## Please Note:

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course are best answered by the individual teacher.

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
		Chapter 1 – The Real Number System	
	1 8/10	Lesson 1.1 - Real Numbers	Lesson 1.1 and 1.2 – YouTube Video
			Lesson 1.1 and 1.2 – Khan Academy
		Lesson 1.2 - Add & Subtract Integers	Lesson 1.1 and 1.2 – YouTube Video
			Lesson 1.1 and 1.2 – Khan Academy
		Lesson 1.3 - Multiplying & Dividing Integers and Lesson	Lesson 1.3 and 1.4 – YouTube Video
		Lesson 1.4 - Operations with Rational Numbers	Lesson 1.3 and 1.4 – Khan Academy
		Topic 20 - Real number operations	
		Lesson 1.5 - Exponents and Properties of Real Numbers	Lesson 1.5 and Topic 5 – <u>YouTube Video</u>
	2	Topic 5 - Repeating Decimals	Lesson 1.5 and Topic 5 – Khan Academy
	8/13 – 8/17	Assessment	
		Chapter 2 - Fundamentals of Algebra	
		Lesson 2.1 - Writing and Evaluating Algebraic Expressions	Lesson 2.1 – <u>YouTube Video</u>
			Lesson 2.1 – Khan Academy
Quarter 1		Lesson 2.2 - Simplifying Algebraic Expressions	Lesson 2.2 - <u>YouTube Video</u>
Aug 10 – Oct 12			Lesson 2.2 - Khan Academy
		Lesson 2.3 - Algebra and Problem Solving	Lesson 2.3 – <u>YouTube Video</u>
			Lesson 2.3 – Khan Academy
		Lesson 2.4 - Introduction to Equations	
	3 8/20 – 8/24	A A A A A A A A A A A A A A A A A A A	
		Assessment	
		Chapter 3 - Equations, Inequalities, and Problem Solving	
		Unit 3 – Lesson 3.1 - Solving Linear Equations	Lesson 3.1 – <u>YouTube Video</u>
		Since Educations	Lesson 3.1 – Khan Academy
		Lesson 3.2 - Equations that Reduce to Linear Form	Lesson 3.2 – <u>YouTube Video</u>
			Lesson 3.2 – <u>Khan Academy</u>
		Lesson 3.3 - Problem Solving with Percents	Lesson 3.3 – <u>YouTube Video</u>
	4		Lesson 3.3 – <u>Khan Academy</u>
		Lesson 3.4 - Ratios and Proportions	Lesson 3.4 – <u>YouTube Video</u>
	8/27 – 8/31	Paris National Control of the Contro	Lesson 3.4 – <u>Khan Academy</u>
		Review	
		Assessment	

5	Topic 10- Partitioning Segments	
9/3 – 9/7	Lesson 3.5 - Geometric and Scientific Applications	Lesson 3.5 – <u>YouTube Video</u>
3/3 – 3/7		Lesson 3.5 – Khan Academy
	Lesson 3.6 - Linear Inequalities	Lessons 3.6 – <u>YouTube Video</u>
		Lessons 3.6 – Khan Academy
6	<ul> <li>Lesson 3.7 - Absolute Value Equations and Inequalities</li> </ul>	Lessons 3.7 – <u>YouTube Video</u>
9/10 – 9/14		Lessons 3.7 – <u>Khan Academy</u>
	Review	
	Assessment	
	Chapter 4 - Graphs and Functions	
	<ul> <li>Unit 4 – Lesson 4.1 - Ordered Pairs and Graphs</li> </ul>	Lesson 4.1 – <u>YouTube Video</u>
		Lesson 4.1 – <u>Khan Academy</u>
7	<ul> <li>Lesson 4.2 - Graphs of Equations in Two variables</li> </ul>	Lesson 4.2 – <u>YouTube Video</u>
9/17 – 9/21		Lesson 4.2 – <u>Khan Academy</u>
	• Lesson 4.3 - Relations, Functions, and Graphs	Lesson 4.3 – <u>YouTube Video</u>
		Lesson 4.3 – <u>Khan Academy</u>
	Assessment	
	Chapter 4 - Graphs and Functions	
	Lesson 4.4 - Slope and Graphs of Linear Equations	Lesson 4.4 – <u>YouTube Video</u>
8		Lesson 4.4 – <u>Khan Academy</u>
9/24 – 9/28	Topic 16 - Graphing Proportional Relationships	
	Review	
	Assessment	
	Chapter 4 - Graphs and Functions	
9	Topic 9 - Step and Piecewise functions	
10/1 – 10/5	Lesson 4.5 - Equations of Lines	Lesson 4.5 – <u>YouTube Video</u>
10,1 10,5		Lesson 4.5 – <u>Khan Academy</u>
	Topic 11 - Scatterplots and lines of Fit	
	Chapter 4 - Graphs and Functions	
10	Lesson 4.6 - Graphs of linear Inequalities	Lesson 4.6 – <u>YouTube Video</u>
10/8 – 10/1	2 • Review	Lesson 4.6 – Khan Academy
	Assessment	

