

Next Generation Sunshine State Standards, Grade 8 and Grade 8 Advanced, Correlated to *Florida Algebra 1*

Lessons in which the standard is the primary focus are indicated in **bold**. Standards with asterisks are included in the Course Description for Grade 8 Advanced only.

Scheme	Descriptor	Student Edition Lesson(s)	Page Numbers
LA.8.1.6.5	The student will relate new vocabulary to familiar words;	Throughout the text; for example, 1-4, 4-7, 9-4, 10-3, 12-3	Throughout the text; for example, 23-29, 261-268, 552-557, 619-623, 756-762
LA.8.2.2.3	The student will organize information to show understanding or relationships among facts, ideas, and events (e.g., representing key points within text through charting, mapping, paraphrasing, summarizing, or comparing/contrasting);	Explore 2-2, 2-6, Extend 6-5, Explore 4-1, and throughout the text in the Foldables Study Organizers	81-82, 111-117, 368, 213
LA.8.3.1.2	The student will prewrite by making a plan for writing that addresses purpose, audience, main idea, logical sequence, and time frame for completion;	Throughout the text; for example, 2-1, Extend 3-5, 5-4, 8-1, 12-6	Throughout the text; for example, 75-80, 194, 304-309, 471-474, 779-784
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.	1-6, 1-7 , Extend 1-7 , 3-1 , 3-2 , Extend 3-2 , 4-1 , 4-2 , 4-3 , 4-4 , 4-5, 4-6, 4-7	38-44, 45-52 , 53 , 153-160 , 161-166 , 167 , 214-221 , 224-230 , 231-236 , 237-243 , 245-251, 253-260, 261-268
MA.8.A.1.2	Interpret the slope and the x - and y -intercepts when graphing a linear equation for a real-world problem.	Explore 4-1 , 4-1 , Extend 4-1 , 4-2	213 , 214-221 , 222-223 , 224-230
MA.8.A.1.3	Use tables, graphs, and models to represent, analyze, and solve real-world problems related to systems of linear equations.	6-1 , Extend 6-1 , 6-5	333-339 , 340-341 , 362-367
MA.8.A.1.4	Identify the solution to a system of linear equations using graphs.	6-1 , Extend 6-1	333-339 , 340-341

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MA.8.A.1.5	Translate among verbal, tabular, graphical and algebraic representations of linear functions.	1-6, 1-7 , Extend 1-7 , 3-1, 3-2 , Extend 3-2 , 3-5, 3-6	38-44, 45-52 , 53, 153-160 , 161-166, 167 , 187-193, 195-200
MA.8.A.1.6	Compare the graphs of linear and non-linear functions for real-world situations.	1-7, 3-3, 7-1 , 9-1, 9-6, 9-9	45-52, 170-178, 401-407 , 525-535, 567-572, 584-589
MA.8.A.4.1	Solve literal equations for a specified variable.	2-8	126-131
MA.8.A.4.2	Solve and graph one- and two-step inequalities in one variable.	5-1, Explore 5-2, 5-3, 5-4 , 5-5, 5-6 , Extend 5-6	283-288, 289 , 290-295, 296-301 , 304-309, 310-314, 315-320, 321
MA.8.A.6.1	Use exponents and scientific notation to write large and small numbers and vice versa and to solve problems.	7-3	416-422
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.	0-2, 10-2, 10-3, 10-4	P7-P10 , 612-617, 619-623, 624-628
MA.8.A.6.3	Simplify real number expressions using the laws of exponents.	7-1, 7-2	401-407, 408-415
MA.8.A.6.4	Perform operations on real numbers (including integer exponents, radicals, percents, scientific notation, absolute value, rational numbers, irrational numbers) using multi-step and real world problems.	0-2, 0-3, 0-4 , 0-5, 0-6, 2-5 , 5-5, 7-1, 7-2 , 7-3, 10-3	P7-P10, P11-P12, P13-P16, P17-P19, P20-P22, 103-109, 310-314, 401-407, 408-415, 416-422, 619-623
MA.8.G.2.1	Use similar triangles to solve problems that include height and distances.	10-7	642-647
MA.8.G.2.2	Classify and determine the measure of angles, including angles created when parallel lines are cut by transversals.	Concepts and Skills 4	862-863
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.	10-7, 10-8	642-647, 649-655
MA.8.G.2.4	Validate and apply Pythagorean Theorem to find distances in real world situations or between points in the coordinate plane.	10-5, 10-6	630-635, 636-641

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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 problems.	Concepts and Skills 1	857-858
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.	0-13	P40-P43
MA.8.S.3.2	Determine and describe how changes in data values impact measures of central tendency.	12-3	756-762
MA.912.A.1.1*	Know equivalent forms of real numbers (including integer exponents and radicals, percents, scientific notation, absolute value, rational numbers, irrational numbers).	0-2, 0-6, 7-1, 7-2, 7-3	P7-P10, P20-P22, 401-407, 408-415, 416-422
MA.912.A.1.2*	Compare real number expressions.	0-3	P11-P12
MA.912.A.3.1*	Solve linear equations in one variable that include simplifying algebraic expressions.	1-5, 2-2, 2-3, 2-4	31-37, 83-89, 91-96, 97-102
MA.912.A.3.2*	Identify and apply the distributive, associative, and commutative properties of real numbers and the properties of equality.	1-3, 1-4, Explore 8-2, 8-2	16-22, 23-29, 475, 476-482
MA.912.A.3.5*	Symbolically represent and solve multi-step and real-world applications that involve linear equations and inequalities.	2-2, 2-3, 2-4, 2-8, 2-9, 3-4, 4-1, 4-2, 4-3, 5-1, 5-2, 5-3, 5-4	83-89, 91-96, 97-102, 126-131, 132-138, 180-186, 214-221, 224-230, 231-236, 283-288, 290-295, 296-301, 304-309
MA.912.A.4.1*	Simplify monomials and monomial expressions using the laws of integral exponents.	7-1, 7-2, 7-3	401-407, 408-415, 416-422
MA.912.A.4.2*	Add, subtract, and multiply polynomials.	Explore 7-5, 7-5, 7-6, Explore 7-7, 7-7, 7-8	431-432, 433-438, 439-444, 445-446, 447-452, 453-458