



High School Correlation to Mathematics Content Standards

	Mathematics Curriculum Framework	I CAN Learn® Lesson #	I CAN Learn® Lesson Title
NUMBERS, NUMBER SENSE, AND COMPUTATION			
*1.12.6	Determine an approximate value of radical and exponential expressions using a variety of methods.	HA1-480	Finding the Square Roots of Rational Numbers
		HA1-492	Simplifying Square and Cube Roots
		HA1-810	Simplifying Expressions Using the Multiplication Properties of Exponents (Future release)
		HA1-860	Using the Laws of Exponents
*1.12.7	Solve mathematical problems involving exponents and roots.	HA1-480	Finding the Square Roots of Rational Numbers
		HA1-492	Simplifying Square and Cube Roots
		HA1-810	Simplifying Expressions Using the Multiplication Properties of Exponents (Future release)
		HA1-860	Using the Laws of Exponents
	Perform addition, subtraction, and scalar multiplication on matrices.	HA1-840	Introduction to Matrices
		HA1-845	Operations with Matrices
1.12.8	Identify and apply real number properties to solve problems.	HA1-076	Basic Distributive Property
		HA1-085	Simplifying Expressions Using the Properties of Real Numbers
		HA1-090	Simplifying Expressions Using the Property of -1
		HA1-080	Simplifying and Evaluating Algebraic Expressions Containing Grouping Symbols
PATTERNS, FUNCTIONS, AND ALGEBRA			
*2.12.1	Use algebraic expressions to identify and describe the nth term of a sequence.	HA1-448	Finding the nth Term of a Pattern
		MPA-270	Generating Algebraic Expressions from Patterns of Models
*2.12.2	Isolate any variable in given equations, inequalities, proportions, and formulas to use in mathematical and practical situations.	HA1-115	Using the Addition and Subtraction Properties for Equations
		HA1-120	Using the Multiplication and Division Properties for Equations
		HA1-124	Using a Concrete Model to Solve One- and Two-Step Equations
		HA1-125	Solving Equations Using More Than One Property
		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
		HA1-150	Writing an Equation to Solve Word Problems
		HA1-155	Writing an Equation to Solve Consecutive Integer Problems
		HA1-160	Writing an Equation to Solve Distance, Rate, and Time Problems
		HA1-135	Evaluating Formulas
		HA1-175	Solving Literal Equations
2.12.3	Add, subtract, multiply, and factor 1st and 2nd degree polynomials connecting the arithmetic and algebraic processes.	HA1-220	Identifying and Multiplying Monomials

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		HA1-225	Dividing Monomials and Simplifying Expressions Having an Exponent of Zero
		HA1-230	Raising a Monomial or Quotient of Monomials to a Power
		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
		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
		HA1-280	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
	Simplify algebraic expressions, including exponents and radicals.	HA1-075	Simplifying Algebraic Expressions by Combining Like Terms
		HA1-076	Basic Distributive Property
		HA1-085	Simplifying Expressions Using the Properties of Real Numbers
		HA1-079	Using a Concrete Model to Simplify Algebraic Expressions
		HA1-090	Simplifying Expressions Using the Property of -1
		HA1-080	Simplifying and Evaluating Algebraic Expressions Containing Grouping Symbols
		HA1-810	Simplifying Expressions Using the Multiplication Properties of Exponents
		HA1-815	Simplifying Expressions with Negative and Zero Exponents
		HA1-818	Simplifying Expressions Using the Division Properties of Exponents
		HA1-490	Simplifying Square Roots
		HA1-492	Simplifying Square and Cube Roots
		HA1-495	Simplifying Sums and Differences of Radicals
		HA1-500	Simplifying Products of Radicals
		HA1-505	Simplifying Quotients of Radicals
*2.12.4	Determine the domain and range of functions, including linear, quadratic, and absolute value, algebraically and graphically.	HA1-438	Finding the Domain and Range of Functions
		HA1-402	Translating Among Multiple Representations of Functions
		HA1-950	Graphing Absolute Value Functions
		HA1-955	Analyzing Linear Functions
		HA1-935	Analyzing Graphs of Quadratic Functions
		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
	Solve absolute value equations and inequalities both algebraically and graphically.	HA1-210	Solving Equations Involving Absolute Value
		HA1-215	Solving Absolute Value Inequalities
2.12.5	Solve systems of two linear equations algebraically and graphically and verify solutions (with and without technology).	HA1-455	Solving Systems of Linear Equations by Graphing
		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
*2.12.6	Solve mathematical and practical problems involving linear and quadratic equations with a variety of methods, including discrete	HA1-150	Writing an Equation to Solve Word Problems