	Week	Major Concepts / Topics	Possible Resources
		Chapter 5 - Exponents and Polynomials	
		Unit 5 – Lesson 5.1 - Integer Exponents, and Scientific Notation	Lesson 5.1 – <u>YouTube Video</u>
	1		Lesson 5.1 – Khan Academy
	10/16 – 10/19	Lesson 5.2 - Adding and Subtracting Polynomials	Lesson 5.2 – <u>YouTube Video</u>
			Lesson 5.2 – Khan Academy
		Assessment	
		Chapter 5 - Exponents and Polynomials	
		Lesson 5.3 - Multiplying Polynomials; Special Products	Lesson 5.3 – <u>YouTube Video</u>
	2		Lesson 5.3 – Khan Academy
	10/22 – 10/26	Lesson 5.4 - Diving Polynomials and Synthetic Division	Lesson 5.4 – <u>YouTube Video</u>
			Lesson 5.4 – <u>Khan Academy</u>
		Assessment	
		Chapter 6 - Factoring and Solving Equations	
0	3	Unit 6 – Lesson 6.1 - Factoring Polynomials with Common Factors	Lesson 6.1 – <u>YouTube Video</u>
Quarter 2 Oct 16 – Dec 21	10/29 – 11/2		Lesson 6.1 – <u>Khan Academy</u>
Oct 16 – Dec 21		Lesson 6.2 - Factoring Trinomials	Lesson 6.2 – <u>YouTube Video</u>
			Lesson 6.2 – Khan Academy
	4 11/5 – 11/9	Chapter 6 - Factoring and Solving Equations	
		Lesson 6.3 - More about Factoring Trinomials	Lesson 6.3 – <u>YouTube Video</u>
			Lesson 6.3 – <u>Khan Academy</u>
		Assessment	
		Lesson 6.4 – Factoring Polynomials with Special Forms	Lesson 6.4 – <u>YouTube Video</u>
			Lesson 6.4 – <u>Khan Academy</u>
		Chapter 6 - Factoring and Solving Equations	Leave CF Ve The Vile
	5 11/12 – 11/16	Lesson 6.5 - Solving Polynomial Equations by Factoring	Lesson 6.5 – <u>YouTube Video</u>
		D. 1.	Lesson 6.5 – <u>Khan Academy</u>
		Review	
		Assessment	
	6	Chapter 7 - Rational Expressions, Equations, and Functions	Lance 74 Mar T. ha Villa
	11/19 – 11/20	Unit 7 – Lesson 7.1 Rational Expressions and Functions	Lesson 7.1 - <u>YouTube Video</u>
			Lesson 7.1 – Khan Academy

