Please Note:

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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:

<u>Pearson</u> (select your grade and course level and use your active directory)

Other Course Supplemental Resources:

Khan Academy (Algebra 1; program does not support Internet Explorer)

Math Nation (Clever – use your active directory; does not support Internet Explorer)

FSA Portal

Algebra 1 EOC Test Item Specifications Algebra 1 FSA Computer-Based Practice Test Answer Key

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

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2021-2022

| | Week | Major Concepts / Topics | Possible Resources |
|------------------------------|---|---|---|
| Quarter 1 Aug 16 – Oct 15 | 1 8/16 – 8/20 | 1.1 Operations on real numbers 1.2 Solving linear equations 1.3 Solving equations with variables on both sides 1.4 Literal equations and formulas | Unit: Irrational numbers - Khan AcademyRational vs. irrational expressions - Khan AcademySum and product of 2 rational #'s is rational - Khan AcademyProduce of rational and irrational is irrational - Khan AcademySum of rational and irrational is irrational - Khan AcademySums and products of irrational numbers - Khan AcademyUnit: Linear equations and graphs - Khan AcademyVariables, expressions and equations - Khan AcademyUnit: Solving equations - Khan AcademyVariables on Both Sides - Khan AcademyIntro to equations with variables on both sides - Khan AcademySolving an equation for a variable - Khan Academy |
| | 2 8/23 - 8/27 | 1.5 Solving inequalities in one variable 1.6 Compound inequalities 1.7 Absolute value equations and inequalities Remediation Review | Unit: Solving inequalities - Khan Academy Testing solutions to an inequality - Khan Academy Plotting an inequality - Khan Academy One step inequality - Khan Academy Two step inequality - Khan Academy Inequalities with variables on both sides - Khan Academy Compound inequalities: OR - Khan Academy Compound inequalities: AND - Khan Academy Unit: Absolute value and piecewise functions - Khan Academy Graphing absolute value functions - Khan Academy |
| | 3 | Assessment | Unit: Forms of linear equations - <u>Khan Academy</u> |
| | 8/30 - 9/3 4 9/6 - 9/10 5 9/13 - 9/17 | 2.1 Slope intercept form Labor Day Holiday – 9/6 2.2 Point slope form 2.3 Standard form Interims Issued – 9/14 Remediation Review Assessment | Slope intercept form – Khan Academy Point slope form - Khan Academy Standard form - Khan Academy Unit: functions - Khan Academy Relations and functions - Khan Academy |
| | 6 9/20 – 9/24 | 3.1 Relations and Functions 3.2 Linear Functions 3.3 Transforming linear functions 3.4 Arithmetic sequences 3.5 Scatter plots and lines of best fit | What is a function - Khan Academy Recognizing linear functions - Khan Academy Linear transformations - Khan Academy Unit: Sequences - Khan Academy Intro to arithmetic sequences - Khan Academy Unit: Data and modeling - Khan Academy |

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| | | Scatter Plots and Lines of Fit - Khan Academy |
|------------------|--|--|
| 7 9/27 – 10/ | 3.6 Analyzing lines of fit Remediation Review | |
| 8 10/4 – 10/ | Assessment 4.1 Solving systems by graphing 4.2 Solving systems by substitution | Unit: Systems of equations - <u>Khan Academy</u> Solving systems with graphing - <u>Khan Academy</u> Solving Systems by Substitution – <u>Khan Academy</u> |
| 9 10/11 – 10/ | 4.3 Solving systems by elimination PSAT/NMSQT - 10/13 4.4 Linear inequalities | Solving Systems by Elimination – <u>Khan Academy</u> Inequalities with variables on both sides - <u>Khan Academy</u> |

