#### **Please Note:**

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#### **Publisher Resource:**

McGraw Hill – <u>Cinch Learning</u> (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

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	Week	Major Concepts / Topics	Possible Resources
	1 8/10 - 8/11	<ul> <li>Pre-test</li> <li>Unit 1 – Sequences and Series</li> <li>Chapter 10 Sequences and Series</li> <li>Lesson 10-1 Sequences and Functions</li> </ul>	Lesson 10-1 – <u>Khan Academy</u> Lesson 10-2 – Khan Academy
	2 8/14 - 8/18	<ul> <li>Unit 1 A – Sequences and Series</li> <li>Chapter 10 Sequences and Series</li> <li>Lesson 10-2 Arithmetic Sequences and Series</li> <li>Lesson 10-5 Recursion and Iteration (Arithmetic Only)</li> <li>Review</li> <li>Assessment</li> <li>Lesson 2-3 Rate of Change and Slope and 2-4 Writing Linear Equations</li> </ul>	Lesson 10-5 - <u>Khan Academy</u> Lesson 2-3 Rate of Change <u>Khan Academy</u> Lesson 2-4 Linear Equations <u>Khan Academy</u>
Quarter 1	3 8/22 – 8/25	<ul> <li>Unit 2 Linear (Review) Unit</li> <li>Chapter 2Linear Relations and Functions</li> <li>Lesson 2-6 Special Functions</li> <li>Lesson 2-7 Parent Functions and Transformations</li> <li>Lesson 2-8 Graphing Linear and Absolute Value Inequalities</li> <li>Assessment</li> </ul>	Lesson 2-6 <u>Khan Academy</u> Lesson 2-7 <u>Virtual Nerd</u> Lesson 2-8 <u>Khan Academy</u>
Aug 10 – Oct 14	4 8/28 – 9/1	<ul> <li>Unit 2 Linear (Review) Unit</li> <li>Chapter 2Linear Relations and Functions</li> <li>Lesson 3-1 Solving Systems of Equations</li> <li>Lesson 3-2 Systems of Inequalities</li> <li>Lesson 3-4 Systems of Equations in Three Variables</li> </ul>	Lesson 3-1 <u>Khan Academy</u> Lesson 3-2 <u>Khan Academy</u> Lesson 3-4 <u>Khan Academy</u>
	5 9/5 – 9/8	<ul> <li>Unit 2 Linear (Review) Unit</li> <li>Unit 3 Quadratics</li> <li>Chapter 3Systems of Equations and Inequalities</li> <li>Review</li> <li>Assessment</li> <li>Lesson 4-1 Graphing Quadratic Functions</li> <li>Lesson 4-2 Solving Quadratics by Graphing</li> </ul>	Lesson 4-1 <u>YouTube</u> Lesson 4-2 <u>Khan Academy</u>
	6 9/11 – 9/15	<ul> <li>Unit 3 Quadratics</li> <li>Chapter 4 Quadratic Functions and Relations</li> <li>Lesson 4-3 Solving Equations by Factoring</li> <li>Lesson 4-4 Complex Numbers</li> <li>Assessment</li> </ul>	Lesson 4-3 <u>Khan Academy</u> Lesson 4-4 <u>Khan Academy</u>
	7 9/18 – 9/22	<ul><li>Unit 3 Quadratics</li><li>Chapter 4 Quadratic Functions and Relations</li></ul>	

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	Algebra 2 Honors	2017 – 2018
	<ul> <li>Lesson 4-5 Completing the Square</li> <li>Lesson 4-6 The Quadratic Formula and the Discriminant</li> <li>Review</li> <li>Assessment</li> </ul>	Lesson 4-5 <u>Khan Academy</u> Lesson 4-6 <u>Khan Academy</u>
8 9/25 – 9/	<ul> <li>Unit 3 Quadratics</li> <li>Chapter 4 Quadratic Functions and Relations</li> <li>Lesson 4-7 Transformations of Quadratic Graphs</li> <li>Lesson 4-8 Quadratic Inequalities</li> <li>Chapter 9 Conic Sections</li> <li>Lesson 9-2 Parabolas</li> <li>Lesson 9-7 Solving Linear-Nonlinear Systems</li> </ul>	Lesson 4-7 <u>YouTube</u> Lesson 4-8 <u>Khan Academy</u> Lesson 9-2 <u>Khan Academy</u>
9 10/2 – 10	Unit 3 Quadratics Chapter 4 Quadratic Functions and Relations Lesson 9-7 Solving Linear-Nonlinear Systems Review	Lesson 9-7 <u>Khan Academy</u> Lesson 5-1 <u>Khan Academy</u> Lesson 5-2 <u>Khan Academy</u>
10 10/9 – 10/	<ul> <li>Chapter 5 Polynomials and Polynomial Functions</li> <li>Lesson 5-2 Dividing Polynomials</li> <li>Lesson 5-3 Polynomial Functions</li> <li>Lesson 5-4 Analyzing Graphs of Polynomial Functions</li> <li>Quarter Review and Assessment</li> </ul>	Lesson 5-3 <u>Khan Academy</u> Lesson 5-4 <u>Khan Academy</u>