		Chapter 7 - Rational Expressions, Equations, and Functions	
		<ul> <li>Lesson 7.2 - Multiplying and Dividing Rational Expressions</li> </ul>	Lesson 7.2 – <u>YouTube Video</u>
	7		Lesson 7.2 – <u>Khan Academy</u>
1	1/26 – 11/30	<ul> <li>Lesson 7.3 - Adding and Subtracting Rational Expressions</li> </ul>	Lesson 7.3 – <u>YouTube Video</u>
			Lesson 7.3 – <u>Khan Academy</u>
		• Assessment	
		Chapter 7 - Rational Expressions, Equations, and Functions	
		• Lesson 7.4 - Complex Fractions	Lesson 7.4 - <u>YouTube Video</u>
	. 8		Lesson 7.4 – Khan Academy
	12/3 – 12/7	<ul> <li>Lesson 7.5 – Solving Rational Equations</li> </ul>	Lesson 7.5 - <u>YouTube Video</u>
			Lesson 7.5 – <u>Khan Academy</u>
		• Assessment	
	9	Exam Review	
1.	2/10 – 12/14		
	10	Semester Review/District Exams	
1	2/17 – 12/21		

	Week	Major Concepts / Topics	Possible Resources
		Chapter 7 - Rational Expressions, Equations, and Functions	
		Review Lesson 7.1 and 7.5	
	1	Topic 15 – Graphing Rational Functions	Topic 15 - <u>YouTube Video</u>
	1/7-1/11	Lesson 7-6 - Applications and Variation	Lesson 7.6 - YouTube Video
			Lesson 7.6 – <u>Khan Academy</u>
		Assessment	
		Chapter 8 - Systems of Equations and Inequalities	
		<ul> <li>Lesson 8.1 - Solving systems of Equations by Graphing and Substitution</li> </ul>	Lesson 8.1 – <u>YouTube Video</u>
	2		Lesson 8.1 – Khan Academy
	1/14 – 1/18	<ul> <li>Lesson 8.2 - Solving Systems of Equations by Elimination</li> </ul>	Lesson 8.2 – <u>YouTube Video</u>
	1,11 1,10		Lesson 8.2 – Khan Academy
		<ul> <li>Lesson 8.6 – Systems of linear Inequalities</li> </ul>	Lesson 8.6 – <u>YouTube Video</u>
			Lesson 8.6 – Khan Academy
		Chapter 8 - Systems of Equations and Inequalities	
Quarter 3		• Lesson 8.6 – Systems of linear Inequalities	
Jan 7 – Mar 14	3 1/21 – 1/25	• Assessment 8.1, 8.2, 8.6	
		Chapter 9 - Radicals and Complex Numbers	
		Lesson 9.1 - Radicals and Rational Exponents	Lesson 9.1 - YouTube Video
		Lesson 3.12 Madicals and National Exponents	Lesson 9.1 – Khan Academy
	4 1/28 – 2/1	Chapter 9 - Radicals and Complex Numbers	
		Lesson 9.1 - Radicals and Rational Exponents	
		<ul> <li>Lesson 9.2 – Simplifying Radical Expressions</li> </ul>	Lesson 9.2 - <u>YouTube Video</u>
			Lesson 9.2 - Khan Academy
		Topic 19 - The Distance Formula	
	5 2/4 – 2/8	Chapter 9 - Radicals and Complex Numbers	
		Lesson 9.3 – Adding and Subtracting Radical Expressions	Lesson 9.3 - YouTube Video
		- Lesson 5.5 Adding and Subtracting National Expressions	Lesson 9.3 – Khan Academy
		• Review	
		Assessment	