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2021-2022

| | Week | Major Concepts / Topics | Possible Resources |
|------------------------------|---------------------|---|---|
| Quarter 2 Oct 19 – Dec 21 | 1 10/19 – 10/22 | 4.5 Systems of linear inequalities Remediation | Systems of inequalities - <u>Khan Academy</u> |
| | 2 10/25 – 10/29 | Report Cards – 10/26 Review Assessment 6.1 Rational exponents and properties of exponents 6.2 Exponential functions | Unit: Exponents and radicals - Khan Academy Exponent properties: products - Khan Academy Exponent properties: parentheses - Khan Academy Exponent properties: quotients - Khan Academy Negative exponents - Khan Academy Multiplying and dividing powers - Khan Academy Powers of products and quotients - Khan Academy Powers of zero - Khan Academy Intro to exponential functions - Khan Academy |
| | 3 11/1 – 11/5 | 6.3 Exponential growth and decay 6.4 Geometric sequences | Unit: Exponential growth and decay - <u>Khan Academy</u> Graphing exponential growth and decay - <u>Khan Academy</u> Unit: Sequences - <u>Khan Academy</u> Intro to geometric sequences – <u>Khan Academy</u> |
| | 4 11/8 - 11/12 | 6.5 Transformations of exponential functions Veterans Day 11/11 Remediation | Transformations of exponential functions - Khan Academy |
| | 5 11/15 – 11/19 | Interims Issued – 11/16 Review Assessment 7.1 Adding and subtracting polynomials 7.2 Multiplying polynomials | Uni <i>t: Quadratics: Multiplying and factoring</i> - <u>Khan Academy</u> Adding polynomials – <u>Khan Academy</u> Intro to multiplying polynomials – <u>Khan Academy</u> |
| | 6 11/22 – 11/26 | 7.3 Multiplying special cases Thanksgiving Holiday 11/24 – 11/26 | Special products (x+a)(x-a) – <u>Khan Academy</u> Squaring binomials - <u>Khan Academy</u> |
| | 7 11/29 – 12/3 | 7.4 Factoring polynomials 7.5 Factoring x² + bx + c 7.6 Factoring ax² + bx + c | Intro to factoring – <u>Khan Academy</u> |
| | 8 12/6 – 12/10 | 7.7 Factoring special cases Remediation Review | Difference of squares - <u>Khan Academy</u> Perfect squares - <u>Khan Academy</u> Special product forms - <u>Khan Academy</u> |
| | 9 12/13 – 12/17 | AssessmentMidterms | |
| | 10 12/20 – 12/24 | Second Quarter/First Semester Ends – 12/21 Winter Break – 12/22 – 1/4 | |

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| | | | |

| | Week | Major Concepts / Topics | Possible Resources |
|-----------------------------|------------------|--|--|
| Quarter 3 Jan 6 – Mar 10 | 1 1/6 - 1/7 | 8.1 Key features of quadratic functions 8.2 Quadratic functions in vertex form | Unit: Quadratic functions and equations - <u>Khan Academy</u> Parabolas intro - <u>Khan Academy</u> Forms and features of quadratics – <u>Khan Academy</u> Intro to vertex form – <u>Khan Academy</u> |
| | 2 1/10 - 1/14 | 8.3 Quadratic functions in standard form 8.4 Modeling with quadratic functions | Graphing quadratics: standard form - Khan Academy |
| | 3 1/17 – 1/21 | Martin Luther King Jr. Holiday – 1/17 Report Cards – 1/19 8.5 Linear exponential and quadratic models Remediation | |
| | 4 1/24 - 1/28 | Review Assessment 9.1 Solving quadratic equations 9.2 Solving quadratic equations by factoring | Solving quadratics by factoring - <u>Khan Academy</u> |
| | 5 1/31 – 2/4 | 9.3 Rewriting radical expressions 9.4 Solving quadratic equations using square roots 9.5 Completing the square 9.6 The quadratic formula and the discriminant | Intro to rational exponents - <u>Khan Academy</u> Rewriting roots as rational exponents - <u>Khan Academy</u> Solving quadratics by taking square roots – <u>Khan Academy</u> Completing the square – <u>Khan Academy</u> Quadratic formula - <u>Khan Academy</u> Discriminant (practice) - <u>Khan Academy</u> |
| | 6 2/7 – 2/11 | Teacher Inservice – 2/7 Interims Issued – 2/8 9.7 Solving Systems of Linear and Quadratic Equations Remediation Review Assessment | |
| | 7 2/14 - 2/18 | 5.1 Absolute value function 5.2 Piece-wise functions 5.3 Step functions 5.4 Transformations of piece-wise functions | Unit: Absolute value and piecewise functions - <u>Khan Academy</u> Graphing absolute value – <u>Khan Academy</u> Intro to piece-wise functions – <u>Khan Academy</u> Domain and range of step functions - <u>Khan Academy</u> Shifting absolute value graphs - <u>Khan Academy</u> |

