

Please Note:

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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.)

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

[Additional Practice of Course Standards](#)

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Algebra 2

2018 – 2019

| | Week | Major Concepts / Topics | Possible Resources |
|------------------------------|------------------|--|---|
| Quarter 1 Aug 10 – Oct 13 | 1 8/10 | <ul style="list-style-type: none"> Syllabus, Class Intro, Books, Etc. | |
| | 2 8/13 – 8/17 | <ul style="list-style-type: none"> Unit 1 – Linear Function and Arithmetic Sequences and Series Rate of Change/Slope & Writing Linear Equations & Graphing Linear Equations Review | Rate of Change Khan Academy Linear Equations Khan Academy |
| | 3 8/20 – 8/24 | <ul style="list-style-type: none"> Lesson 9.1 Introduction to Sequences Lesson 9.2 Arithmetic Series and Summation notation Lesson 9.3 Arithmetic Sequences and Series Assessment | Lesson 9.1 Khan Academy Lesson 9.2 Khan Academy Lesson 9.3 Khan Academy |
| | 4 8/27 – 8/31 | <ul style="list-style-type: none"> Solving Systems of Equations Graphically and Algebraically Solving Systems of Inequalities Solving Systems of Equations in Three Variables | Solving Systems of Equations Graphically Khan Academy Solving Systems of Equations Algebraically Khan Academy Solving Systems of Equations in Three Variables |
| | 5 9/4 – 9/7 | <ul style="list-style-type: none"> Lesson 6.3 Piece-wise Functions Lesson 1.2 Parent Functions Absolute Value Function Graphing Linear and Absolute Value Inequalities | Lesson 1.2 Virtual Nerd Khan Academy- Absolute Value Khan Academy- Graphing Non-linear Piecewise Functions |
| | 6 9/10 – 9/14 | <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 2.1 Youtube Lesson 2.2 Khan Academy Lesson 2.3 Solving Quadratics by Graphing and Factoring |
| | 7 9/17 – 9/21 | <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 |
| | 8 9/24 – 9/28 | <ul style="list-style-type: none"> Lesson 2.4 Completing the Square Lesson 2.5 Complex Numbers Lesson 2.9 Operations on Complex Numbers | Lesson 2.4 Completing the Square Lesson 2.5 Khan Academy Lesson 2.9 Khan Academy |
| | 9 10/1 – 10/5 | <ul style="list-style-type: none"> Lesson 2.6 The Quadratic Formula Lesson 2.7 Quadratic Inequalities | Lesson 2.6 Khan Academy Lesson 2.7 Quadratic Inequalities |

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2018 – 2019

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| | | <ul style="list-style-type: none"> • Review | |
| | <p>10 10/8 – 10/12</p> | <ul style="list-style-type: none"> • Assessment • Lesson 12.7 Solving Non-Linear Systems | Lesson 12.7 Khan Academy |

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| Quarter 2 Oct 17 – Dec 21 | 1 10/16 – 10/19 | <ul style="list-style-type: none"> • Lesson 12.5 Parabolas (Focus and Directrix) • Review • Cumulative Assessment Unit 2 Quadratics | Lesson 12.5 Khan Academy |
| | 2 10/22 – 10/26 | <ul style="list-style-type: none"> • Unit 3 – Polynomial Functions • Lesson 3.1 Polynomials • Lesson 3.2 Multiplying Polynomials • Lesson 3.3 Dividing Polynomials | Lesson 3.1 Khan Academy Lesson 3.2 Khan Academy Lesson 3.3 Khan Academy |
| | 3 10/29 – 11/2 | <ul style="list-style-type: none"> • Assessment • Lesson 3.4 Factoring Polynomials | Lesson 3.4 Khan Academy |
| | 4 11/5 – 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 3.5 Youtube Lesson 3.7 Khan Academy |
| | 5 11/13 – 11/16 | <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 11/19 – 11/20 | <ul style="list-style-type: none"> • Lesson 5.2 Multiplying and Dividing Rational Functions | Lesson 5.2 Multiplying and Dividing Rational Functions |
| | 7 11/26 – 11/30 | <ul style="list-style-type: none"> • Lesson 5.3 Adding and Subtracting Rational Functions • Lesson 5.4 Rational Functions | Lesson 5.3 Khan Academy Lesson 5.4 Khan Academy |
| | 8 12/3 – 12/7 | <ul style="list-style-type: none"> • Lesson 5.4 Rational Functions • Lesson 5.5 Solving Rational Equations and Inequalities | Lesson 5.4 Khan Academy Lesson 5.5 Khan Academy |
| | 9 12/10 – 12/14 | <ul style="list-style-type: none"> • Review • Unit 4 Assessment • Standards Review | |
| | 10 12/17 – 12/21 | <ul style="list-style-type: none"> • Midterm Exams | |

