



## Algebra I Correlation to Mathematics Content Standards

	Mathematics Curriculum Framework	I CAN Learn® Lesson Number	I CAN Learn® Lesson Title
MA.912.A.1.8	Use the zero product property of real numbers in a variety of contexts to identify solutions to equations.	HA1-305	Solving Polynomial Equations by Factoring
		HA1-310	The Practical Use of Polynomial Equations
		HA1-536	Solving Quadratic Equations Using the Graphing Calculator
MA.912.A.2.3	Describe the concept of a function, use function notation, determine whether a given relation is a function, and link equations to functions.	HA1-436	Identifying Relations
		HA1-437	Identifying Relations as Functions
		HA1-439	Using Function Notation
MA.912.A.2.4	Determine the domain and range of a relation.	HA1-438	Finding the Domain and Range of Functions
MA.912.A.2.13	Solve real-world problems involving relations and functions.	HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-450	Solving Problems Involving Direct Variation
		HA1-960	Real-World Applications of Linear Functions
MA.912.A.3.1	Solve linear equations in one variable that include simplifying algebraic expressions.	HA1-140	Solving Equations by Combining Like Terms
		HA1-144	Using a Concrete Model to Solve Equations with Variables on Both Sides
		HA1-145	Solving Equations with Variables on Both Sides
		HA1-360	Expressing Ratios in Simplest Form and Solving Equations Involving Proportions
		HA1-382	Solving Linear Equations Using the Graphing Calculator
MA.912.A.3.2	Identify and apply the distributive, associative, and commutative properties of real numbers and the properties of equality.	HA1-085	Simplifying Expressions Using the Properties of Real Numbers
		HA1-076	Basic Distributive Property
		HA1-090	Simplifying Expressions Using the Property of -1
		HA1-080	Simplifying and Evaluating Algebraic Expressions Containing Grouping Symbols
		HA1-130	Identifying Postulates, Theorems, and Properties
MA.912.A.3.3	Solve literal equations for a specified variable.	HA1-175	Solving Literal Equations
MA.912.A.3.4	Solve and graph simple and compound inequalities in one variable and be able to justify each step in a solution.	HA1-180	Graphing Equations and Inequalities on the Number Line
		HA1-185	Solving Inequalities Using the Addition and Subtraction Properties
		HA1-190	Solving Inequalities Using the Multiplication and Division Properties
		HA1-195	Solving Inequalities Using More Than One Property
		HA1-200	Combined Inequalities
		HA1-205	Solving Combined Inequalities
MA.912.A.3.5	Symbolically represent and solve multi-step and real-world applications that involve linear equations and inequalities.	HA1-125	Solving Equations Using More Than One Property
		HA1-140	Solving Equations by Combining Like Terms
		HA1-145	Solving Equations with Variables on Both Sides
		HA1-360	Expressing Ratios in Simplest Form and Solving Equations Involving Proportions
		HA1-150	Writing an Equation to Solve Word Problems

