



7th Grade Correlation to Mathematics Performance Standards

	Mathematics Curriculum Framework	I CAN Learn® Lesson #	I CAN Learn® Lesson Title
	NUMERATION		
N-1	The student demonstrates understanding of rational numbers (fractions, decimals, percents, or integers) by ordering rational numbers (M1.3.1)	MM1-602	Comparing and Ordering Rational Numbers
		MPA-031	Comparing and Ordering Fractions and Decimals
		MPA-016	Comparing and Ordering Decimals
		MPA-045	Comparing and Ordering Integers
N-2	The student demonstrates understanding of rational numbers (fractions, decimals, percents, or integers) by modeling (place value blocks) or identifying place value positions of whole numbers and decimals (L) (M1.3.2)	MM1-001	Identifying Place Value to the Billions
		MPA-015	Identifying the Place Value of Decimals Through Thousandths
N-3	The student demonstrates understanding of rational numbers (fractions, decimals, percents, or integers) by converting between expanded notation (multiples of ten) and standard form for decimal numbers (M1.3.3)	MM1-005	Writing Numbers in Expanded Form
N-4	The student demonstrates understanding of positive fractions, decimals, or percents by identifying or representing equivalents of numbers (M1.3.4 & M3.3.5)	MM1-280	Identifying and Writing Decimals to the Hundredths and Thousandths
		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
N-5	The student demonstrates conceptual understanding of mathematical operations by [using models, explanations, number lines, real-life situations L] describing or illustrating the effects of arithmetic operations on rational numbers (fractions, decimals) (M1.2.3)	MM1-145	Adding and Subtracting Fractions with Like and Unlike Denominators
		MM1-150	Adding Mixed Numbers with Like Denominators
		MM1-155	Subtracting Mixed Numbers with Like Denominators
		MM1-160	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MM1-165	Multiplying Fractions
		MM1-170	Multiplying Fractions by Simplifying the Problem
		MM1-175	Multiplying Mixed Numbers
		MM1-180	Dividing Fractions
		MM1-185	Dividing Mixed Numbers
		MM1-190	Finding the Fraction of a Given Number
		MPA-018	Adding and Subtracting Decimals

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		MPA-122	Modeling Multiplication and Division of Decimals
		MPA-019	Multiplying Decimals
		MPA-020	Multiplying Decimals by Powers of Ten
		MM1-311	Using a One-Digit Divisor, Express the Remainder as a Decimal
		MM1-313	Using a Two-Digit Divisor, Express the Remainder as a Decimal
		MM1-315	Dividing Decimals by Whole Number Divisors
		MM1-325	Dividing with Decimal Divisors
		MM1-330	Dividing with a Decimal Divisor and Dividend
N-6	The student demonstrates conceptual understanding of number theory by using commutative, [associative L], inverse, or identity properties with rational numbers (M1.3.6)	MM1-025	Identifying the Properties of Addition
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
		MPA-002	Adding, Subtracting, Multiplying, and Dividing Whole Numbers
N-7	The student demonstrates conceptual understanding of number theory by applying rules of divisibility to whole numbers (M1.3.5)	MM1-088	Applying the Divisibility Rules for 2, 3, 4, 5, 6, 9 and 10
N-8	The student demonstrates conceptual understanding of number theory by identifying prime and composite numbers (M1.3.5)	MM1-090	Identifying Prime and Composite Numbers
N-9	The student demonstrates conceptual understanding of number theory by using distributive property with rational numbers (L) (M1.3.6)	MM1-170	Multiplying Fractions by Simplifying the Problem
		MPA-019	Multiplying Decimals
	MEASUREMENT		
MEA-1	The student demonstrates understanding of measurable attributes by estimating length to the nearest sixteenth of an inch or millimeter, volume to the nearest cubic centimeter or milliliter, or angle to the nearest 30 degrees (L) (M2.3.1)	MPA-130	Developing a Sense of Relative Sizes of Measures
		MPA-133	Distinguishing Between Exact and Approximate Answers
		MM1-525	Finding the Volume of Rectangular and Triangular Prisms
		MM1-530	Finding the Volume of a Cylinder
		MM1-460	Measuring and Classifying Angles
MEA-2	The student demonstrates understanding of measurable attributes by identifying or using equivalent English (square inches, square feet, square yards) or metric systems (square centimeters, square meters) (M2.3.2)	MM1-535	Converting Customary Units of Measurement for Length
		MM1-540	Converting Customary Units of Measurement for Capacity and Weight
		MM1-545	Converting Metric Units of Measurement for Length
		MM1-550	Converting Metric Units of Measurement for Mass and Capacity
MEA-3	The student demonstrates understanding of measurement techniques by applying a given scale factor to find missing dimensions of similar figures (M2.3.4)	MM1-470	Using Ratios to Identify Similar Figures
		MM1-475	Using Proportions to Solve for Unknown Lengths of Sides of Similar Figures
		MPA-110	Solving Problems Using Proportions, Scale Drawings, Models, and Maps
MEA-4	The student demonstrates understanding of measurement techniques by measuring various dimensions to one-sixteenth of an inch or millimeter (M2.3.1)	MPA-130	Developing a Sense of Relative Sizes of Measures
		MPA-133	Distinguishing Between Exact and Approximate Answers
MEA-5	The student demonstrates understanding of measurement techniques by accurately measuring a given angle using a protractor to the nearest plus or minus 2 degrees (M2.3.1)	MM1-460	Measuring and Classifying Angles
MEA-6	The student demonstrates understanding of measurement techniques by solving real-world problems involving elapsed time between world time zones (M2.3.5)	MM1-555	Determining Elapsed Time from A.M. to P.M. and P.M. to A.M.
		MM1-560	Identifying Time Zones and Determining Elapsed Time Between Zones

