I CAN Learn®
EDUCATION SYSTEMS

7th Grade Correlation to Mathematics Content Standards

	Mathematics Curriculum Framework	I CAN Learn® Lesson #	I CAN Learn® Lesson Title
NUMBER AND OPERATION			
7.M.1.1.1	Compare magnitudes and relative magnitudes of rational numbers, including integers, fractions, and decimals.	MPA-045	Comparing and Ordering Integers
		MM1-602	Comparing and Ordering Rational Numbers
		MPA-016	Comparing and Ordering Decimals
		MPA-031	Comparing and Ordering Fractions and Decimals
7.M.1.1.2	Solve problems requiring the conversion between simple decimals, fractions, ratios, and percents.	MPA-081	Converting Fractions, Decimals, and Percents I
		MPA-082	Converting Fractions, Decimals, and Percents II
		MPA-078	Expressing Ratios as Fractions and Determining Equivalency
		MM1-358	Converting Fractions and Mixed Numbers with Denominators of Powers of Ten to Decimals
		MM1-360	Expressing Percent as a Ratio
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
7.M.1.1.3	Locate the position of rational numbers on a number line.	MPA-045	Comparing and Ordering Integers
		MM1-602	Comparing and Ordering Rational Numbers
		MPA-016	Comparing and Ordering Decimals
		MPA-031	Comparing and Ordering Fractions and Decimals
7.M.1.1.4	Rewrite multiple factors using exponents.	MPA-013	Using Powers and Exponents in Expressions
		MPA-026	Using Prime Factorization
7.M.1.1.5	Apply the number theory concepts of primes, composites, and prime factorization and find the Least Common Multiple (LCM) and the Greatest Common Factor (GCF).	MPA-024	Using Divisibility Rules
		MPA-025	Identifying Prime and Composite Numbers
		MPA-026	Using Prime Factorization
		MPA-027	Finding the Greatest Common Factor
		MPA-030	Finding Least Common Multiple of Two or More Numbers
7.M.1.1.6	Recognize pertinent information for problem solving.	Throughout	Standard is demonstrated throughout. For examples, see the following lessons:
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-003	Using Four-Step Plan for Problem Solving
		MPA-007	Solving Problems Using Logical Reasoning Skills
		MPA-125	Formulating a Possible Problem Situation Given an Equation
		MM1-195	Identifying the Mathematical Question Given in a Word Problem
7.M.1.1.7	Describe the use of integers in real-world situations.	Throughout	

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		MPA-043	Reading and Writing Integers
		MPA-044	Finding Opposite and Absolute Values of Integers
7.M.1.1.8	Use appropriate vocabulary.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.1.2.1	Recall the common equivalent fractions, decimals, and percents of halves, fourths, and tenths.	MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
7.M.1.2.2	Add, subtract, multiply, and divide whole numbers, fractions and decimals; and add, multiply, and divide integers.	MPA-002	Adding, Subtracting, Multiplying, and Dividing Whole Numbers
		MPA-034	Adding and Subtracting Fractions
		MPA-035	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MPA-123	Modeling Multiplication and Division of Fractions
		MPA-036	Multiplying Fractions and Mixed Numbers and Simplifying
		MPA-037	Dividing Fractions and Mixed Numbers and Simplifying
		MPA-018	Adding and Subtracting Decimals
		MPA-122	Modeling Multiplication and Division of Decimals
		MPA-019	Multiplying Decimals
		MPA-020	Multiplying Decimals by Powers of Ten
		MPA-119	Dividing Decimals
		MPA-047	Adding Integers with Like Signs
		MPA-048	Adding Integers with Unlike Signs
		MPA-050	Subtracting Integers with Unlike Signs
		MPA-051	Multiplying Integers with Like and Unlike Signs
		MPA-052	Dividing Integers with Like and Unlike Signs
		MPA-053	Adding, Subtracting, Multiplying, and Dividing Integers
		MPA-117	Modeling Integer Arithmetic Using Cups and Counters
7.M.1.2.3	Evaluate whole numbers in exponential form.	MPA-013	Using Powers and Exponents in Expressions
7.M.1.2.4	Evaluate numerical expressions using the order of operations with whole numbers and decimals.	MPA-008	Order of Operations
7.M.1.2.5	Select and use an appropriate method of computation from mental math, paper and pencil, calculator, or a combination of the three.	Throughout	Standard is demonstrated throughout. For examples, see the following lessons:
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-133	Distinguishing Between Exact and Approximate Answers
7.M.1.2.6	Use a variety of strategies including common mathematical formulas to compute problems drawn from real-life situations.	Throughout	Standard is demonstrated throughout. For examples, see the following lessons:
		MPA-077	Solving Problems Using a Formula
		MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
7.M.1.2.7	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.1.3.1	Estimate to predict computation results.	MPA-005	Estimating Products and Quotients Using Patterns
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-033	Estimating Computations with Fractions and Mixed Numbers
		MPA-133	Distinguishing Between Exact and Approximate Answers
7.M.1.3.2	Explain when estimation is appropriate and describe the usefulness of an estimate as opposed to an exact answer.	MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-133	Distinguishing Between Exact and Approximate Answers
7.M.1.3.3	Identify whether a given estimate is an overestimate or underestimate.	MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-133	Distinguishing Between Exact and Approximate Answers