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2017 – 20	)18
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	Week	Major Concepts / Topics	Possible Resources
	1 10/17 – 10/20	<ul> <li>Unit 4 Polynomials</li> <li>Chapter 5 Polynomials and Polynomial Functions</li> <li>Lesson 5-5 Solving Polynomial Equations</li> <li>Lesson 5-6 The Remainder and Factor Theorems</li> <li>Lesson 5-7 Roots and Zeros</li> </ul>	Lesson 5-5 <u>Khan Academy</u> Lesson 5-6 <u>Khan Academy</u> Lesson 5-7 <u>YouTube</u>
	2 10/23 – 10/27	<ul> <li>Unit 4 Polynomials</li> <li>Chapter 8 Rational Functions and Relations</li> <li>Lesson 5-8 Rational Zero Theorem</li> <li>Pythagorean Triples</li> <li>Review</li> <li>Assessments</li> <li>Lesson 8-1 Multiplying and Dividing Rationals</li> </ul>	Lesson 5-8 <u>YouTube</u> Lesson Pythagorean Triples <u>Pythagorean Triples</u> Lesson 8-1 <u>Khan Academy</u>
Quarter 2	3 10/30 – 11/3	Unit 5 Rationals Chapter 8 Rational Functions and Relations Lesson 8-1 Multiplying and Dividing Rationals Lesson 8-2 Adding and Subtracting Rationals Lesson 8-3 Graphing Reciprocal Functions	Lesson 8-1 <u>Khan Academy</u> Lesson 8-2 <u>Khan Academy</u> Lesson 8-3 <u>YouTube</u>
Oct 18 – Dec 21	4 11/6 - 11/10	<ul> <li>Unit 5 Rationals</li> <li>Chapter 8 Rational Functions and Relations</li> <li>Assess</li> <li>Lesson 8-4 Graphing Rational Functions</li> <li>Lesson 8-6 Solving Rational Equations (no Inequalities)</li> </ul>	Lesson 8-4 <u>Khan Academy</u> Lesson 8-6 <u>Khan Academy</u>
	5 11/13 – 11/17	Unit 5 Rationals <ul> <li>Review</li> <li>Assessment</li> </ul>	
	6 11/20 – 11/21	<ul><li>Unit 5 Rationals</li><li>Project Based Learning</li></ul>	
	7 11/27 – 12/1	<ul> <li>Unit 6 Radical Functions</li> <li>Chapter 6 Inverses and Radical Functions and Relations</li> <li>Lesson 6-1 Operations on Functions</li> <li>Lesson 6-2 Inverse Functions and Relations</li> <li>Lesson 6-3 Square Root Functions</li> <li>Lesson 6-4 nth Roots</li> </ul>	Lesson 6-1 <u>YouTube</u> Lesson 6-2 <u>Khan Academy</u> Lesson 6-3 <u>Khan Academy</u> Lesson 6-4 <u>Khan Academy</u>
	9 12/11 – 12/15	Review     Assess	

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	Algebra 2 Honors	2017 – 2018
	Semester Review	
10 12/18 – 12/21	District Exams	

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Possible	e Resources	

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	Week Major Concepts / Topics		Possible Resources
		Unit 7 Exponents and Logarithms	
		Chapter 7 Exponential and Logarithmic Functions and Relations	
	1	Lesson 7-1 Graphing Exponential Functions	Lesson 7-1 Khan Academy
	1/8 – 1/12	Lesson 7-2 Solving Exponential Equations	Lesson 7-2 Khan Academy
		Lesson 7-3 Solving Exponential Functions and Logs	Lesson 7-3 Khan Academy
		Assessment	
		Unit 7 Exponents and Logarithms	
		Chapter 7 Exponential and Logarithmic Functions and Relations	Lesson 7-4 Khan Academy
	2	Lesson 7-4 Solving Logarithmic Equations	Lesson 7-5 Khan Academy
	1/16 – 1/19	Lesson 7-5 Properties of Logs	Lesson 7-6 Khan Academy
		Lesson 7-6 Common Logs	Lesson 7-7 Khan Academy
		Lesson 7-7 The Natural Base, <i>e</i>	
		Unit 7 Exponents and Logarithms	
	2	Chapter 7 Exponential and Logarithmic Functions and Relations	Lesson 7-8 <u>YouTube</u>
	3	Lesson 7-8 Using Exponential and Logarithmic Functions	
	1/22 – 1/26	Review	
		Assessment	
Quarter 3	4 1/30 – 2/2	Unit 1 B – Sequences and Series	
Jan 5 – Mar 10		Chapter 10 Sequences and Series	
		Lesson 10-1 Review	Lesson 10-3 – <u>Khan Academy</u>
		Lesson 10-3 Geometric Sequences	Lesson 10-4 – <u>Khan Academy</u>
		Lesson 10-3 Geometric Series	Lesson 10-5 - Khan Academy
		Lesson 10-4 Infinite Geometric Series	
		Lesson 10-5 Recursion and Iteration (Geometric)	
		Unit 1B Assessment & Unit 7 Exponents and Logarithms	
		Chapter 7 Exponential and Logarithmic Functions and Relations	
	5	Review	
	2/5 – 2/9	Assessments	
		Chapter 12 Trigonometric Functions	Lesson 12-1 Khan Academy
		Lesson 12-1 Trig. Functions in Right Triangles	Lesson 12-2 Khan Academy
		Lesson 12-2 Angles and Angle Measures	
		Unit 8 Trigonometry	
	C	Chapter 12 Trigonometric Functions	
	6 2/12 – 2/16	Lesson 12-3 Trig. Functions of General Angles	Lesson 12-3 Khan Academy
		Unit Circle     Lesson 12 C Circles and Pariodia Eventions	Lesson 12-6 Khan Academy
		Lesson 12-6 Circles and Periodic Functions	Lesson 12-7 Khan Academy
		Assess	