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| Presidents Day Holiday – 2/21 Remediation/Review Assessment 10.1 Square root function 10.2 Cube root function | Graphing square root and cube root functions - <u>Khan Academy</u> |
|--|---|
| 9 9 -3/4 10.3 Analyzing functions graphically 10.4 Translations of functions 10.5 Compressions and stretches of functions | Identifying function transformations - <u>Khan Academy</u> Reflecting and compressing functions - <u>Khan Academy</u> Identifying horizontal squash - <u>Khan Academy</u> |
| 10.6 Operations of functions 10.7 Inverse Operations 3/10 Remediation/Review Assessment | |

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2021-2022

| | Week | Major Concepts / Topics | Possible Resources |
|------------------------------|---|---|--|
| Quarter 4 Mar 14 – June 2 | 1 3/14 - 3/18 | SPRING BREAK – NO SCHOOL | |
| | 2 3/21 - 3/25 | 11.1 Analyzing data displays 11.2 Comparing data sets 11.3 Interpreting the sets of data displays | |
| | 3 3/28 – 4/1 | Report Cards – 3/29 11.4 Standard deviation 11.5 Two-way frequency tables | Two way frequency tables (8th grade standards) - <u>Khan Academy</u> Two-way frequency tables (practice) - <u>Khan Academy</u> |
| | 4 4/4 - 4/8 | 11.6 Data Distributions 11.7 Normal Distributions Remediation | |
| | 5 4/11 – 4/15 | Review Assessment 12.1 Polynomial Identities 12.2 Dividing Polynomials Holiday – 4/15 | Polynomial Identities - <u>Khan Academy</u> Dividing polynomials - <u>Khan Academy</u> |
| | 6 4/18 – 4/22 | Holiday – 4/18 12.3 Inverse Variation and the Reciprocal Functions 12.4 Graphing Rational Functions 12.5 Multiplying and Dividing Rational Expressions | Inverse variation - <u>Khan Academy</u> Graphing rational functions - <u>Khan Academy</u> Multiplying and dividing rational expressions - <u>Khan Academy</u> |
| | 7 4/25 – 4/29 | Interims Issued – 4/26 12.6 Adding and Subtracting Rational Expressions 12.7 Solving Rational Equations 12.8 Solving Radical Equations | Adding and subtracting rational expressions - <u>Khan Academy</u> Intro to rational equations - <u>Khan Academy</u> Intro to square root equations - <u>Khan Academy</u> |
| | 8 5/2 – 5/6 5/2 – 5/27 - FSA/EOC Testing Window | Remediation Review Assessment Course Standards Review | |
| | 9 | Course Standards Review | |

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| 5/9 – 5/13 | | | |
|-------------------|-----------------------------|--|--|
| 10 5/16 – 5/20 | Course Standards Review | | |
| 11 5/23 – 5/27 | Course Standards Review | | |
| 12 | Memorial Day Holiday – 5/30 | | |
| 5/30 - 6/2 | Course Standards Review | | |

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