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		HA1-155	Writing an Equation to Solve Consecutive Integer Problems
		HA1-160	Writing an Equation to Solve Distance, Rate, and Time Problems
		HA1-362	Solving Work Problems
		HA1-165	Using Equations to Solve Percent Problems
		HA1-170	Solving Percent of Change Problems
		HA1-105	Translating Word Statements into Inequalities
		HA1-180	Graphing Equations and Inequalities on the Number Line
		HA1-185	Solving Inequalities Using the Addition and Subtraction Properties
		HA1-190	Solving Inequalities Using the Multiplication and Division Properties
		HA1-195	Solving Inequalities Using More Than One Property
MA.912.A.3.7	Rewrite equations of a line into slope-intercept form and standard form.	HA1-394	Interchanging Linear Equations Between Standard Form and Slope-Intercept Form
MA.912.A.3.8	Graph a line given any of the following information: a table of values, the x- and y-intercepts, two points, the slope and a point, the equation of the line in slope-intercept form, standard form, or point-slope form .	HA1-380	Graphing Linear Equations
		HA1-398	Graphing Linear Equations Using Slope and y-Intercept or Slope and a Point
		HA1-402	Translating Among Multiple Representations of Functions
		HA1-955	Analyzing Linear Functions
MA.912.A.3.9	Determine the slope, x-intercept, and y-intercept of a line given its graph, its equation, or two points on the line.	HA1-385	Finding the Slope of a Line from its Graph or from the Coordinates of Two Points
		HA1-401	How Variations of "m" and "b" Affect the Graph of $y = mx + b$
MA.912.A.3.10	Write an equation of a line given any of the following information: two points on the line, its slope and one point on the line, or its graph. Also, find an equation of a new line parallel to a given line, or perpendicular to a given line, through a given point on the new line.	HA1-395	Finding the Equation of a Line Parallel or Perpendicular to a Given Line
		HA1-405	Determining an Equation of a Line Given the Slope and Coordinates of One Point
		HA1-410	Determining an Equation of a Line Given the Coordinates of Two Points
MA.912.A.3.11	Write an equation of a line that models a data set and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.	HA1-892	Data Analysis Using the Graphing Calculator
		HA1-965	Determining the Best-Fitting Line
MA.912.A.3.12	Graph a linear equation or inequality in two variables with and without graphing technology. Write an equation or inequality represented by a given graph.	HA1-380	Graphing Linear Equations
		HA1-398	Graphing Linear Equations Using Slope and y-Intercept or Slope and a Point
		HA1-402	Translating Among Multiple Representations of Functions
		HA1-415	Graphing Linear Inequalities with Two Variables
		HA1-416	Graphing Linear Inequalities with Two Variables Using the Graphing Calculator
		HA1-382	Solving Linear Equations Using the Graphing Calculator
		HA1-395	Finding the Equation of a Line Parallel or Perpendicular to a Given Line
		HA1-405	Determining an Equation of a Line Given the Slope and Coordinates of One Point
		HA1-410	Determining an Equation of a Line Given the Coordinates of Two Points
MA.912.A.3.13	Use a graph to approximate the solution of a system of linear equations or inequalities in two variables with and without technology.	HA1-455	Solving Systems of Linear Equations by Graphing
		HA1-806	Solving Systems of Linear Equations Using the Graphing Calculator
		HA1-475	Graphing the Solution Set of a System of Linear Inequalities
MA.912.A.3.14	Solve systems of linear equations and inequalities in two and three variables using graphical, substitution, and elimination methods.	HA1-460	Solving Systems of Linear Equations by the Substitution Method
		HA1-465	Solving Systems of Linear Equations by the Addition/Subtraction Method
		HA1-470	Solving Systems of Linear Equations by the Multiply/Add/Subtract Method
		HA1-806	Solving Systems of Linear Equations Using the Graphing Calculator