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7.M.1.3.4	Use a four-function calculator to solve complex grade-level problems.	Activity	See Journals and Problem Sets of the Day
7.M.1.3.5	Formulate conjectures and discuss why they must be or seem to be true.	MPA-007	Solving Problems Using Logical Reasoning Skills
7.M.1.3.6	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen:
CONCEPTS AND PRINCIPALS OF MEASUREMENT			
7.M.2.1.1	Select and use appropriate units and tools to make formal measurements in both systems.	MPA-130	Developing a Sense of Relative Sizes of Measures
		MPA-133	Distinguishing Between Exact and Approximate Answers
		MPA-062	Converting Units in Customary System
		MPA-061	Converting Metric Units of Length, Capacity, and Mass
		MPA-134	Calculating with Precision, Accuracy, and Significant Digits
7.M.2.1.2	Apply estimation of measurement to real-world and content problems using standard measuring devices.	MPA-130	Developing a Sense of Relative Sizes of Measures
		MPA-133	Distinguishing Between Exact and Approximate Answers
7.M.2.1.3	Explain the differences between perimeter, area, and volume (capacity) and their measures within both systems.	MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
		MPA-062	Converting Units in Customary System
		MPA-061	Converting Metric Units of Length, Capacity, and Mass
7.M.2.1.4	Given the formulas, find the perimeter, circumference, or area of triangles, circles, and quadrilaterals.	MPA-055	Finding the Perimeter of a Figure
		MPA-067	Finding the Area of Rectangles and Parallelograms
		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-160	Plotting Polygons and Finding the Area
7.M.2.1.5	Convert units of measurement within each system.	MPA-062	Converting Units in Customary System
		MPA-061	Converting Metric Units of Length, Capacity, and Mass
7.M.2.1.6	Solve problems involving perimeter and area of rectangles and triangles.	MPA-055	Finding the Perimeter of a Figure
		MPA-067	Finding the Area of Rectangles and Parallelograms
		MPA-069	Finding the Area of Triangles and Trapezoids
		MPA-068	Finding the Area of Irregular Figures
7.M.2.1.7	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook scree.
7.M.2.2.1	Explain rates and their relationship to ratios, and use proportions to solve problems represented with a diagram.	MPA-079	Unit rates
		MPA-080	Solving Proportions
		MPA-110	Solving Problems Using Proportions, Scale Drawings, Models, and Maps
		MPA-155	Comparing and Converting Rates
7.M.2.2.2	Reduce rates to unit rates.	MPA-079	Unit rates
7.M.2.3.1	Identify properly constructed dimensional analysis conversions.	MPA-155	Comparing and Converting Rates
CONCEPTS AND PRINCIPALS OF ALGEBRA AND FUNCTIONS			
7.M.3.1.1	Use variables in simple expressions and equations.	MPA-014	Evaluating Expressions for Given Variables
7.M.3.1.2	Translate simple word statements into algebraic expressions and equations.	MPA-041	Writing Simple Algebraic Expressions from Phrases
7.M.3.1.3	Use symbols <, >, ≠, ≤, and ≥ to express relationships.	MPA-045	Comparing and Ordering Integers
		MPA-016	Comparing and Ordering Decimals
		MPA-031	Comparing and Ordering Fractions and Decimals
		MPA-109	Solving and Graphing Linear Inequalities on a Number Line
7.M.3.2.1	Evaluate simple numeric and algebraic expressions using commutative,	MPA-014	Evaluating Expressions for Given Variables

