> Factoring Polynomials with Common Factors - <u>Khan</u> <u>Academy</u> Factoring Trinomials - <u>YouTube Video</u> Factoring Trinomials - <u>Khan Academy</u>
	4 11/4 - 11/8	 Chapter 6 - Factoring and Solving Equations Lesson 6.3 - More about Factoring Trinomials Assessment Lesson 6.4 – Factoring Polynomials with Special Forms 	Factoring Trinomials - <u>YouTube Video</u> Factoring Trinomials - <u>Khan Academy</u> Factoring Polynomials with Special Forms - <u>YouTube</u> <u>Video</u> Factoring Polynomials with Special Forms - <u>Khan</u> Academy
	5 11/12 – 11/15	 Chapter 6 - Factoring and Solving Equations Lesson 6.5 - Solving Polynomial Equations by Factoring Review Assessment 	Solving Polynomial Equations by Factoring - <u>YouTube</u> <u>Video</u> Solving Polynomial Equations by Factoring - <u>Khan</u> <u>Academy</u>
	6 11/18 – 11/22	 Chapter 7 - Rational Expressions, Equations, and Functions Unit 7 – Lesson 7.1 Rational Expressions and Functions 	Rational Expressions and Functions - <u>YouTube Video</u> Rational Expressions and Functions - <u>Khan Academy</u>
	7 11/25 – 11/26	 Chapter 7 - Rational Expressions, Equations, and Functions Lesson 7.2 - Multiplying and Dividing Rational Expressions Lesson 7.3 - Adding and Subtracting Rational Expressions Assessment 	Multiplying/Dividing Rational Expressions - <u>YouTube</u> <u>Video</u> Multiplying/Dividing Rational Expressions - <u>Khan</u> <u>Academy</u> Adding/Subtracting Rational Expressions - <u>YouTube</u> <u>Video</u> Adding/Subtracting Rational Expressions - <u>Khan</u> <u>Academy</u>

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12/2	8 2-12/6	 Chapter 7 - Rational Expressions, Equations, and Functions Lesson 7.4 - Complex Fractions Lesson 7.5 – Solving Rational Equations 	Complex Fractions - <u>YouTube Video</u> Complex Fractions - <u>Khan Academy</u> Solving Rational Equations - <u>YouTube Video</u> Solving Rational Equations - <u>Khan Academy</u>
12/9	9 - 12/13	Assessment Exam Review	
12/16	10 5 – 12/20	Semester Review/District Exams	

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Quarter 3 Jan 6 – Mar 12	1 1/6- 1/10	 Chapter 7 - Rational Expressions, Equations, and Functions Review Lesson 7.1 and 7.5 Topic 15 – Graphing Rational Functions Lesson 7-6 - Applications and Variation Assessment 	Graphing Rational Functions - <u>YouTube Video</u> Applications and Variation - <u>YouTube Video</u> Applications and Variation - <u>Khan Academy</u>
	2 1/13 - 1/17	 Chapter 8 - Systems of Equations and Inequalities Lesson 8.1 - Solving systems of Equations by Graphing and Substitution Lesson 8.2 - Solving Systems of Equations by Elimination Lesson 8.6 - Systems of linear Inequalities 	Solving Systems of Equation by Graphing and Substitution - YouTube VideoSolving Systems of Equation by Graphing and Substitution - Khan AcademySolving Systems by Elimination - YouTube VideoSolving Systems by Elimination - Khan AcademySystems of Linear Inequalities - YouTube Video Systems of Linear Inequalities - Khan Academy
	3 1/21 – 1/24	 Chapter 8 - Systems of Equations and Inequalities Lesson 8.6 – Systems of linear Inequalities Assessment 8.1, 8.2, 8.6 Chapter 9 - Radicals and Complex Numbers Lesson 9.1 - Radicals and Rational Exponents 	Radicals and Rational Exponents - <u>YouTube</u> <u>Video</u> Radicals and Rational Exponents - <u>Khan</u> <u>Academy</u>
	4 1/27 – 1/30	 Chapter 9 - Radicals and Complex Numbers Lesson 9.1 - Radicals and Rational Exponents Lesson 9.2 - Simplifying Radical Expressions Topic 19 - The Distance Formula 	Simplifying Radical Expressions - <u>YouTube</u> <u>Video</u> Simplifying Radical Expressions - <u>Khan</u> <u>Academy</u>
	5 2/3 – 2/7	 Chapter 9 - Radicals and Complex Numbers Lesson 9.3 – Adding and Subtracting Radical Expressions Review Assessment 	Adding and Subtracting Radical Expressions - YouTube Video Adding and Subtracting Radical Expressions - <u>Khan Academy</u>
	6 2/10 – 2/14	 Chapter 9 - Radicals and Complex Numbers Lesson 9.4 Multiplying and Dividing Radical Expressions Topic 18 - Graphing Square and Cube Root Functions Lesson 9.5 - Radical Equations and Applications Lesson 9.6 - Complex Numbers 	Multiplying/Dividing Radical Expressions - <u>YouTube Video</u> Multiplying/Dividing Radical Expressions - <u>Khan</u> <u>Academy</u> Radical Equations - <u>YouTube Video</u> Radical Equations - <u>Khan Academy</u> Complex Numbers - <u>YouTube Video</u> Complex Numbers - <u>Khan Academy</u>