	Chapter 9 - Radicals and Complex Numbers	
	Lesson 9.4 Multiplying and Dividing Radical Expressions	Lesson 9.4 – <u>YouTube Video</u>
6		Lesson 9.4 – Khan Academy
6	Topic 18 - Graphing Square and Cube Root Functions	Lesson 9.5 – YouTube Video
2/11 – 2/15	Lesson 9.5 – Radical Equations and Applications	Lesson 9.5 – <u>You rube Video</u> Lesson 9.5 – <u>Khan Academy</u>
		Lesson 9.6 – YouTube Video
	Lesson 9.6 - Complex Numbers	Lesson 9.6 – Khan Academy
	Review	
7	Assessment	
2/18 – 2/22		
2/18 - 2/22	Chapter 10 - Quadratic Equations, Functions, and Inequalities	Lesson 10.1 - YouTube Video
	Unit 10 – Lesson 10.1 - Solving Quadratic Equations	Lesson 10.1 – Khan Academy
	Unit 10 – Lesson 10.1 - Solving Quadratic Equations	
8	Lesson 10.2 - Completing the Square	Lesson 10.2 - YouTube Video
2/25 – 3/1		Lesson 10.2 – <u>Khan Academy</u>
2,23 3,1	Lesson 10.3 – Quadratic Formula	Lesson 10.3 - YouTube Video
		Lesson 10.3 – <u>Khan Academy</u>
	Chapter 10 - Quadratic Equations, Functions, and Inequalities	
	<ul> <li>Lesson 10.4 – Graphs of Quadratic Functions</li> </ul>	Lesson 10.4 - <u>YouTube Video</u>
9		Lesson 10.4 – Khan Academy
3/4 – 3/8	<ul> <li>Topic 8 – Symmetry and Behavior of Graphs</li> </ul>	
	<ul> <li>Lesson 10.5 – Applications of Quadratic Equations</li> </ul>	Lesson 10.5 - YouTube Video
		Lesson 10.5 – Khan Academy
	Review	
10	Assessment	
3/11 – 3/14	Lesson 10.6 - Quadratic and Rational Inequalities	Lesson 10.6 - <u>YouTube Video</u>
		Lesson 10.6 – Khan Academy

	Week	Major Concepts / Topics	Possible Resources
	1 3/18 – 3/22	SPRING BREAK – NO SCHOOL	
	0,10 0,11	Chapter 11 - Quadratic Equations, Functions, and Inequalities	
		Lesson 11.1 - Exponential Functions	Lesson 11.1 – <u>YouTube Video</u>
	2		Lesson 11.1 – Khan Academy
	3/25 – 3/29	Lesson 11.2 - Composite and Inverse Functions	Lesson 11.2 - YouTube Video
		'	Lesson 11.2 – Khan Academy
		Assessment	
		Chapter 11 - Quadratic Equations, Functions, and Inequalities	
		• Review 11.1, 11.2 Exponential Functions and Composite and Inverse Functions	
	3		
	4/1 – 4/5	Lesson 11.3 - Logarithmic Functions	Lesson 11.3 – <u>YouTube Video</u>
	7/1 7/3		Lesson 11.3 – Khan Academy
		• Lesson 11.4 - Properties of Logarithms	Lesson 11.4 – <u>YouTube Video</u>
Quarter 4			Lesson 11.4 – Khan Academy
Mar 18 – May 24		Chapter 11 - Quadratic Equations, Functions, and Inequalities	
	4 4/8 – 4/12	Lesson 11.5 - Solving Exponential and Logarithmic Equations	Lesson 11.5 – <u>YouTube Video</u>
			Lesson 11.5 – Khan Academy
		• Lesson 11.6 - Applications	Lesson 11.6 – Khan Academy
		Topic 21 - Two-way tables	Topic 21 - <u>YouTube Video</u>
		Review	
		Chapter 11 Assessment	
	5	Chapter 12 - Conics	
	4/15 – 4/19	Unit 12 – Lesson 12.1 - Circles and Parabolas	Lesson 12.1 – YouTube Video
	4/13 - 4/13	• Onit 12 – Lesson 12.1 - Circles and Parabolas	Lesson 12.1 – Khan Academy
		• Lesson 12.2 – Ellipses	Lesson 12.2 - YouTube Video
		Lesson 12.2 – Ellipses	Lesson 12.2 – Khan Academy
		Chapter 12 - Conics	
	6	• Lesson 12.2 – Ellipses	
	4/22 – 4/26	• Lesson 12.3 – Hyperbolas	Lesson 12.3 – YouTube Video
	· · · · · ·		Lesson 12.3 – Khan Academy

	Lesson 12.4 - Solving non-linear systems of equations	
7 4/29 – 5/3	<ul> <li>Chapter 12 - Conics</li> <li>Lesson 12.4 - Solving non-linear systems of equations</li> <li>Review</li> <li>Assessment</li> </ul>	Lesson 12.4 - <u>YouTube Video</u> Lesson 12.4 - <u>Khan Academy</u>
8 5/6 – 5/10	Standards Review	
9 5/13 – 5/17	Standards Review	
10 5/20 – 5/24	District Final Exams	