

	<b>September-October</b>	<b>November-December</b>	<b>January-February</b>
<b>Unit</b>	Expressions and Equations The Number Systems	Expressions and Equations	Expressions and Equations Functions
<b>Topics</b>	<ul style="list-style-type: none"> <li>- Calculations with Integers</li> <li>- Order of Operations with Integral Values</li> <li>- Evaluating Algebraic Expressions</li> <li>- Rational and Irrational Numbers</li> <li>- Laws of Exponents</li> <li>- Scientific Notation</li> <li>- Writing Algebraic Expressions and Equations</li> <li>- Solving Multi-Step Equations</li> <li>- Solving Verbal Proportions</li> </ul>	<ul style="list-style-type: none"> <li>- Solve Equations by Combining Like Terms</li> <li>- Solve Equations with Variables on Both Sides</li> <li>- Solve Equations using the Distributive Property</li> <li>- Graph using a table of values</li> <li>- Slope-Intercept Form of a Line</li> <li>- Calculate Slope</li> <li>- Direct Proportionality</li> </ul>	<ul style="list-style-type: none"> <li>- Graph using Slope and Y-Intercept</li> <li>- Transform Equation into Slope-Intercept form</li> <li>- Write Equation of Line Given Points</li> <li>- Solve Systems of Equations Graphically</li> <li>- Solve Systems of Equations Using Substitution</li> <li>- Solve Systems of Equations Using Elimination</li> </ul>
<b>Materials</b>	Big Ideas NYReady BuckleDown Related Videos	Big Ideas NYReady BuckleDown Related Videos	Big Ideas NYReady BuckleDown Related Videos

<b>Academic Vocabulary</b>	radical, integer, exponent, property, equivalent, power, estimate, scientific notation, decimal notation, unit, rational, irrational, decimal expansion, expression, product, quotient, square root, cube root, solution, equation, simultaneous equations, infinite, proportion, variable	simultaneous equations, no solution, equivalent, rational, coefficient, like terms, distributive property, proportion, proportional relationship, unit rate, slope, distance-time graph, slope-intercept form, y-intercept, direct proportion, similar triangles, distinct, vertical, horizontal, derive, axis, origin, variable	proportional relationship, unit rate, slope, y-intercept, derive, origin, axis, intersection, satisfy, simultaneously, equations, elimination, algebraically, define, evaluate, linear function, non-linear function, quadratic, analyze, input, output, ordered pairs, rate of change, substitution
<b>Pacing</b>	September: Expressions and Equations October: Number Systems, Expressions and Equations	November: Expressions and Equations December: Expressions and Equations	January: Expressions and Equations February: Functions
<b>Embedded Assessments</b>	Unit Test on Solving Equations Unit Test on Exponents and Scientific Notation Unit Test on Expressions and Proportions	Unit Test on Solving Multi-Step Equations Unit Test on Interpreting slope and Direct Proportionality Unit Test on Slope Intercept Form	Unit Test: Unit Test on Solving Systems Graphically Unit Test on Solving Systems Algebraically
<b>CCLS</b>	8.EE.1, 8.EE.3, 8.EE.4, 8.NS.1, 8.NS.2, 8.33.2, 8.33.7, 8.33.7a	8.EE.7, 8.EE.7a, 8.EE.7b, 8.EE.5, 8.EE.6	8.EE.5, 8.EE.6, 8.EE.8, 8.EE.8a, 8.EE.8b, 8.EE.8c, 8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5

	<b>March-April</b>	<b>May-June</b>	
<b>Unit</b>	Geometry State Assessment Review	Expressions and Equations Statistics and Probability Geometry	
<b>Topics</b>	<ul style="list-style-type: none"> <li>- Reflections in the Coordinate Plane</li> <li>- Translations in the Coordinate Plane</li> <li>- Rotations in the Coordinate Plane</li> <li>- Dilations in the Coordinate Plane</li> <li>- Geometric Vocabulary and Symbolic Representations</li> <li>- Complementary, Supplementary and Vertical angles</li> <li>- Parallel Lines Cut by a Transversal</li> <li>- Algebraic Angle Measures and Angle Relationships</li> <li>- Classifying Triangles</li> <li>- Exterior Angles of a Triangle</li> </ul>	<ul style="list-style-type: none"> <li>- Proof of the Pythagorean Theorem</li> <li>- Prove a Triangle is a Right Triangle</li> <li>- Use Pythagorean Theorem to find Distance</li> <li>- Applications of the Pythagorean Theorem</li> <li>- Scatterplots</li> <li>- Linear vs. Non-Linear Correlations</li> <li>- Interpolate and Extrapolate Trend Lines</li> <li>- Write Equation of a Trend Line</li> <li>- Relative Frequency</li> <li>- Volume of Cylinders, Cones, Spheres</li> <li>- Applications of Volume</li> </ul>	
<b>Materials</b>	<ul style="list-style-type: none"> <li>- Big Ideas</li> <li>- NYReady</li> <li>- Buckle Down</li> <li>- Related Videos</li> </ul>	<ul style="list-style-type: none"> <li>- Big Ideas</li> <li>- Related Videos</li> <li>- Buckle Down</li> <li>- NYReady</li> </ul>	

<b>Academic Vocabulary</b>	congruence, similarity, physical models, transparencies, experiment, property, rotation, reflection, translation, line segment, coordinate plane, dilation, parallel, two-dimensional figure, sequence, coordinates, argument, exterior angle, interior angle, ray, perpendicular, complementary angles, vertical angles, supplementary angles, transversal, isosceles triangle, right triangle	radicals, integers, integer exponents, square root, cube root, rational number, perfect squares, perfect cubes, irrational number, Pythagorean Theorem, converse of the Pythagorean Theorem, association, bivariate data, interpret, scatter plots, clustering, outlier, positive association, negative association, nonlinear association, quantitative variable, best fit model, linear model, slope, intercept, categorical data, interpolate, extrapolate, trend line, frequency, relative frequency, two-way table, volume, cylinder, cone, sphere, height, radius	
<b>Pacing</b>	March: Geometry April: Geometry, State Assessment Review	May: Equations and Expressions June: Probability and Statistics, Geometry	
<b>Embedded Assessments</b>	Unit Test on Translations Unit Test on Parallel Lines Cut by Transversal Unit Test on Triangles	Unit Test on Equations Unit Test on Probability	

<b>CCLS</b>	8.G.1, 8.G.1a, 8.G.1b, 8.G.1c, 8.G.2, 8.G.3, 8.G.4, 8.G.5	8.E.2, 8.G.6, 8.G.7, 8.G.8, 8.SP.1, 8.SP.2, 8.SP.3, 8.SP.4, 8.G.9	
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