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	Review	Solving Quadratic Equations - YouTube Video
7	Assessment	Solving Quadratic Equations - Khan Academy
2/17 – 2/21	Chapter 10 - Quadratic Equations, Functions, and Inequalities	
, ,	• Unit 10 – Lesson 10.1 - Solving Quadratic Equations	
	Unit 10 – Lesson 10.1 - Solving Quadratic Equations	Completing the Square - YouTube Video
8	Lesson 10.2 - Completing the Square	Completing the Square - Khan Academy
2/24 – 2/28	Lesson 10.3 – Quadratic Formula	Quadratic Formula - YouTube Video
		Quadratic Formula - Khan Academy
	Chapter 10 - Quadratic Equations, Functions, and Inequalities	Graphs of Quadratic Equations - YouTube
	Lesson 10.4 – Graphs of Quadratic Functions	Video
9	Topic 8 – Symmetry and Behavior of Graphs	Graphs of Quadratic Equations - Khan
3/2 - 3/6	Lesson 10.5 – Applications of Quadratic Equations	Academy
		Applications of Quadratics -YouTube Video
		Applications of Quadratics -Khan Academy
	Review	Quadratic and Rational Inequalities - YouTube
10	Assessment	Video
3/9 – 3/12	Lesson 10.6 - Quadratic and Rational Inequalities	Quadratic and Rational Inequalities - Khan
		<u>Academy</u>

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	Week	Major Concepts / Topics	Possible Resources
	1 3/16 – 3/20	SPRING BREAK – NO SCHOOL	
	2 3/23 - 3/27	 Chapter 11 - Quadratic Equations, Functions, and Inequalities Lesson 11.1 - Exponential Functions Lesson 11.2 - Composite and Inverse Functions Assessment 	Exponential Functions - <u>YouTube Video</u> Exponential Functions - <u>Khan Academy</u> Composite and Inverse Functions - <u>YouTube Video</u> Composite and Inverse Functions - <u>Khan Academy</u>
	3 3/30 – 4/3	 Chapter 11 - Quadratic Equations, Functions, and Inequalities Review 11.1, 11.2 Exponential Functions and Composite and Inverse Functions Lesson 11.3 - Logarithmic Functions Lesson 11.4 - Properties of Logarithms 	Logarithmic Functions - <u>YouTube Video</u> Logarithmic Functions – <u>Khan Academy</u> Properties of Logarithms – <u>YouTube</u> <u>Video</u> Properties of Logarithms – <u>Khan</u> <u>Academy</u>
Quarter 4 Mar 23 – May 27	4 4/6 – 4/9	 Chapter 11 - Quadratic Equations, Functions, and Inequalities Lesson 11.5 - Solving Exponential and Logarithmic Equations Lesson 11.6 - Applications Topic 21 - Two-way tables 	Solving Exponential and Logarithmic Equations - <u>YouTube Video</u> Solving Exponential and Logarithmic Equations - <u>Khan Academy</u> Applications - <u>Khan Academy</u> Two-Way Tables - <u>YouTube Video</u>
	5 4/14 – 4/17	 Review Chapter 11 Assessment Chapter 12 - Conics Unit 12 - Lesson 12.1 - Circles and Parabolas Lesson 12.2 - Ellipses 	Circles and Parabolas - <u>YouTube Video</u> Circles and Parabolas - <u>Khan Academy</u> Ellipses - <u>YouTube Video</u> Ellipses – <u>Khan Academy</u>
	6 4/20 – 4/24	 Chapter 12 - Conics Lesson 12.2 - Ellipses Lesson 12.3 - Hyperbolas Lesson 12.4 - Solving non-linear systems of equations 	Hyperbolas - <u>YouTube Video</u> Hyperbolas - <u>Khan Academy</u>
	7 4/27 – 5/1	 Chapter 12 - Conics Lesson 12.4 - Solving non-linear systems of equations Review Assessment 	Solving Non-Linear Systems - <u>YouTube</u> <u>Video</u> Solving Non-Linear Systems - <u>Khan</u> <u>Academy</u>
	8 5/4 – 5/8	Standards Review	
	9 5/11 – 5/15	Standards Review	

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10	Standards Review	
5/18 – 5/22		
11	District Final Exams	
5/25 – 5/27		

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