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:

McGraw Hill – Cinch Learning (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.)

Mathematics Practice Tests and Answer Keys – PARCC (Partnership for Assessment of Readiness for College and Careers)

Additional Practice of Course Standards

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 12	1 8/10	• Pre-test	
	2 8/13 – 8/17	• **Unit 1 Linear Functions Review (with Arithmetic Sequences and Series)** • Lesson 2-3 Rate of Change and Slope and • 2-4 Writing Linear Equations and Inequalities • Graphing Linear Equations and Inequalities • Lesson 10-1 Sequences and Functions	Lesson 2-3 Rate of Change Khan Academy Lesson 2-4 Linear Equations Khan Academy Lesson 10-1 – Khan Academy
	3 8/20 – 8/24	• Lesson 10-2 Arithmetic Sequences and Series • Review • Assess • Lesson 3-1 Solving Systems of Equations	Lesson 10-2 – Khan Academy Lesson 3-1 Khan Academy
	4 8/27 – 8/31	• Lesson 3-1 Solving Systems of Equations • Lesson 3-2 Systems of Inequalities • Lesson 3-4 Systems of Equations in Three Variables • Lesson 2-6 Special Functions	Lesson 3-1 Khan Academy Lesson 3-2 Khan Academy Lesson 3-4 Khan Academy Lesson 2-6 Khan Academy
	5 9/3 – 9/7	• Labor Day Holiday 9/3 • Lesson 2-6 Special Functions • Lesson 2-7 Parent Functions and Transformations • Review • Assess	Lesson 2-6 Khan Academy Lesson 2-7 Virtual Nerd
	6 9/10 – 9/14	• **Unit 2 Quadratic Functions** • Lesson 4-1 Graphing Quadratic Functions • Lesson 4-2 Solving Quadratics by Graphing • Lesson 4-3 Solving Equations by Factoring	Lesson 4-1 YouTube Lesson 4-2 Khan Academy Lesson 4-3 Khan Academy
	7 9/17 – 9/21	• Lesson 4-4 Complex Numbers • Assessment • Lesson 4-5 Completing the Square	Lesson 4-4 Khan Academy Lesson 4-5 Khan Academy
	8 9/24 – 9/28	• Lesson 4-6 The Quadratic Formula and the Discriminant • Review	Lesson 4-6 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.

		• Assessment • Lesson 4-7 Transformations of Quadratic Graphs • Lesson 4-8 Quadratic Inequalities	Lesson 4-7 YouTube Lesson 4-8 Khan Academy
	9 10/1 – 10/5	• Lesson 9-7 Solving Linear-Nonlinear Systems • Lesson 9-2 Parabolas • Review	Lesson 9-7 Khan Academy Lesson 9-2 Khan Academy
	10 10/8 – 10/12	• Test • **Unit 3 Polynomial Functions** • Lesson 5-1 Operations with Polynomials **(INCLUDE CLOSURE!)** • **PSAT 10/10** • Lesson 5-2 Dividing Polynomials	Lesson 5-1 Khan Academy Lesson 5-2 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.

Algebra 2 Honors   2018 – 2019

	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 16 – Dec 21	1 10/16 – 10/19	• Teacher Planning 10/15 • Lesson 5-3 Polynomial Functions • Lesson 5-4 Analyzing Graphs of Polynomial Functions • Assess **(INCLUDE CLOSURE!!)** • Lesson 5-5 Solving Polynomial Equations	Lesson 5-3 Khan Academy Lesson 5-4 Khan Academy Lesson 5-5 Khan Academy
	2 10/22 – 10/26	• Lesson 5-5 Solving Polynomial Equations • Lesson 5-6 The Remainder and Factor Theorems • Lesson 5-7 Roots and Zeros • Lesson 5-8 Rational Zero Theorem	Lesson 5-5 Khan Academy Lesson 5-6 Khan Academy Lesson 5-7 YouTube Lesson 5-8 YouTube Lesson Pythagorean Triples Pythagorean Triples
	3 10/29 – 11/2	• Review • Assess • **Unit 4 Rational Functions** • Lesson 8-1 Multiplying and Dividing Rationals • Lesson 8-2 Adding and Subtracting Rationals	Lesson 8-1 Khan Academy Lesson 8-2 Khan Academy
	4 11/5 – 11/9	• Lesson 8-3 Graphing Reciprocal Functions • Assess • Lesson 8-4 Graphing Rational Functions • Lesson 8-6 Solving Rational Equations (no Inequalities)	Lesson 8-3 YouTube Lesson 8-4 Khan Academy Lesson 8-6 Khan Academy
	5 11/12 – 11/16	• Veterans Day Holiday 11/2 • Lesson 8-6 Solving Rational Equations (no Inequalities) • Review • Assess	Lesson 8-6 Khan Academy
	6 11/19 – 11/20	• Standards Review	
	7 11/26 – 11/30	• **Unit 5 Radical Functions** • Lesson 6-1 Operations on Functions • Lesson 6-2 Inverse Functions and Relations • Lesson 6-3 Square Root Functions (include cube root)	Lesson 6-1 YouTube Lesson 6-2 Khan Academy Lesson 6-3 Khan Academy
	8	• Lesson 6-3 Square Root Functions	Lesson 6-3 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.

