

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:

[HMH \(Holt McDougal\)](#) (use student Active Directory)

Other Course Supplemental Resources:

[Math Nation](#) (use student Active Directory)

[Algebra 2](#) - Khan Academy

[IXL Math – High School Standards](#)

Standards Practice: (Although the Algebra 2 FSA EOC will not be administered, these links help students practice the rigor of the course standards and how they will be assessed.)

[Algebra 2 FSA EOC Mathematics Computer-Based PRACTICE TEST](#)

[Algebra 2 FSA EOC Computer-Based Practice Test Answer Key](#)

[Mathematics Practice Tests – PARCC \(Partnership for Assessment of Readiness for College and Careers\)](#)

[Mathematics Answer Keys – PARCC](#)

[Additional Practice of Course Standards](#)

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 is 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.

Algebra 2

2017 – 2018

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 13	1 8/10 - 8/11	<ul style="list-style-type: none"> Syllabus, Class Intro, Books, Etc. 	
	2 8/14 – 8/18	<ul style="list-style-type: none"> Pre-Test Unit 1 – Linear Review (Including Arithmetic Sequences and Series) Supplemental Lesson Rate of Change/Slope & Writing Linear Equations & Graphing Linear Equations Review 	Rate of Change Khan Academy Linear Equations Khan Academy
	3 8/21 – 8/25	<ul style="list-style-type: none"> Lesson 9.1 Introduction to Sequences (focus on Arithmetic) Lesson 9.2 Series and Summation notation (Focus on Arithmetic) Lesson 9.3 Arithmetic Sequences and Series Assessment 	Lesson 9.1 Khan Academy Lesson 9.2 Khan Academy Lesson 9.3 Khan Academy
	4 8/28 – 9/1	<ul style="list-style-type: none"> Lesson 1.2 Parent Functions Supplemental Lesson Absolute Value Parent Function (including Transformations) Supplemental Lesson Graphing Linear and Absolute Value Inequalities Lesson 6.3 Piece-wise Functions Assessment 	Lesson 1.2 Virtual Nerd Khan Academy- Absolute Value Khan Academy- Graphing Non-linear Piecewise Functions
	5 9/5 – 9/8	<ul style="list-style-type: none"> Supplemental Lesson Solving Systems of Equations Graphically and Algebraically Supplemental Lesson Solving Systems of Inequalities Supplemental Lesson Solving Systems of Equations in Three Variables (Creating the system, NOT SOLVING) 	Solving Systems of Equations Graphically Khan Academy Solving Systems of Equations Algebraically Khan Academy Solving Systems of Equations in Three Variables Khan Academy
	6 9/11 – 9/15	<ul style="list-style-type: none"> Review and Assessment of UNIT 1 Unit 2 – Quadratic Functions Lesson 2.1 Transformations of Quadratic Functions Lesson 2.2 Properties of Quadratic Functions in Standard Form Lesson 2.3 Solving Quadratics by Graphing and Factoring 	Lesson 2.1 Youtube Lesson 2.2 Khan Academy Lesson 2.3 Solving Quadratics by Graphing and Factoring
	7 9/18 – 9/22	<ul style="list-style-type: none"> Lesson 2.3 Solving Quadratics by Graphing and Factoring Assessment Lesson 2.4 Completing the Square 	Khan Academy -Solving Quadratics by Factoring Lesson 2.4 Completing the Square

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 is 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.

Algebra 2

2017 – 2018

	8 9/25 – 9/29	<ul style="list-style-type: none"> • Lesson 2.4 Completing the Square • Lesson 2.5 Complex Numbers • Lesson 2.6 The Quadratic Formula • Lesson 2.7 Quadratic Inequalities 	Lesson 2.5 Khan Academy Lesson 2.6 Khan Academy Lesson 2.7 Quadratic Inequalities
	9 10/2 – 10/6	<ul style="list-style-type: none"> • Lesson 2.7 Quadratic Inequalities • Review • Assessment • Lesson 2.9 Operations on Complex Numbers 	Lesson 2.9 Khan Academy
	10 10/9 – 10/13	<ul style="list-style-type: none"> • Lesson 2.9 Operations on Complex Numbers • Lesson 12.7 Solving Non-Linear Systems • Lesson 12.5 Parabolas (Focus and Directrix) 	Lesson 12.7 Khan Academy Lesson 12.5 Khan Academy

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 is 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.