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	methods (with and without technology).		
		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
		HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-960	Real-World Applications of Linear Functions
		HA1-305	Solving Polynomial Equations by Factoring
		HA1-310	The Practical Use of Polynomial Equations
		HA1-940	Applications of Quadratic Equations
		HA1-945	Real-World Applications of Quadratic Functions
		HA1-805	Applying Algebra Concepts
MEASUREMENT			
3.12.1	Estimate and convert between customary and metric systems.	MPA-063	Converting Units Between Metric and Customary System
3.12.2	Justify, communicate, and differentiate between precision, error, and tolerance in practical problems.	MPA-134	Calculating with Precision, Accuracy, and Significant Digits
		HA1-030	Using Opposites and Absolute Values (Journal)
*3.12.3	Select and use appropriate measurement tools, techniques, and formulas to solve problems in mathematical and practical situations.	HA1-160	Writing an Equation to Solve Distance, Rate, and Time Problems
		HA1-135	Evaluating Formulas
		HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
		HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
		MM1-605	Converting Fahrenheit and Celsius
		HA1-441	Applications of Functions and Relations Involving Distance, Rate, and Time
		HA1-442	Interpreting Graphs of Functions in Real-Life Situations
		HA1-877	Drawing Inferences and Making Predictions from Tables and Graphs
*3.12.4	Interpret and apply consumer data presented in charts, tables, and graphs to make informed financial decisions related to practical applications.	HA1-442	Interpreting Graphs of Functions in Real-Life Situations (profit)
		HA1-870	Solving Problems with Systems of Linear Equations and Inequalities
		HA1-105	Translating Word Statements into Inequalities (income)
		HA1-170	Solving Percent of Change Problems (discount, tax)
		MPA-126	Solving Real-World Problems Involving Sales Tax
		MPA-127	Solving Real-World Problems Involving Discounts, Markup, and Commission
		MPA-128	Solving Real-World Problems Involving Simple and Compound Interest
3.12.5	Determine the measure of unknown dimensions, angles, areas, and volumes using relationships and formulas to solve problems.	HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
		HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
		HA1-889	Complementary and Supplementary Angles
		MPA-069	Finding the Area of Triangles and Trapezoids
		MPA-070	Finding the Circumference of a Circle
		MPA-071	Finding the Area of a Circle
		MPA-068	Finding the Area of Irregular Figures
		MPA-073	Finding the Surface Area of Rectangular Prisms
		MPA-074	Finding the Surface Area of Cylinders
		MPA-075	Finding the Volume of Rectangular Prisms
		MPA-076	Finding the Volume of Cylinders
		MPA-077	Solving Problems Using a Formula