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	ESTIMATION & COMPUTATION		
E&C-1	The student solves problems (including real-world situations) using estimation by identifying or using [a variety of L] strategies, including truncating, rounding, front-end estimation, compatible numbers, to check for reasonableness of solutions (M3.3.1)	MM1-010	Rounding Whole Numbers to the Nearest Million, 10 Million, 100 Million and Billion
		MM1-030	Estimating Sums and Differences
		MM1-050	Identifying Special Patterns in Multiplication
		MM1-060	Estimating Products
		MM1-070	Estimating Quotients
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
E&C-2	The student solves problems (including real-world situations) using estimation by comparing results of different strategies (L) (M3.3.1)	MM1-010	Rounding Whole Numbers to the Nearest Million, 10 Million, 100 Million and Billion
		MM1-030	Estimating Sums and Differences
		MM1-050	Identifying Special Patterns in Multiplication
		MM1-060	Estimating Products
		MM1-070	Estimating Quotients
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
E&C-3	The student accurately solves problems (including real-world situations) by adding or subtracting fractions or mixed numbers with unlike denominators, or decimals to the thousandths place (M3.3.3)	MM1-145	Adding and Subtracting Fractions with Like and Unlike Denominators
		MM1-150	Adding Mixed Numbers with Like Denominators
		MM1-155	Subtracting Mixed Numbers with Like Denominators
		MM1-160	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MM1-300	Adding and Subtracting Decimals
E&C-4	The student accurately solves problems (including real-world situations) by multiplying or dividing decimals to hundredths, or multiplying or dividing by powers of ten, or multiplying or dividing fractions or mixed numbers (M3.3.4)	MM1-310	Multiplying Decimals
		MM1-311	Using a One-Digit Divisor, Express the Remainder as a Decimal
		MM1-313	Using a Two-Digit Divisor, Express the Remainder as a Decimal
		MM1-315	Dividing Decimals by Whole Number Divisors
		MM1-325	Dividing with Decimal Divisors
		MM1-330	Dividing with a Decimal Divisor and Dividend
		MM1-335	Using Zeros as Placeholders when Dividing with Decimal Numbers in the Dividend
		MM1-360	Expressing Percent as a Ratio
		MPA-020	Multiplying Decimals by Powers of Ten
		MM1-165	Multiplying Fractions
		MM1-170	Multiplying Fractions by Simplifying the Problem
		MM1-175	Multiplying Mixed Numbers
		MM1-180	Dividing Fractions
		MM1-185	Dividing Mixed Numbers
		MM1-190	Finding the Fraction of a Given Number
E&C-5	The student accurately solves problems (including real-world situations) by converting between equivalent fractions, terminating decimals, or percents ($10\% = 1/10 = 0.1$) (M3.3.5)	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

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E&C-6	The student accurately solves problems (including real-world situations) by solving proportions using a given scale (M3.3.6)	MM1-220	Writing and Forming Proportions
		MM1-225	Solving Proportions
		MPA-110	Solving Problems Using Proportions, Scale Drawings, Models, and Maps
	FUNCTIONS AND RELATIONSHIPS		
F&R-1	The student demonstrates conceptual understanding of functions, patterns, or sequences including those represented in real-world situations by describing or extending patterns (linear) up to ten terms, represented in tables, sequences, or in problem situations (M4.3.1)	MM1-020	Identifying and Finding Number Patterns Using Whole Numbers
		MPA-104	Recognizing Patterns (of Rational Numbers)
F&R-2	The student demonstrates conceptual understanding of functions, patterns, or sequences including those represented in real-world situations by generalizing relationships (linear) using a table of ordered pairs, a function, or an equation (M4.3.4)	MPA-102	Graphing Equations by Plotting Points
F&R-3	The student demonstrates conceptual understanding of functions, patterns, or sequences including those represented in real-world situations by describing in words how a change in one variable in a formula affects the remaining variables (how changing the length affects the area of a quadrilateral) (M4.3.2)	MPA-135	Determining the Slope of a Line (Rate of Change)
		MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
F&R-4	The student demonstrates conceptual understanding of functions, patterns, or sequences including those represented in real-world situations by using a calculator as a tool when describing, extending, or representing patterns (L) (M4.3.3)	MM1-020	Identifying and Finding Number Patterns Using Whole Numbers
		MPA-104	Recognizing Patterns (of Rational Numbers)
F&R-5	The student demonstrates algebraic thinking by evaluating algebraic expressions (M4.3.5)	MM1-600	Introducing Variables in Algebra
		MM1-620	Using the Order of Operations in Algebraic Expressions
		MPA-014	Evaluating Expressions for Given Variables
F&R-6	The student demonstrates algebraic thinking by solving or identifying solutions to one-step linear equations of the form $x \pm a=b$ or $ax=b$, where a and b are whole numbers; translating a story problem into an equation of similar form; or translating a story problem into an equation of similar form and solving it (M4.3.5)	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
	GEOMETRY		
G-1	The student demonstrates an understanding of geometric relationships by using the attributes and properties of polygons (diagonals, number of sides and angles) to identify and classify regular or irregular polygons (M5.3.1)	MM1-465	Naming and Classifying Polygons by Characteristics
		MM1-480	Identifying and Labeling Triangles According to Their Sides and Angles
G-2	The student demonstrates an understanding of geometric relationships by using the attributes and properties of prisms (vertices, length and alignment of edges, shape and number of bases, shape of faces) to identify and describe triangular or rectangular pyramids (M5.3.2)	MPA-072	Identifying 3-D Figures
		MPA-106	Identifying a Solid Figure From a Net

