**MATH STANDARDS: “I CAN STATEMENTS” CLASS SUMMARY**

**8**

A PACIFIC UNION CONFERENCE CORRELATION OF NAD AND CCSS

| **“I Can Statements”…Common Core Standards in Kid-Friendly Language** | **Big Ideas**  **Correlation** | **Students** | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| **NUMBERS AND OPERATIONS (NAD) / THE NUMBER SYSTEM (CCSS)** | | | | | | | | | | | | | | | | | | | | | |
| I know that numbers that are not rational are called irrational. ([NAD 8.NO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 8.NS.1](http://www.corestandards.org/Math/Content/8/NS/)) | Section 6.3, 6.3b, 6.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I understand that every number has a decimal expansion. ([NAD 8.NO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 8.NS.1](http://www.corestandards.org/Math/Content/8/NS/)) | Section 6.3, 6.3b, 6.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| For rational numbers, I can show that the decimal expansion repeats eventually, and I can convert a decimal expansion which repeats eventually into a rational number.  ([NAD 8.NO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 8.NS.1](http://www.corestandards.org/Math/Content/8/NS/)) | Section 6.3, 6.3b, 6.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions. ([NAD 8.NO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 8.NS.2](http://www.corestandards.org/Math/Content/8/NS/)) | Section 6.3, 6.3b, 6.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **OPERATIONS AND ALGEBRAIC THINKING (NAD) / EXPRESSIONS AND EQUATIONS (CCSS)** | | | | | | | | | | | | | | | | | | | | | |
| I know and apply the properties of integer exponents to generate equivalent numerical expressions. ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.1](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use square root and cube root symbols to represent solutions to equations of the form *x2* equals *p* and *x3* equals *p*, where *p* is a positive rational number. ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.2](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can evaluate square roots of small perfect squares and cube roots of small perfect cubes. ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.2](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I know that the square root of 2 is irrational. ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.2](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.3](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used.  ([NAD 8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.4](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use scientific notation and choose units of appropriate size for measurements of very large or very small quantities.  ([NAD.8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.4](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can interpret scientific notation that has been generated by technology.  ([NAD.8.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.4](http://www.corestandards.org/Math/Content/8/EE/)) | Section 6.1, 6.2, 6.3, 6.3b, 6.5, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.6b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can graph proportional relationships, interpreting the unit rate as the slope of the graph. ([NAD 8.OAT.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.5](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.5, 2.2, 2.2b, 2.3, 2.4, 3.1, 3.2, 3.4, 3.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can compare two different proportional relationships represented in different ways.  ([NAD 8.OAT.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.5](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.5, 2.2, 2.2b, 2.3, 2.4, 3.1, 3.2, 3.4, 3.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use similar triangles to explain why the slope *m* is the same between any two distinct points on a non-vertical line in the coordinate plane. ([NAD 8.OAT.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.6](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.5, 2.2, 2.2b, 2.3, 2.4, 3.1, 3.2, 3.4, 3.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can derive the equation *y = mx* for a line through the origin and the equation *y* *= mx + b* for a line intercepting the vertical axis at *b*.  ([NAD 8.OAT.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.6](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.5, 2.2, 2.2b, 2.3, 2.4, 3.1, 3.2, 3.4, 3.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions.  ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.7](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form *x = a, a = a*, or *a = b* results. ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.7](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.7](http://www.corestandards.org/Math/Content/8/EE/))  **\*\*\*REQUIRED FLUENCY\*\*\*** | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.8](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations.  ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.8](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can solve simple two-variable linear equation cases by inspection.  ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.8](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can solve real-world and mathematical problems leading to two linear equations in two variables. ([NAD 8.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.EE.8](http://www.corestandards.org/Math/Content/8/EE/)) | Section 1.1, 1.2, 1.3, 1.3b, 1.4, 2.1, 2.5, 2.6, 2.7, 3.5, 8.1, 8.2, 8.3, 8.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **OPERATIONS AND ALGEBRAIC THINKING (NAD) / FUNCTIONS (CCSS)** | | | | | | | | | | | | | | | | | | | | | |
| I can understand that a function is a rule that assigns to each input exactly one output.  ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.1](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can understand that the graph of a function is the set of ordered pairs consisting of an input and the corresponding output.  ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.1](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can compare properties of two functions each represented in a different way.  ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.2](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can interpret the equation *y = mx + b* as defining a linear function, whose graph is a straight line. ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.3](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can give examples of functions that are not linear. ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.3](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can construct a function to model a linear relationship between two quantities.  ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.4](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can determine the rate of change and initial value of the function from a description of a relationship or from two values.  ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.4](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.4](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can describe qualitatively the functional relationship between two quantities by analyzing a graph. ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.5](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can sketch a graph that exhibits the qualitative features of a function that has been described verbally. ([NAD 8.OAT.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 8.F.5](http://www.corestandards.org/Math/Content/8/F/)) | Section 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.4b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **MEASUREMENT (NAD)** | | | | | | | | | | | | | | | | | | | | | |
| I can use appropriate significant digits in calculations. ([NAD 8.M.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Measurement.pdf)) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **GEOMETRY (NAD / CCSS)** | | | | | | | | | | | | | | | | | | | | | |
| I can use experimentation to verify the properties of rotations, reflections, and translations: that lines are taken to lines, and line segments to line segments of the same length. ([CCSS 8.G.1](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use experimentation to verify the properties of rotations, reflections, and translations: parallel lines are taken to parallel lines. ([CCSS 8.G.1](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations.  ([NAD 8.GEO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.2](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Given two congruent figures, I can describe a sequence that exhibits the congruence between them. ([NAD 8.GEO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.2](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use coordinates to describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures. ([CCSS 8.G.3](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations.  ([NAD 8.GEO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.4](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Given two similar two-dimensional figures, I can describe a sequence that exhibits the similarity between them. ([NAD 8.GEO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.4](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use informal arguments to establish facts and about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.  ([CCSS 8.G.5](http://www.corestandards.org/Math/Content/8/G/)) | Topic 1 / Section 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can explain a proof of the Pythagorean Theorem and its converse.  ([NAD 8.GEO.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.6](http://www.corestandards.org/Math/Content/8/G/)) | Section 6.2, 6.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.  ([NAD 8.GEO.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.7](http://www.corestandards.org/Math/Content/8/G/)) | Section 6.2, 6.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can apply the Pythagorean Theorem to find the distance between two points in a coordinate system. ([NAD 8.GEO.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.8](http://www.corestandards.org/Math/Content/8/G/)) | Section 6.2, 6.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.  ([NAD 8.GEO.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 8.G.9](http://www.corestandards.org/Math/Content/8/G/))  **\*\*\*REQUIRED FLUENCY\*\*\*** | Topic 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **DATA ANALYSIS, STATISTICS, AND PROBABILITY (NAD) / STATISTICS AND PROBABILITY (CCSS)** | | | | | | | | | | | | | | | | | | | | | |
| I can construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.1](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.1](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I know that straight lines are widely used to model relationships between two quantitative variables. ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.2](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can write an equation for the line-of-best fit for a scatter plot, and assess the model fit by judging how close to the line the data points are.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.2](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use the equation of a linear model to solve problems in the context of bivariate measurement data.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.3](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can interpret the slope and intercept of a linear equation. ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.3](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.4](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.4](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I can use relative frequencies calculated for rows or columns to describe possible association between the two variables.  ([NAD 8.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 8.SP.4](http://www.corestandards.org/Math/Content/8/SP/)) | Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |