Grade 8 FSA English Language Arts	
Achievement Level	Achievement Level Descriptions
Level 1	Students performing at Level 1 are just beginning to access the challenging content of the *Florida Standards*.
Level 2	For grade-appropriate low-complexity texts, a student performing at Level 2 typically • cites textual evidence to support an analysis of what a text says explicitly as well as simple inferences drawn from the text • identifies a theme or central idea of a text and follows its development and its relationship to literary elements and supporting ideas, including how themes and concepts may draw from other works • recognizes the structure within and across texts and how it contributes to meaning and style or refines key concepts • recognizes an author's or speaker's point of view or purpose and identifies the use of sound reasoning and relevant evidence, including how they may conflict within or across texts or diverse media • with textual support, determines the meaning of words and phrases as they are used in a text, including figurative, technical, connotative meanings and knowledge of commonly used Greek or Latin affixes and roots; analyzes the impact of specific word choices, including analogies or allusions, on meaning and tone • provides a simple summary of a text • determines the purposes/motives for and advantages or disadvantages of using different media to present a particular topic or idea, including identifying the choices made by the director or actors • demonstrates basic understanding of the conventions of standard English grammar, usage, and mechanics • provides a claim or controlling idea with lapses in focus, attempts to include a counterclaim when appropriate, uses inconsistent or unclear organizational structure, includes loosely related support by referencing evidence that demonstrates a partial understanding of grade-level texts, employs simple sentence construction and word choice, and demonstrates inconsistent use of conventions

Level 3	For grade-appropriate low-to-moderate complexity texts, a student performing at Level 3 typically • cites textual evidence that most strongly supports an analysis of what a text says explicitly as well as inferences drawn from the text • determines a theme or central idea of a text and analyzes its development and its relationship to literary elements and supporting ideas, including how themes and concepts may draw from other works • analyzes the structure within and across texts and how it contributes to meaning and style or refines key concepts • determines an author's or speaker's point of view or purpose and evaluates the use of sound reasoning and relevant evidence, including how they may conflict within or across texts or diverse media • determines the meaning of words and phrases as they are used in a text, including figurative, technical, connotative, nuanced meanings, and knowledge of Greek or Latin affixes and roots; analyzes the impact of specific word choices, including analogies or allusions, on meaning and tone • provides an objective summary of a text • evaluates the purposes/motives for and advantages/disadvantages of using different media to present a particular topic or idea, including evaluating the choices made by the director or actors • demonstrates command of the conventions of standard English grammar, usage, and mechanics • adequately sustains a focused claim or controlling idea, acknowledges a counterclaim when appropriate, includes a clear organizational structure that provides a sense of completeness, provides adequate support by citing evidence that demonstrates an understanding of grade-level texts, introduces some variation in sentence structure and adequate word choice, and demonstrates adequate use of conventions

Level 4	For grade-appropriate moderate-to-high complexity texts, a student performing at Level 4 typically • cites specific and relevant textual evidence that most strongly supports a complex analysis of a text • analyzes a theme or central idea of a text and its development and evaluates its relationship to literary elements and supporting ideas, including how themes and concepts may draw from other works • analyzes the structure within and across texts and how it contributes to meaning and style or refines key concepts by providing evidence to support an analysis • analyzes an author's or speaker's point of view or purpose and evaluates the use of sound reasoning and relevant evidence, including how they may conflict within or across texts or diverse media • determines the meaning of complex words and phrases as they are used in a text, including figurative, technical, connotative, nuanced meanings, and knowledge of Greek or Latin affixes and roots; analyzes and evaluates the impact of specific word choices, including analogies or allusions, on meaning and tone • provides a specific objective summary of a text • evaluates the purposes/motives for and advantages/disadvantages of using different media to present a particular topic or idea, including evaluating the choices made by the director or actors, providing specific evidence to support the evaluation • demonstrates a strong command of the conventions of standard English grammar, usage, and mechanics • sustains a focused, controlling idea or claim to fully examine concepts, fully addresses a counterclaim when appropriate, utilizes an effective organizational structure that creates a coherent presentation of ideas with relevant and varied types of support by citing evidence that demonstrates a strong understanding of grade-level texts, and varies sentence structure with purposeful word choice to enhance meaning