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| Quarter 3 Jan 8 – Mar 15 | 1 1/7 – 1/11 | <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 1/14 – 1/18 | <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 – 1/25 | <ul style="list-style-type: none"> • Lesson 5.6 Radical Expressions and Rational Exponents • Assessment • Lesson 5.7 Radical Functions (Graphing with Transformations) | Lesson 5.6 Radical Expressions and Radical Exponents Lesson 5.7 Khan Academy |
| | 4 1/28 – 2/1 | <ul style="list-style-type: none"> • Lesson 5.8 Solving Radical Equations • Assessment Unit 5 • Unit 6 – Exponential and Logarithmic Functions (Include Geometric Sequences and Series) • Lesson 4.1 Exponential Functions, Growth and Decay | Lesson 5.8 Khan Academy Lesson 4.1 |
| | 5 2/4 – 2/8 | <ul style="list-style-type: none"> • Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Exponential functions) • Lesson 9.4 Geometric Sequences and Series | Lesson 4.7 Youtube Lesson 9.4 Khan Academy |
| | 6 2/11 – 2/14 | <ul style="list-style-type: none"> • Lesson 9.4 Geometric Sequences and Series • Lesson 4.5 Exponential Functions • Assessment | Lesson 9.4 Khan Academy Lesson 4.5 Khan Academy |
| | 7 2/19 – 2/22 | <ul style="list-style-type: none"> • Lesson 4.2 Inverses of Relations and Functions • Lesson 4.3 Logarithmic Functions • Lesson 4.7 Transforming Exponential and Logarithmic Functions (Focus on Logarithmic Functions) | Lesson 4.2 Khan Academy Lesson 4.3 Khan Academy Lesson 4.7 Youtube |
| | 8 2/25 – 3/1 | <ul style="list-style-type: none"> • Lesson 4.4 Properties of Logarithms • Lesson 4.5 Exponential and Logarithmic Functions • Lesson 4.6 The Natural Base E | Lesson 4.4 Khan Academy Lesson 4.5 Khan Academy Lesson 4.6 |
| | 9 3/4 – 3/8 | <ul style="list-style-type: none"> • Lesson 4.6 The Natural Base E • Review • Assessment Unit 6 • Unit 7 - Probability | Lesson 4.6 |

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| | | <ul style="list-style-type: none"> Lesson 7.1 Fundamental Counting Principle | Lesson 7.1 Khan Academy |
| | 10 3/11 – 3/14 | <ul style="list-style-type: none"> Supplemental Lesson Set Theory and Venn Diagrams Lesson 7.2 Theoretical and Experimental Probability Lesson 7.3 Independent and Dependent Events | Lesson 7.2 Khan Academy Lesson 7.3 Khan Academy |

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| Quarter 4 Mar 19 – May 24 | 1 3/18 – 3/22 | SPRING BREAK – NO SCHOOL | |
| | 2 3/25 – 3/29 | <ul style="list-style-type: none"> Lesson 7.5 Compound Events Lesson 7.4 Two-Way Tables Review Assessment Unit 7 | Lesson 7.5 Khan Academy Lesson 7.4 Khan Academy |
| | 3 4/1 – 4/5 | <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 8.2 Khan Academy Lesson 8.3 Youtube Lesson 8.1 Khan Academy |
| | 4 4/8 – 4/12 | <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 4/15 – 4/18 | <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 4/22 – 4/26 | <ul style="list-style-type: none"> Lesson 10.3 The Unit Circle Assessment | Lesson 10.3 Khan Academy |
| | 7 4/29 – 5/3 | <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 5/6 – 5/10 | <ul style="list-style-type: none"> Review Assessment Unit 9 | |
| | 9 5/13 – 5/17 | <ul style="list-style-type: none"> Standards Review | |
| | 10 5/20 – 5/24 | <ul style="list-style-type: none"> Final Exams | |

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