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		HA1-475	Graphing the Solution Set of a System of Linear Inequalities
MA.912.A.3.15	Solve real-world problems involving systems of linear equations and inequalities in two and three variables.	HA1-870	Solving Problems with Systems of Linear Equations and Inequalities
MA.912.A.4.1	Simplify monomials and monomial expressions using the laws of integral exponents.	HA1-860	Using the Laws of Exponents
		HA1-815	Simplifying Expressions with Negative and Zero Exponents
		HA1-818	Simplifying Expressions Using the Division Properties of Exponents
		HA1-220	Identifying and Multiplying Monomials
		HA1-225	Dividing Monomials and Simplifying Expressions Having an Exponent of Zero
		HA1-230	Raising a Monomial or Quotient of Monomials to a Power
MA.912.A.4.2	Add, subtract, and multiply polynomials.	HA1-240	Identifying the Degree of Polynomials and Simplifying by Combining Like Terms
		HA1-245	Adding and Subtracting Polynomials
		HA1-920	Simplifying Algebraic Expressions Using the Distributive Property
		HA1-255	Multiplying Two Binomials Using the FOIL Method
		HA1-260	Squaring a Binomial and Finding the Product of a Sum and Difference
MA.912.A.4.3	Factor polynomial expressions.	HA1-270	Factoring the Greatest Common Monomial Factor from a Polynomial
		HA1-271	Factoring Trinomials and the Differences of Squares Using Algebra Tiles
		HA1-275	Factoring the Difference Between Two Squares and Perfect Square Trinomials
		HA1-276	Factoring Sums and Differences of Cubes
		HA1-280	Factoring $x^2 + bx + c$ When $c$ is Greater Than Zero
		HA1-285	Factoring $x^2 + bx + c$ When $c$ is Less Than Zero
		HA1-290	Factoring $ax^2 + bx + c$
		HA1-291	Factoring Quadratic Equations Using the Graphing Calculator
		HA1-295	Factoring by Removing a Common Factor and Grouping
		HA1-300	Factoring a Polynomial Completely
MA.912.A.4.4	Divide polynomials by monomials and polynomials with various techniques, including synthetic division.	HA1-355	Dividing Polynomials
		HA1-862	Dividing Polynomials Using Factoring
		HA1-863	Dividing Polynomials Using Long Division
		HA1-864	Dividing Polynomials Using Synthetic Division
MA.912.A.5.1	Simplify algebraic ratios.	HA1-315	Defining Rational Expressions and Determining the Restricted Values
		HA1-320	Simplifying Rational Expressions
MA.912.A.5.4	Solve algebraic proportions.	HA1-360	Expressing Ratios in Simplest Form and Solving Equations Involving Proportions
MA.912.A.6.1	Simplify radical expressions	HA1-490	Simplifying Square Roots
		HA1-492	Simplifying Square and Cube Roots
MA.912.A.6.2	Add, subtract, multiply and divide radical expressions (square roots and higher).	HA1-495	Simplifying Sums and Differences of Radicals
		HA1-500	Simplifying Products of Radicals
		HA1-505	Simplifying Quotients of Radicals
MA.912.A.7.1	Graph quadratic equations with and without graphing technology.	HA1-536	Solving Quadratic Equations Using the Graphing Calculator
		HA1-927	Graphing $f(x) = ax^2$ Using Dilations
		HA1-928	Graphing $f(x) = ax^2$ Using Dilations and Reflections
		HA1-929	Graphing $f(x) = ax^2 + c$ Using Dilations, Reflections, and Vertical Translations
		HA1-935	Analyzing Graphs of Quadratic Functions
MA.912.A.7.2	Solve quadratic equations over the real numbers by factoring, and by using the quadratic formula.	HA1-305	Solving Polynomial Equations by Factoring
		HA1-525	Solving Quadratic Equations Involving Perfect Square Expressions
		HA1-530	Solving Quadratic Equations by Completing the Square
		HA1-535	Developing the Quadratic Formula and Using it to Solve Equations
MA.912.A.7.8	Use quadratic equations to solve real-world problems.	HA1-310	The Practical Use of Polynomial Equations
		HA1-805	Applying Algebra Concepts

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		HA1-940	Applications of Quadratic Equations
		HA1-945	Real-World Applications of Quadratic Functions
MA.912.A.7.10	Use graphing technology to find approximate solutions of quadratic equations.	HA1-935	Analyzing Graphs of Quadratic Functions
		HA1-536	Solving Quadratic Equations Using the Graphing Calculator
MA.912.A.10.1	Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess- and-check, solving a simpler problem, writing an equation, working backwards, and create a table.	HA1-150	Writing an Equation to Solve Word Problems
		HA1-160	Writing an Equation to Solve Distance, Rate, and Time Problems
		HA1-362	Solving Work Problems
		MPA-003	Using Four-Step Plan for Problem Solving
		MPA-116	Solving Real-Life Problems by Using Guess-and-Check and Working Backwards
MA.912.A.10.2	Decide whether a solution is reasonable in the context of the original situation.	MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		Throughout	
MA.912.A.10.3	Decide whether a given statement is always, sometimes, or never true (statements involving linear or quadratic expressions, equations, or inequalities rational or radical expressions or logarithmic or exponential functions).	HA1-881	Completing and Validating Algebraic Proofs
		HGM-035	Using Deductive Reasoning: Algebraic Proof
MA.912.D.7.1	Perform set operations such as union and intersection, complement, and cross product.	HA1-886	Unions and Intersections of Sets Using Venn Diagrams
		HA1-560	Determining Probability of an Event and Complementary Event from a Random Experiment
MA.912.D.7.2	Use Venn diagrams to explore relationships and patterns, and to make arguments about relationships between sets.	HA1-886	Unions and Intersections of Sets Using Venn Diagrams
MA.912.G.1.4	Use coordinate geometry to find slopes, parallel lines, perpendicular lines, and equations of lines.	HA1-385	Finding the Slope of a Line from its Graph or from the Coordinates of Two Points
		HA1-395	Finding the Equation of a Line Parallel or Perpendicular to a Given Line
		HGM-090	Examining Slopes of Parallel and Perpendicular Lines

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

Note: Standards were taken from the Algebra I Florida Mathematics Content Standards document adopted by the Florida Department of Education on September 18, 2007.