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	Lesson 12-7 Graphing Trig. Functions	
	Unit 8 Trigonometry	
	Chapter 12 Trigonometric Functions	
7	Lesson 12-8 Translations in Trig. Functions	Lesson 12-8 Khan Academy
2/20 – 2/23	Chapter 13 Trigonometric identities and Equations	
	Lesson 13-1 Trig. Identities	Lesson 13-1 Khan Academy
	Review	
	Unit 8 Trigonometry & Unit 9 Probability	
	Assessment	
	Chapter 0 Preparing for Advanced Algebra	
8	Lesson 0-4 Counting Techniques (Fundamental Counting Principle only)	Lesson 0-4 Virtual Nerd
2/26 – 3/2	Lesson 0-5 Adding Probabilities (Experimental/Theoretical only)	Lesson 0-5 Khan Academy
	Lesson Sets & Venn diagrams	Lesson 0-6 Khan Academy
	Lesson 0-5 Adding Probabilities	Venn Diagrams
	Lesson 0-6 Multiplying Probabilities	
	Unit 9 Statistics	
	Chapter 0 Preparing for Advanced Algebra	
	Lesson Two- Way tables	
9	Review	
3/5 – 3/9	Assessment	
	Unit 10 Statistics	
	Lesson 11.1 Designing a Study	Lesson 0-9 Khan Academy
	Lesson 0-9 Measures of Central Tendency	
	Unit 10 Statistics	
10	Chapter 11 Statistics and Probability	
3/12 – 3/15	Lesson 11-2 Distribution of Data	Lesson 11-2 YouTube
5/12 - 5/15	Assess	Lesson 11-3 Khan Academy
	Lesson 11-3 Probability Distribution	

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#### 2017 - 2018

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	Week	Major Concepts / Topics	Possible Resources
	1 3/19 - 3/23	<ul> <li>Unit 9 Statistics</li> <li>Chapter 11 Statistics and Probability</li> <li>Lesson 11-3 Probability Distribution cont.</li> <li>Lesson 11-5 Normal Distribution</li> <li>Lesson 11-6 Confidence Interval and Hypothesis Testing</li> <li>Review</li> <li>Assessment</li> </ul>	Lesson 11-3 <u>Khan Academy</u> Lesson 11-5 <u>Khan Academy</u>
	2 4/2 - 4/6	EOC Review	
	3 4/9 – 4/13	EOC Review	
	4 4/16 - 4/20	<ul><li>EOC's Begin</li><li>Course Review</li></ul>	
Quarter 4 Mar 21 – May 24	5 4/23 – 4/27	<ul> <li>Unit 11 Honors Topics</li> <li>Chapter 0 Preparing for Advanced Algebra</li> <li>Lesson 0-4 Permutations and Combinations</li> <li>Chapter 10 Sequences and Series</li> <li>Lesson 10-6 Binomial Theorem, Binomial Expansion, Pascal's Triangle</li> <li>Review</li> </ul>	Lesson 0-4 <u>Khan Academy</u> Lesson 10-6 <u>Khan Academy</u>
	6 4/30 – 5/4	<ul> <li>Unit 11 Honors Topics</li> <li>Assessment Unit 12 Conics</li> <li>Chapter 9 Conic Sections</li> <li>Lesson 9.1 Midpoint and Distance Formulas</li> <li>Lesson 9.2 Parabolas</li> <li>Lesson 9.3 Circles</li> </ul>	
	7 5/7 – 5/11	Unit 12 Conics Chapter 9 Conic Sections Lesson 9.4 Ellipses Lesson 9.5 Hyperbola Review Assessment	
	8 5/14 – 5/18	Review Material for Final Exam	

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Algebra 2 Honors		2017 – 2018
9	Final Exam	
5/21 – 5/24		

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