Level 5	For grade-appropriate high complexity texts, a student performing at Level 5 typically • uses specific and relevant textual evidence as well as complex inferences to develop a deep analysis of a text • evaluates multiple or implicit themes or central ideas of a text and provides a deep analysis of their development and evaluates their relationship to literary elements and supporting ideas, including how themes and concepts may draw from other works • analyzes the structure within and across texts and evaluates its impact on meaning and style or how it refines key concepts with evidence • provides evidence for an analysis of the subtleties of an author's or speaker's point of view or purpose and evaluates the use of sound reasoning and relevant evidence, including how they may conflict within or across texts or diverse media • evaluates the meaning and use of words and phrases in text, including figurative, technical, connotative, nuanced meanings, and knowledge of Greek or Latin affixes and roots; analyzes and evaluates the subtle impact of word choices, including analogies or allusions, on other texts • provides a succinct and objective summary of a text • interprets the purposes/motives for and evaluates the advantages/disadvantages of using different media to present a particular topic or idea, including evaluating the impact of the choices made by the director or actors, providing specific evidence to support the evaluation • demonstrates a mature command of the conventions of standard English grammar, usage, and mechanics • thoroughly sustains a compelling, focused claim or controlling idea to examine concepts and a fairly treated and fully addressed counterclaim when appropriate, utilizes a purposeful organizational structure that creates coherence with specific, appropriate, and integrated support that demonstrates a nuanced understanding of grade-level texts, and purposefully employs sentence structure and word choice to enhance meaning

Grade 8 FSA Mathematics	
Achievement Level	Achievement Level Descriptions
Level 1	Students performing at Level 1 are just beginning to access the challenging content of the *Florida Standards*.
Level 2	A student performing at Level 2 typically • identifies rational or irrational numbers that have decimal expansions • converts familiar rational numbers with one repeating digit to fraction form • evaluates square roots and solves mathematical equations of the form $x^2 = p$, where p is a positive rational number and is a small perfect square; knows that √2 is irrational • uses properties of natural number exponents and represents very large and small quantities in scientific notation • graphs proportional relationships, interpreting the unit rate as the slope • solves linear equations with integer coefficients and variables on one side • interprets mathematical or real-world problems, given the graph, of a system of two linear equations in two variables • determines the rate of change given two points or a graph and compares properties of two linear functions given a graph and an equation in slope-intercept form • determines and describes qualitatively the relationship between two quantities by analyzing some features of a graph to be linear or nonlinear and a function or not a function • describes a rigid transformation between two congruent figures • uses coordinates to describe reflections and translations • uses the fact that the sum of the angles in a triangle equals 180 • identifies angle pairs when parallel lines are cut by a transversal • uses the Pythagorean theorem as it applies to right triangles to calculate the length of the hypotenuse given a diagram or leg lengths • constructs and describes the correlations of points on scatter plots and can identify the slope and y-intercept of a line of best fit

Level 3	A student performing at Level 3 typically • places irrational numbers on a number line • identifies rational and irrational numbers and converts less-familiar rational numbers to fraction form • uses square root and cube root symbols to represent solutions to mathematical equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number; evaluates cube roots of small perfect cubes • uses properties of exponents and performs operations with numbers expressed in scientific notation • explains, using similar triangles, why the slope is the same between any two distinct points on a nonvertical line in the coordinate plane • identifies the unit rate as the slope • derives the equation y = mx for a line through the origin • compares two different proportional relationships represented in different ways • identifies linear equations as having solutions of one, infinitely many, or none by transforming the given equation into simpler forms by inspection • solves multistep linear equations in one variable (variable on one side only) with rational coefficients using the distributive property and/or combining like terms • solves systems of two linear equations in two variables with integer coefficients by inspection, algebraically by substitution (with at least one equation with an isolated variable) or elimination by multiplying at most one of the equations by an integer • interprets and compares properties and models, including equations in the form y = mx + b as defining a linear function whose graph is a straight line • describes qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear) • describes the sequence and the effect of up to two rigid transformations and/or a dilation on two-dimensional figures using coordinates and coordinate notation • finds unknown angle measures for angle pairs when parallel lines are cut by a transversal; gives an informal argument for sum of angles of a triangle equals 180 and/or the measure of an exterior angle of a triangle is equal to the sum of the measures of the non-adjacent angles • Pythagorean theorem: models and explains the proof, calculates unknown side lengths, applies to find the distance between two points • uses the formulas for the volumes of cones, cylinders, and spheres to solve real-world mathematical problems • draws a straight line on and interprets a scatter plot that closely fits the data points • completes a two-way table of categorical data