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	associative, identity, zero, inverse, distributive, and substitution properties.		
		MM1-025	Identifying the Properties of Addition
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
7.M.3.2.2	Use the order of operations in evaluating simple algebraic expressions.	MPA-008	Order of Operations
		MM1-620	Using the Order of Operations in Algebraic Expressions
7.M.3.3.1	Solve one-step equations.	MPA-009	Solving One-Step Equations Using a Box
		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-042	Solving Problems Using an Equation
7.M.3.4.1	Extend patterns involving rational numbers and describe the rule that generates the pattern.	MPA-104	Recognizing Patterns
		MPA-270	Generating Algebraic Expressions from Patterns of Models
7.M.3.4.2	Explain how a change in one quantity impacts a change in another quantity.	MPA-102	Graphing Equations by Plotting Points
		MPA-135	Determining the Slope of a Line
		MPA-140	Examining Linear Equations in Slope-Intercept Form
		MPA-142	Solving Problems With Linear Functions and Direct Variation
7.M.3.4.3	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.3.5.1	Represent a simple set of data in a table, as a graph, and as a mathematical relationship.	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
		MPA-150	Identifying and Graphing Linear and Nonlinear Functions
		MPA-270	Generating Algebraic Expressions from Patterns of Models
7.M.3.6.1	Use patterns and linear functions to represent and solve simple problems.	MPA-142	Solving Problems With Linear Functions and Direct Variation
		MPA-270	Generating Algebraic Expressions from Patterns of Models
CONCEPTS AND PRINCIPALS OF GEOMETRY			
7.M.4.1.1	Classify relationships among types of one- and two-, dimensional geometric figures, using their defining properties.	MPA-056	Classifying Angles
		MPA-057	Identifying and Applying Supplementary and Complementary Angles
		MPA-058	Identifying Polygons
		MPA-059	Classifying Triangles and Quadrilaterals
7.M.4.1.2	Draw and measure various angles and shapes using appropriate tools.	MPA-056	Classifying Angles (Journal and Problem Sets of the Day)
7.M.4.1.3	Apply fundamental concepts, properties, and relationships among points, lines, rays, planes, and angles.	MPA-057	Identifying and Applying Supplementary and Complementary Angles
		MPA-105	Determining the Measure of Angles Made by Parallel Lines and a Transversal
7.M.4.1.4	Explain and model the effects of reflections, translations, and rotations on various shapes.	MPA-108	Graphing Translations and Reflections on the Coordinate Plane
		MPA-180	Examining Line and Rotational Symmetry (Future Release)
7.M.4.1.5	Identify congruence, similarities, and line symmetry of shapes.	MPA-121	Identifying Similar and Congruent Polygons Using Proportions
		MPA-180	Examining Line and Rotational Symmetry (Future Release)
7.M.4.1.6	Describe the concept of surface area and volume (capacity).	MPA-073	Finding the Surface Area of Rectangular Prisms
		MPA-074	Finding the Surface Area of Cylinders
		MPA-106	Identifying a Solid Figure From a Net
		MPA-075	Finding the Volume of Rectangular Prisms
		MPA-076	Finding the Volume of Cylinders

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		MPA-115	Finding the Volumes of Prisms, Cylinders, Pyramids, and Cones Using Models
7.M.4.1.7	Use appropriate vocabulary and symbols.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.4.3.1	Identify and plot points on a coordinate plane.	MPA-046	Graphing Points on a Coordinate Plane
DATA ANALYSIS, PROBABILITY, AND STATISTICS			
7.M.5.1.1	Read and interpret tables, charts, and graphs, including frequency tables, scatter plots, broken line graphs, line plots, bar graphs, histograms, circle graphs, and stem-and-leaf plots.	MPA-092	Reading and Interpreting Bar, Line, and Circle Graphs
		MPA-129	Choosing Appropriate Scales and Intervals for Data
		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
		MPA-132	Interpreting and Creating Scatterplots
7.M.5.1.2	Explain conclusions drawn from tables, charts, and graphs.	MPA-098	Making Predictions from Graphs and Choosing the Correct Graph
7.M.5.1.3	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.5.2.1	Collect, organize, and display data with appropriate notation in tables, charts and graphs, including scatter plots, broken line graphs, line plots, bar graphs, and stem-and-leaf plots.	MPA-092	Reading and Interpreting Bar, Line, and Circle Graphs
		MPA-129	Choosing Appropriate Scales and Intervals for Data
		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
		MPA-132	Interpreting and Creating Scatterplots
7.M.5.3.1	Determine the measures of central tendency – mean, median and mode – with sets of data.	MPA-095	Find the Mean, Median, and Mode
7.M.5.3.2	Discuss distribution of data, including range, frequency, gaps, and clusters.	MPA-129	Choosing Appropriate Scales and Intervals for Data
		MPA-097	Constructing Box-and-Whisker Plots
7.M.5.4.1	Predict, perform, and record results of simple probability experiments.	MPA-090	Finding the Probability of Simple Real-Life Events
7.M.5.4.2	Recognize equally likely outcomes.	MPA-112	Constructing Sample Spaces for Compound Events (Dependent and Independent)
		MPA-113	Finding the Probability of Compound Events Through Experimentation
7.M.5.4.3	Explain that probability ranges from impossible to certain (0% to 100%).	MPA-112	Constructing Sample Spaces for Compound Events (Dependent and Independent)
		MPA-113	Finding the Probability of Compound Events Through Experimentation
7.M.5.4.4	Use the language of probability.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.
7.M.5.5.1	Make predictions based on simple theoretical probabilities.	MPA-114	Finding the Odds of Events and Experimental Probability from a Math Model
7.M.5.5.2	Use appropriate vocabulary and notations.	Throughout	Standard is demonstrated throughout. For examples, see definitions and vocabulary as listed at the end of each video on the Notebook screen.

***I**ndicates the benchmark standards that are assessed at the state level (ISAT).

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

Note: Standards were taken from the Grade 7 Mathematics Content Standards K-12 document adopted by the Idaho State Board of Education in February 2007.