	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 17 – Dec 21	1 10/17 – 10/20	<ul style="list-style-type: none"> Lesson 12.5 Parabolas (Focus and Directrix) Review Cumulative Assessment Unit 2 Quadratics Unit 3 – Polynomial Functions Lesson 3.1 Polynomials 	Lesson 3.1 Khan Academy
	2 10/23 – 10/27	<ul style="list-style-type: none"> Lesson 3.2 Multiplying Polynomials Lesson 3.3 Dividing Polynomials Assessment 	Lesson 3.2 Khan Academy Lesson 3.3 Khan Academy
	3 10/30 – 11/3	<ul style="list-style-type: none"> Lesson 3.4 Factoring Polynomials Assessment Lesson 3.5 Finding Real Roots of Polynomial Functions 	Lesson 3.4 Khan Academy Lesson 3.5 Youtube
	4 11/6 – 11/9	<ul style="list-style-type: none"> Lesson 3.5 Finding Real Roots of Polynomial Functions Lesson 3.7 Investigating Graphs of Polynomial Functions 	Lesson 3.7 Khan Academy
	5 11/13 – 11/17	<ul style="list-style-type: none"> Review Assessment Unit 3 Unit 4 – Rational Functions Lesson 5.2 Multiplying and Dividing Rational Functions 	Lesson 5.2 Multiplying and Dividing Rational Functions
	6 11/20 – 11/21	<ul style="list-style-type: none"> Lesson 5.3 Adding and Subtracting Rational Functions 	Lesson 5.3 Khan Academy
	7 11/27 – 12/1	<ul style="list-style-type: none"> Lesson 5.3 Adding and Subtracting Rational Functions Lesson 5.4 Rational Functions 	Lesson 5.4 Khan Academy
	8 12/4 – 12/8	<ul style="list-style-type: none"> Lesson 5.5 Solving Rational Equations and Inequalities Review Assessment Unit 4 	Lesson 5.5 Khan Academy
	9 12/11 – 12/15	<ul style="list-style-type: none"> Review for Midterms 	

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 is 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.

Algebra 2

2017 – 2018

	10 12/18 – 12/21	<ul style="list-style-type: none">• Midterm Exams
--	---------------------	---

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 is 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.

	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 8 – Mar 15	1 1/8 – 1/12	<ul style="list-style-type: none"> • Unit 5 – Properties of Functions, Rational Exponents & Radical Functions • Lesson 6.5 Operations with Functions • Lesson 6.4 Transforming Functions • Lesson 6.6 Functions and Their Inverses 	Lesson 6.5 Youtube Lesson 6.4 Youtube Lesson 6.6 Khan Academy
	2 1/16 – 1/19	<ul style="list-style-type: none"> • Review • Assessment • Lesson 5.6 Radical Expressions and Rational Exponents 	Lesson 5.6 Radical Expressions and Radical Exponents
	3 1/22 – 1/26	<ul style="list-style-type: none"> • Lesson 5.6 Radical Expressions and Rational Exponents • Assessment • Lesson 5.7 Radical Functions (Graphing with Transformations) 	Lesson 5.7 Khan Academy
	4 1/30 – 2/2	<ul style="list-style-type: none"> • Lesson 5.8 Solving Radical Equations • Assessment Unit 5 	Lesson 5.8 Khan Academy
	5 2/5 – 2/9	<ul style="list-style-type: none"> • Unit 6 – Exponential and Logarithmic Functions (Include Geometric Sequences and Series) • Lesson 4.1 Exponential Functions, Growth and Decay • Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Exponential functions) • Lesson 9.4 Geometric Sequences and Series 	Lesson 4.1 Lesson 9.4 Khan Academy Lesson 4.7 Youtube
	6 2/12 – 2/16	<ul style="list-style-type: none"> • Lesson 9.4 Geometric Sequences and Series • Assessment • Lesson 4.2 Inverses of Relations and Functions 	Lesson 4.2 Khan Academy
	7 2/20 – 2/23	<ul style="list-style-type: none"> • Lesson 4.3 Logarithmic Functions • Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Logarithmic Functions) • Lesson 4.4 Properties of Logarithms 	Lesson 4.7 Youtube Lesson 4.3 Khan Academy Lesson 4.4 Khan Academy
	8 2/26 – 3/2	<ul style="list-style-type: none"> • Lesson 4.5 Exponential and Logarithmic Functions • Lesson 4.6 The Natural Base E 	Lesson 4.5 Khan Academy Lesson 4.6