Level 4	A student performing at Level 4 typically • uses approximations of irrational numbers to estimate the value of an expression • compares and orders rational and irrational numbers without a number line • writes and solves equations representing real-world situations using square root and cube root symbols • expresses how many times as much a number written in the form of single digit times an integer power of 10 is than another number written in the same form • performs multiple properties of exponents and operations and interprets values written in scientific notation within a real-world context • generates a model of a proportional and/or linear relationship to include tables, graphs, and equations • justifies why an equation has one solution, infinitely many solutions, or no solution • solves and analyzes a system of equations in two variables with integer and benchmark fraction coefficients • compares two linear functions and justifies whether two functions each represented in a different way (algebraically, graphically, numerically in tables, or verbal descriptions) are equivalent or not by comparing their properties or determining if a rule is a function • determines whether a function is linear or nonlinear (table or equation) • interprets the rate of change and initial value of a linear function in terms of the situation it models, and explains what makes it linear • sketches a graph that exhibits given qualitative features of a function • use properties of rigid and nonrigid transformations to understand the relationship between transformations, congruence, and similarity • gives an informal argument for congruent angle relationships when parallel lines are cut by a transversal • applies the Pythagorean theorem to a real-world situation in two and three dimensions to determine unknown side lengths or the distance between two points in a coordinate system • explains the relationship between formulas for the volumes of cones and cylinders • constructs and uses equations of trend lines to solve problems using scatter plots for bivariate measurement data to investigate patterns of association between quantities • constructs a two-way table to summarize data and/or describes relative frequencies for possible associations from a two-way table

Level 5	A student performing at Level 5 typically • explains how to get more precise approximations of square roots • analyzes and explains the patterns that exist when writing rational numbers as fractions • analyzes the reasonableness of the result of using the properties of integer exponents in numerical expressions • justifies how square roots and cube roots relate to each other and to their radicands • analyzes the process and solution to given problems using scientific notation • compares and contrasts situations in which similar triangles would or would not yield the same slope between any two distinct points on a nonvertical line in the coordinate plane • creates and solves examples of multistep linear equations in one variable that have one solution, infinitely many solutions, or no solutions using the distributive property and combining like terms on a side • solves and analyzes problems involving two linear equations in two variables with rational coefficients or constants • creates a rule, given a table or graph, and explains why it is or is not a function • create a function, based on given criterion, in comparison to a given function • gives real-world examples of functions that are linear or nonlinear • analyzes a set of values in either a table or graph to determine changes to be made to make the relationship linear • interprets qualitative features of a function in a context • describes the effect of two transformations, including at least one dilation, on two-dimensional figures using coordinates and coordinate notation • gives an informal argument that a triangle can only have one 90-degree angle; gives an informal argument for the pairs of angles that are supplementary when parallel lines are cut by a transversal • finds multiple leg lengths given a hypotenuse of an isosceles triangle or finds multiple leg lengths when two triangles with the same hypotenuse are given • applies the Pythagorean theorem in multistep problems • finds the coordinates of a point which is a given distance (nonvertical and nonhorizontal) from another point • justifies the relationship between the formulas for volume of cones, cylinders, or spheres • explains the derivation of the formulas for cones, cylinders, and spheres • compares more than one trend line for the same scatter plot and justifies the best one • creates and uses a linear model based on a set of bivariate data to solve a problem involving slope and intercept • interprets a two-way table to summarize data • compares relative frequencies to identify patterns of association