



8th Grade Correlation to Mathematics Content Standards

	Mathematics Curriculum Framework	I CAN Learn [®] Lesson #	I CAN Learn [®] Lesson Title
NUMBERS, NUMBER SENSE, AND COMPUTATION			
*1.8.1	Represent numbers using scientific notation in mathematical and practical situations.	MPA-021	Converting Between Standard and Scientific Notation
*1.8.2	Translate among fractions, decimals, and percents, including percents greater than 100 and percents less than 1.	MPA-081	Converting Fractions, Decimals, and Percents I
		MPA-082	Converting Fractions, Decimals, and Percents II
	Explain and use the relationship among equivalent representations of rational numbers in mathematical and practical situations.	MPA-083	Finding Number Given Percent and Total
		MPA-084	Finding Percent Given Number and Total
		MPA-085	Finding Total Given Number and Percent
		MPA-086	Solving Problems Using Percent
		MPA-087	Finding Percent Increase and Decrease
		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
*1.8.3	Compare and order real numbers, including powers of whole numbers in mathematical and practical situations.	MM1-602	Comparing and Ordering Rational Numbers
		HA1-025	Comparing and Ordering Real Numbers
		MPA-013	Using Powers and Exponents in Expressions (Journal)
		MPA-021	Converting Between Standard and Scientific Notation (Journal & Problem Sets of the Day)
*1.8.5	Identify perfect squares to 225 and their corresponding square roots.	MPA-064	Finding Square Roots of Perfect Squares
		MM1-565	Finding Squares and Square Roots
*1.8.6	Use estimation strategies to determine the reasonableness of an answer in mathematical and practical situations.	MPA-005	Estimating Products and Quotients Using Patterns
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-003	Using Four-Step Plan for Problem Solving
		MPA-017	Rounding Decimals and Estimating Computations Using Decimals
		MPA-033	Estimating Computations with Fractions and Mixed Numbers
1.8.7	Calculate with real numbers to solve mathematical and practical situations.	Throughout	
	Use order of operations to solve equations in the real number system.	MPA-008	Order of Operations
		HA1-060	Evaluating Numerical Expressions Using the Order of Operations
		MPA-170	Solving Two-Step Equations Using the Distributive Property (Future release)
1.8.8	Identify and apply the identity property, inverse property, and the absolute value of real numbers to solve problems.	MPA-002	Adding, Subtracting, Multiplying, and Dividing Whole Numbers (includes properties)
		MPA-010	Solving One-Step Equations of Whole Numbers Using Addition and Subtraction
		MPA-011	Solving One-Step Equations of Whole Numbers Using Multiplication and Division

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		MPA-012	Solving One-Step Equations of Whole Numbers Using All Operations
		MPA-042	Solving Problems Using an Equation
		MPA-117	Modeling Integer Arithmetic Using Cups and Counters
		MPA-054	Solving One-Step Equations with Integers Using all Four Operations
		MPA-125	Formulating a Possible Problem Situation Given an Equation
		MPA-118	Modeling Integer Arithmetic Using Algebra Tiles
		MPA-044	Finding Opposite and Absolute Values of Integers
PATTERNS, FUNCTIONS, AND ALGEBRA			
*2.8.1	Find the missing term in a numerical sequence or a pictorial representation of a sequence.	MPA-104	Recognizing Patterns
		MPA-270	Generating Algebraic Expressions from Patterns of Models
2.8.2	Evaluate formulas and algebraic expressions using rational numbers (with and without technology).	HA1-005	Evaluating Algebraic Expressions
		HA1-065	Evaluating Expressions Containing Exponents
		HA1-070	Evaluating Formulas for Given Values of the Variables
	Solve and graphically represent equations and inequalities in one variable, including absolute value.	HA1-180	Graphing Equations and Inequalities on the Number Line
		MPA-010	Solving One-Step Equations of Whole Numbers Using Addition and Subtraction
		MPA-011	Solving One-Step Equations of Whole Numbers Using Multiplication and Division
		MPA-012	Solving One-Step Equations of Whole Numbers Using All Operations
		MPA-054	Solving One-Step Equations with Integers Using all Four Operations
		MPA-109	Solving and Graphing Linear Inequalities on a Number Line
		HA1-030	Using Opposites and Absolute Values
2.8.3	Add and subtract binomials.	MPA-118	Modeling Integer Arithmetic Using Algebra Tiles
		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
2.8.4	Identify, model, describe, and evaluate functions (with and without technology).	MPA-103	Distinguishing Between Relations and Functions
		MPA-140	Examining Linear Equations in Slope-Intercept Form
		MPA-142	Solving Problems With Linear Functions and Direct Variation
	Translate among verbal descriptions, graphic, tabular, and algebraic representations of mathematical situations (with and without technology).	MPA-102	Graphing Equations by Plotting Points
		MPA-135	Determining the Slope of a Line (Future release)
		MPA-140	Examining Linear Equations in Slope-Intercept Form
		MPA-142	Solving Problems With Linear Functions and Direct Variation
		HA1-402	Translating Among Multiple Representations of Functions
*2.8.5	Solve linear equations and represent the solution graphically.	MPA-102	Graphing Equations by Plotting Points
		MPA-140	Examining Linear Equations in Slope-Intercept Form
		MPA-142	Solving Problems With Linear Functions and Direct Variation
		MPA-100	Solving Two-Step Equations with Positive Coefficients (Future release)
		MPA-165	Solving Two-Step Equations with Negative Coefficients (Future release)
		MPA-101	Solving Two-Step Equations by Combining Like Terms (Future release)
		MPA-170	Solving Two-Step Equations Using the Distributive Property (Future release)
		MPA-175	Solving Equations with Variables on Both Sides (Future release)
	Solve inequalities and represent the solution on a number line.	MPA-109	Solving and Graphing Linear Inequalities on a Number Line
2.8.6	Describe how changes in the value of one variable affect the values of the remaining variables in a relation.	MPA-102	Graphing Equations by Plotting Points
		MPA-135	Determining the Slope of a Line
		MPA-140	Examining Linear Equations in Slope-Intercept Form