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 is 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.

Algebra 2

2017 – 2018

	9 3/5 – 3/9	<ul style="list-style-type: none"> • Review • Assessment Unit 6 • Unit 7 - Probability • Lesson 7.1 Permutations and Combinations (include Fundamental Counting Principle) • Supplemental Lesson Set Theory and Venn Diagrams 	Lesson 7.1 Khan Academy
	10 3/12 – 3/15	<ul style="list-style-type: none"> • Lesson 7.2 Theoretical and Experimental Probability • Review • Assessment • Lesson 7.3 Independent and Dependent Events 	Lesson 7.2 Khan Academy Lesson 7.3 Khan Academy

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 is 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.

	Week	Major Concepts / Topics	Possible Resources
Quarter 4 Mar 19 – May 24	1 3/19 – 3/23	<ul style="list-style-type: none"> Lesson 7.5 Compound Events Lesson 7.4 Two-Way Tables Review Assessment Unit 7 	Lesson 7.4 Khan Academy Lesson 7.5 Khan Academy
	2 3/26 – 3/30	<ul style="list-style-type: none"> SPRING BREAK – NO SCHOOL 	
	3 4/2 – 4/6	<ul style="list-style-type: none"> Unit 8 Data Analysis and Statistics Lesson 8.2 Data Gathering Lesson 8.3 Surveys, Experiments, and Observational Studies Lesson 8.1 Measures of Central Tendency and Variation Supplemental lesson on Distributions of Data (Box and Whisker plot, Histograms, & Skewed vs Symmetric Data) 	Lesson 8.1 Khan Academy Lesson 8.2 Khan Academy Lesson 8.3 Youtube
	4 4/9 – 4/13	<ul style="list-style-type: none"> Extension on Normal Distributions (p. 594) Lesson 8.7 Fitting to a Normal Distribution Review Assessment Unit 8 	Lesson 8.7 Khan Academy
	5 4/16 – 4/20	<ul style="list-style-type: none"> Unit 9 – Trigonometric Functions Lesson 10.1 Right-Angle Trigonometry Lesson 10.2 Angles of Rotation 	Lesson 10.1 Khan Academy Lesson 10.2 Khan Academy
	6 4/23 – 4/27	<ul style="list-style-type: none"> Lesson 10.3 The Unit Circle Assessment 	Lesson 10.3 Khan Academy
	7 4/30 – 5/4	<ul style="list-style-type: none"> Lesson 11.1 Graphs of Sine and Cosine 11.3 Fundamental Trigonometric Identities (Pythagorean Identities ONLY) 	Lesson 11.1 Khan Academy Lesson 11.3 Khan Academy
	8 5/7 – 5/11	<ul style="list-style-type: none"> Review Assessment Unit 9 	
	9 5/14 – 5/18	<ul style="list-style-type: none"> Review for Final Exams 	
	10 5/21 – 5/24	<ul style="list-style-type: none"> Final Exams 	

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 is 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.