Northpoint Horizons

***Math Elevations*™**
Correlated to the
Florida Sunshine State 2007 Mathematics Content Standards

Grade 8

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Math Content Standard	***Math Elevations* Level H Teacher's Guide Examples/Lessons**
MA.8.A.1.1 Create and interpret tables, graphs, and models to represent, analyze, and solve problems related to linear equations, including analysis of domain, range and the difference between discrete and continuous data.	Unit 5 - Lesson 6: Graphing Linear Functions pp. 147-150
MA.8.A.1.2 Interpret the slope and the x- and y-intercepts when graphing a linear equation for a real-world problem.	Unit 5 - Lesson 6: Graphing Linear Functions pp. 147-150 Lesson 7: Interpreting Linear Functions pp. 151-153 Lesson 8: Slope pp. 154-157
MA.8.A.1.3 Use tables, graphs, and models to represent, analyze, and solve real-world problems related to systems of linear equations.	Unit 5 - Lesson 6: Graphing Linear Functions pp. 147-150 Lesson 7: Interpreting Linear Functions pp. 147-150
MA.8.A.1.4 Identify the solution to a system of linear equations using graphs.	Unit 5 - Lesson 6: Graphing Linear Functions pp. 147-150 Lesson 7: Interpreting Linear Functions pp. 147-150
MA.8.A.1.5 Translate among verbal, tabular, graphical and algebraic representations of linear functions.	Unit 5 - Lesson 6: Graphing Linear Functions pp. 147-150 Lesson 7: Interpreting Linear Functions pp. 147-150
MA.8.G.2.1 Use similar triangles to solve problems	Unit 6 -

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Math Content Standard	***Math Elevations* Level H Teacher's Guide Examples/Lessons**
that include height and distances.	Lesson 5: Congruent Triangles pp. 174-176 Lesson 6: Similarity and Dilations pp.177-179
MA.8.G.2.2 Classify and determine the measure of angles, including angles created when parallel lines are cut by transversals.	Unit 6 - Lesson1: Angles pp.160-163 Lesson 2: Angles in Parallel Lines Cut by a Transversal pp. 164-166
MA.8.G.2.3 Demonstrate that the sum of the angles in a triangle is 180-degrees and apply this fact to find unknown measure of angles, and the sum of angles in polygons.	Unit 6 - Lesson 4: Sum of Angles in Polygons pp. 171-173
MA.8.G.2.4 Validate and apply Pythagorean Theorem to find distances in real world situations or between points in the coordinate plane.	Unit 3 - Lesson 8: Pythagorean Theorem pp. 98-101
MA.8.S.3.1 Select, organize and construct appropriate data displays, including box and whisker plots, scatter plots, and lines of best fit to convey information and make conjectures about possible relationships.	Unit 8 - Lesson 2: Making Predictions pp. 220-223 Lesson 4: Scatter Plots pp. 227-229 Lesson 5: Box-and-Whiskers Plots pp. 230-233 Lesson 6: Line Graphs pp. 234-237 Lesson 7: Circle Graphs pp. 238-240 Lesson 8: Appropriate Graphs pp. 241-243
MA.8.S.3.2 Determine and describe how changes in data values impact measures of central tendency.	Unit 8 - Lesson 3: Mean, Median, and Mode pp. 224-226

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MA.8.A.4.1 Solve literal equations for a specified variable.	Unit 3 - Lesson 3: Substituting Values for Variables in Equations pp. 81-83 Lesson 4: Solving Equations Using Addition or Subtraction pp. 84-86 Lesson 5: Solving Equations Using Multiplication or Division pp. 87-89 Unit 5 - Lesson 1: Solving Two-Step Equations pp. 132-134 Lesson 2: Solving Multi-Step Equations pp. 135-137 Lesson 3: Translating and Solving Word Problems pp. 138-140 Lesson 4: Relations and Functions pp. 141-143 Lesson 5: Two-Variable Equations pp. 144-146
MA.8.A.4.2 Solve and graph one- and two-step inequalities in one variable.	Unit 3 - Lesson 6: Solving Inequalities by Addition and Subtraction pp. 90-93 Lesson 7: Solving Inequalities Using Multiplication and Division pp. 94-97
MA.8.G.5.1 Compare, contrast, and convert units of measure between different measurement systems (US customary or metric (SI)) and dimensions including temperature, area, volume, and derived units to solve	Unit 7 - Lesson 1: Area of a Trapezoid pp. 190-192 Lesson 2: Circumference of a Circle pp. 193-195 Lesson 3: Area of a Circle pp. 196-198

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Math Content Standard	***Math Elevations* Level H Teacher's Guide Examples/Lessons**
problems.	Lesson 4: Surface Area of a Prism pp. 199-201 Lesson 5: Surface Area of a Cylinder pp. 202-204 Lesson 6: Surface Area of a Pyramid and a Cone pp. 205-207 Lesson 7: Volume of a Prism and a Cylinder pp. 208-210 Lesson 8: Volume of a Pyramid and a Cone pp. 211-213
MA.8.A.6.1 Use exponents and scientific notation to write large and small numbers and vice versa and to solve problems.	Unit 1 - Lesson 7: Exponents pp. 37-39 Unit 2 - Lesson 6: Rules of Exponents pp. 62-64 Lesson 7: Negative and Zero Exponents pp. 65-67 Lesson 8: Scientific Notation pp. 68-70
MA.8.A.6.2 Make reasonable approximations of square roots and mathematical expressions that include square roots, and use them to estimate solutions to problems and to compare mathematical expressions involving real numbers and radical expressions.	Unit 1 - Lesson 8: Square Roots pp. 40-42
MA.8.A.6.3 Simplify real number expressions using the laws of exponents.	Unit 2 - Lesson 6: Rules of Exponents pp. 62-64

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MA.8.A.6.4 Perform operations on real numbers (including integer exponents, radicals, percents, scientific notation, absolute value, rational numbers, and irrational numbers) using multi-step and real world problems.	Unit 1 - Lesson 2: Adding Integers Using a Number Line pp. 21-23 Lesson 3: Adding Integers Using Absolute Value pp. 24-27 Lesson 4: Subtracting Integers pp. 28-30 Lesson 5: Multiplying Integers pp. 31-33 Lesson 6: Dividing Integers pp. 34-36 Unit 2 - Lesson 4: Adding and Subtracting Fractions pp. 55-57 Lesson 5: Multiplying and Dividing Fractions and Mixed Numbers pp. 58-61 Unit 3 - Lesson 2: Order of Operations pp. 78-80 Lesson 3: Substituting Values for Variables in Equations pp. 81-83 Lesson 4: Solving Equations Using Addition or Subtraction pp. 84-86 Lesson 5: Solving Equations Using Multiplication or Division pp. 87-89 Unit 5 - Lesson 1: Solving Two-Step Equations pp. 132-134

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	Lesson 2: Solving Multi-Step Equations pp. 135-137 Lesson 3: Translating and Solving Word Problems pp. 138-140