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MEASUREMENT			
3.8.1	Estimate and convert units of measure for mass and capacity within the same measurement system (customary and metric).	MPA-062	Converting Units in Customary System
		MPA-061	Converting Metric Units of Length, Capacity, and Mass
3.8.2	Demonstrate an understanding of precision, error, and tolerance when using appropriate measurement tools.	MPA-134	Calculating with Precision, Accuracy, and Significant Digits
*3.8.3	Identify how changes in a dimension of a figure effect changes in its perimeter, area and volume.	MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
*3.8.4	Calculate percents in monetary problems.	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
*3.8.5	Apply ratios and proportions to calculate rates and solve mathematical and practical problems using indirect measure.	MPA-155	Comparing and Converting Rates
		MPA-066	Solving Problems Using the Pythagorean Theorem
SPATIAL RELATIONSHIPS, GEOMETRY AND LOGIC			
*4.8.1	Find and use the sum of the measures of interior angles of polygons.	MPA-058	Identifying Polygons
		MPA-060	Determining Which Figures Tessellate
*4.8.2	Apply the properties of equality and proportionality to congruent or similar shapes.	MPA-121	Identifying Similar and Congruent Polygons Using Proportions
4.8.3	Demonstrate dilation using coordinate geometry and models.	MPA-120	Applying Dilations in the Coordinate Plane
	Describe the relationship between an original figure and its transformation or dilation.	MPA-120	Applying Dilations in the Coordinate Plane
4.8.5	Calculate slope, midpoint, and distance using equations and formulas (with and without technology).	MPA-135	Determining the Slope of a Line
		HA1-520	Finding the Distance Between Two Points on a Coordinate Plane
		HA1-876	Applying Length, Midpoint and Slope of a Segment on a Cartesian Plane
	Determine the x- and y- intercepts of a line.	MPA-140	Examining Linear Equations in Slope-Intercept Form
		MPA-142	Solving Problems With Linear Functions and Direct Variation
4.8.6	Form generalizations and validate conclusions about geometric figures and their properties.	MPA-058	Identifying Polygons
		MPA-059	Classifying Triangles and Quadrilaterals
		MPA-121	Identifying Similar and Congruent Polygons Using Proportions
		MPA-060	Determining Which Figures Tessellate
		MPA-072	Identifying 3-D Figures
4.8.7	Verify and explain the Pythagorean Theorem using a variety of methods.	MPA-066	Solving Problems Using the Pythagorean Theorem
	Determine the measure of the missing side of a right triangle.	MPA-066	Solving Problems Using the Pythagorean Theorem
4.8.8	Construct geometric figures using a variety of tools.	MPA-107	Constructing Three-Dimensional Figures and Examining Their Dimensions
4.8.9	Represent logical relationships using conditional statements.	MPA-007	Solving Problems Using Logical Reasoning Skills
		HA1-130	Identifying Postulates, Theorems, and Properties
		HA1-881	Completing and Validating Algebraic Proofs
		HA1-449	Applying Inductive and Deductive Reasoning
DATA ANALYSIS			
*5.8.1	Formulate questions and design a study that guides the collection of data.	MM1-385	Collecting Data
	Organize, display, and read data including box and whisker plots (with and without technology).	MPA-094	Interpreting and Constructing Line Plots
		MPA-096	Constructing Stem-and-Leaf Plots
		MPA-097	Constructing Box-and-Whisker Plots
		MPA-131	Interpreting and Creating Histograms

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5.8.2	Select and apply appropriate measures of data distribution, using interquartile range and central tendency.	MPA-132 MPA-095	Interpreting and Creating Scatterplots Find the Mean, Median, and Mode
*5.8.3	Evaluate statistical arguments that are based on data analysis for accuracy and validity.	MPA-097 MPA-099	Constructing Box-and-Whisker Plots Recognizing Misleading Statistics and Graphs
5.8.4	Find the number of combinations possible in mathematical and practical situations. Distinguish between permutations and combinations.	MPA-840 MPA-091	Interpreting Data Finding the Number of Combinations of a Set of Objects
5.8.5	Differentiate between the probability of an event and the odds of an event.	MPA-091 MPA-114	Finding the Number of Combinations of a Set of Objects Finding the Odds of Events and Experimental Probability from a Math Model
5.8.6	Formulate reasonable inferences and predictions through interpolation and extrapolation of data to solve practical problems.	MPA-113	Finding the Probability of Compound Events Through Experimentation

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

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

Note: Standards were taken from the Grade 8 Nevada Mathematics Content Standards K-12 document adopted by the Nevada State Board of Education in Summer 2006.