	12/3 – 12/7	• Lesson 6-4 nth Roots • Review • Assess	Lesson 6-4 Khan Academy
	9 12/10 – 12/14	• Standards Review	
	10 12/17 – 12/21	• District 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.

Algebra 2 Honors   2018 – 2019

	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 7 – Mar 14	1 1/7– 1/11	• **Unit 6 Exponential and Logarithmic Functions (including Geometric Sequences and Series)** • Lesson 7-1 Graphing Exponential Functions • Lesson 7-2 Solving Exponential Equations • Lesson 7-3 Solving Exponential Functions and Logs • Assess	Lesson 7-1 Khan Academy Lesson 7-2 Khan Academy Lesson 7-3 Khan Academy
	2 1/14 – 1/18	• Lesson 7-4 Solving Logarithmic Equations • Lesson 7-5 Properties of Logs • Lesson 7-6 Common Logs	Lesson 7-4 Khan Academy Lesson 7-5 Khan Academy Lesson 7-6 Khan Academy
	3 1/21 – 1/25	• Martin Luther King, Jr. Holiday 1/21 • Lesson 7-7 The Natural Base, *e* • Lesson 7-8 Using Exponential and Logarithmic Functions • Review	Lesson 7-7 Khan Academy Lesson 7-8 YouTube
	4 1/28 – 2/1	• Review • Assess • Lesson 10-1 Review • Lesson 10-3 Geometric Sequences • Lesson 10-3 Geometric Series	Lesson 10-3 – Khan Academy
	5 2/4 – 2/8	• Lesson 10-4 Infinite Geometric Series • Lesson 10-5 Recursion and Iteration (Geometric) • Review • Assess • **Unit 7 Trigonometric Functions** • Lesson 12-1 Trig. Functions in Right Triangles	Lesson 10-4 – Khan Academy Lesson 10-5 - Khan Academy Lesson 12-1 Khan Academy
	6 2/11 – 2/15	• Lesson 12-2 Angles and Angle Measures • Lesson 12-3 Trig. Functions of General Angles • Assess • Teacher Inservice 2/15	Lesson 12-2 Khan Academy Lesson 12-3 Khan Academy
	7 2/18 – 2/22	• Presidents Day Holiday 2/18 • Unit Circle • Lesson 12-6 Circles and Periodic Functions	Lesson 12-6 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.

		• Assess	
	8 2/25 – 3/1	• Lesson 12-7 Graphing Trig. Functions • Lesson 12-8 Translations in Trig. Functions • Lesson 13-1 Trig. Identities	Lesson 12-7 Khan Academy Lesson 12-8 Khan Academy Lesson 13-1 Khan Academy
	9 3/4 – 3/8	• Review • Unit Assess • **Unit 8 Probability** • Lesson 0-4 Counting Techniques (Fundamental Counting Principle only) • Lesson 0-5 Adding Probabilities (Experimental/Theoretical only) • Sets & Venn Diagrams	Lesson 0-4 Virtual Nerd Lesson 0-6 Khan Academy Venn Diagrams
	10 3/11 – 3/14	• Sets & Venn Diagrams • Probability Addition Rule (Lesson 0-5) • Review • Assess • Teacher Planning 3/15	Venn Diagrams Lesson 0-5 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 4 Mar 18 – May 24	1 3/18 – 3/22	• **SPRING BREAK – NO SCHOOL**	
	2 3/25 – 3/29	• Review Probability Addition Rule/Independence • Conditional Probability • Two-Way Tables	Two-way Tables – Khan Academy Permutations and Combinations - Khan Academy
	3 4/1 – 4/5	• Permutations and Combinations • Review • Assess	
	4 4/8 – 4/12	• Standards Review	
	5 4/15 – 4/19	• Standards Review • Holiday 4/19	
	6 4/22 – 4/26	• **Unit 9 Statistics** • Lesson 11-1 Designing a Study • Lesson 0-9 Measures of Central Tendency • Lesson 11-2 Distribution of Data	Lesson 0-9 Khan Academy Data Distribution – Khan Academy
	7 4/29 – 5/3	• Lesson 11-5 Normal Distribution • Lesson 11-6 Confidence Interval and Hypothesis Testing	Lesson 11-5 Khan Academy
	8 5/6 – 5/10	• Review • Assess • **Unit 10 – Honors Topics** • Lesson 3-5 and 3-6 Operations with Matrices • Lesson 3-7/3-8 Solving Systems Using Matrices • Lesson 9-3 Circles	Matrices – Khan Academy Conic Sections – Khan Academy
	9 5/13 – 5/17	• Lesson 9-2 Parabolas • Lesson 9-4 Ellipses • Lesson 9-5 Hyperbolas • Standards Review	Conic Sections – Khan Academy
	10 5/20 – 5/24	• 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.