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		MPA-115	Finding the Volumes of Prisms, Cylinders, Pyramids, and Cones Using Models
		MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
SPATIAL RELATIONSHIPS, GEOMETRY AND LOGIC			
*4.12.1	Identify and use the parts of a circle to solve mathematical and practical problems.	Content under review	
	Identify and apply properties of interior and exterior angles of polygons to solve mathematical and practical problems.	HGM-045	Applying Properties of Complementary and Supplementary Angles
		HGM-060	Examining Angle Relationships and Parallel Lines
*4.12.2	Apply properties of similarity through right triangle trigonometry to find missing angles and sides.	HGM-215	Investigating Properties of the 30°-60°-90° Triangle
		HGM-220	Investigating Properties of the 45°-45°-90° Triangle
*4.12.5	Determine the slope of lines using coordinate geometry and algebraic techniques.	HA1-385	Finding the Slope of a Line from its Graph or from the Coordinates of Two Points
	Identify parallel, perpendicular, and intersecting lines by slope.	HA1-398	Graphing Linear Equations Using Slope and y-Intercept or Slope and a Point
		HGM-090	Examining Slopes of Parallel and Perpendicular Lines
	Graph linear equations and find possible solutions to those equations using coordinate geometry.	HA1-395	Finding the Equation of a Line Parallel or Perpendicular to a Given Line
		HA1-380	Graphing Linear Equations
		HA1-382	Solving Linear Equations Using the Graphing Calculator
		HA1-955	Analyzing Linear Functions
	Find possible solution sets of systems of equations whose slopes indicate parallel, perpendicular, or intersecting lines	HA1-455	Solving Systems of Linear Equations by Graphing
		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
4.12.6	Solve problems using complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal and angles in polygons.	HGM-045	Applying Properties of Complementary and Supplementary Angles
		HGM-055	Investigating Vertical Angles and Linear Pairs
		HGM-060	Examining Angle Relationships and Parallel Lines
		HGM-145	Classifying Triangles and Applying Angle Relationships
4.12.7	Apply the Pythagorean Theorem and its converse in mathematical and practical situations.	HA1-515	Using the Pythagorean Theorem
		HA1-516	Applications of the Pythagorean Theorem
4.12.8	Solve problems by drawing and/or constructing geometric figures to demonstrate geometric relationships.	HA1-890	Using Models to Derive Formulas for Two-Dimensional Geometric Figures
		HA1-891	Using Models to Derive Formulas for Three-Dimensional Solids
4.12.9	Formulate, evaluate, and justify arguments using inductive and deductive reasoning in mathematical and practical situations.	HA1-449	Applying Inductive and Deductive Reasoning
		HGM-020	Using Inductive Reasoning
		HGM-027	Identifying Counterexamples and Using Proof by Contradiction
		HGM-030	Deductive Reasoning: Writing Conditional Statements
		HGM-035	Using Deductive Reasoning: Algebraic Proof
		HA1-881	Completing and Validating Algebraic Proofs
DATA ANALYSIS			
*5.12.1	Organize statistical data through the use of tables, graphs, and matrices (with and without technology).	HA1-840	Introduction to Matrices
		HA1-850	Identifying Matrices and Dimensions of a Matrix
		HA1-545	Making a Frequency Distribution Table

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		HA1-540	Finding the Mean, Median, and Mode from Data and Frequency Distribution Tables
		HA1-965	Determining the Best-Fitting Line
		HA1-892	Data Analysis Using the Graphing Calculator
5.12.2	Select and apply appropriate statistical measures in mathematical and practical situations.	HA1-541	Analyzing Data Using the Measures of Central Tendency and the Range
		HA1-885	Histograms and the Normal Distribution
		HA1-555	Computing the Range, Variance, and Standard Deviation of a Set of Data
*5.12.3	Distinguish between a sample and a census.	MPA-840	Interpreting Data
		MPA-087	Finding Percent Increase and Decrease
	Identify sources of bias and their effect on data representations and statistical conclusions.	MPA-840	Interpreting Data
	Use the shape of a normal distribution to compare and analyze data from a sample.	HA1-885	Histograms and the Normal Distribution
5.12.4	Apply permutations and combinations to mathematical and practical situations, including the Fundamental Counting Principle.	HA1-879	Applying Counting Techniques to Permutations and Combinations
5.12.5	Determine the probability of an event with and without replacement using sample spaces.	HA1-560	Determining Probability of an Event and Complementary Event from a Random Experiment
	Design, conduct, analyze, and effectively communicate the results of multi-stage probability experiments.	HA1-565	Solving Problems Involving Independent, Dependent, and Mutually Exclusive and Inclusive Events
5.12.6	Design, construct, analyze, and select an appropriate type of graphical representations to communicate the results of a statistical experiment.	HA1-877	Drawing Inferences and Making Predictions from Tables and Graphs
	Formulate and justify inferences based on a valid data sample.	HA1-877	Drawing Inferences and Making Predictions from Tables and Graphs

*Indicates the HSPE standards that are assessed at the state level.

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

Note: Standards were taken from the High School Nevada Mathematics Content Standards K-12 document adopted by the Nevada State Board of Education in Summer 2006.