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G-3	The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformations of shapes by using a scale factor to solve problems involving similar shapes (e.g., scale drawings, maps) (M5.3.3)	MM1-470	Using Ratios to Identify Similar Figures
		MM1-475	Using Proportions to Solve for Unknown Lengths of Sides of Similar Figures
		MM1-500	Using Translations, Rotations and Reflections to Transform Shapes
		MPA-121	Identifying Similar and Congruent Polygons Using Proportions
G-4	The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformations of shapes by drawing or describing the results of applying transformations such as translations, rotations, reflections, or dilations to figures (L) (M5.3.5)	MPA-108	Graphing Translations and Reflections on the Coordinate Plane
		MPA-120	Applying Dilations in the Coordinate Plane
		MPA-180	Examining Line and Rotational Symmetry
G-5	The student solves problems (including real-world situations) by determining the volume of cubes and rectangular prisms (M5.3.4)	MM1-525	Finding the Volume of Rectangular and Triangular Prisms
G-6	The student solves problems (including real-world situations) by determining the surface area of rectangular prisms (M5.3.4)	MM1-520	Finding the Surface Area of a Rectangular Prism
		MPA-106	Identifying a Solid Figure From a Net
G-7	The student solves problems (including real-world situations) by determining the circumference of a circle (M5.3.4)	MPA-070	Finding the Circumference of a Circle
G-8	The student demonstrates understanding of position and direction by graphing or identifying values of variables on a coordinate grid (M5.3.6)	MM1-642	Exploring the Coordinate Plane and Graphing Ordered Pairs
		MPA-102	Graphing Equations by Plotting Points
**G-9	The student demonstrates a conceptual understanding of geometric drawings or constructions by drawing or measuring polygons with given dimensions and angles or circles with given dimensions (L) (M5.3.7)	MPA-056	Classifying Angles (Problem Sets of the Day)
		MPA-133	Distinguishing Between Exact and Approximate Answers (Problem Sets of the Day)
	STATISTICS AND PROBABILITY		
S&P-1	The student demonstrates an ability to classify and organize data by [collecting, L] displaying, organizing, or explaining the classification of data in real-world problems (e.g., science or humanities, peers or community), using circle graphs, frequency distributions, stem and leaf, [or scatter plots L] with appropriate scale (M6.3.1)	MPA-129	Choosing Appropriate Scales and Intervals for Data
		MM1-390	Understanding Data in Bar Graphs, Line Graphs, and Stem-and-Leaf Plots
		MM1-400	Interpreting Double Bar Graphs
		MM1-405	Interpreting and Constructing Circle Graphs
		MPA-132	Interpreting and Creating Scatterplots
S&P-2	The student demonstrates an ability to analyze data (comparing, explaining, interpreting, evaluating, making predictions; drawing or justifying conclusions) by using information from a variety of displays (e.g., as found in graphical displays in newspapers and magazines) (M6.3.2)	MM1-430	Using Graphs to Solve Story Problems
		MM1-435	Using Pictographs, Bar Graphs and Line Graphs to Solve Problems
		MPA-098	Making Predictions from Graphs and Choosing the Correct Graph
		MPA-099	Recognizing Misleading Statistics and Graphs
		MPA-840	Interpreting Data
S&P-3	The student demonstrates an ability to analyze data (comparing, explaining, interpreting, evaluating, making predictions; drawing or justifying conclusions) by determining mean, median, mode, or range (M6.3.3)	MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode

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S&P-4	The student demonstrates a conceptual understanding of probability and counting techniques by determining the [experimental and] (L) theoretical probability of a simple event (M6.3.5)	MM1-230	Finding the Probability of Simple Events
		MM1-235	Finding Experimental Probability
S&P-5	The student demonstrates a conceptual understanding of probability and counting techniques by using a systematic approach to finding sample spaces or to making predictions about the probability of independent events (M6.3.5)	MPA-112	Constructing Sample Spaces for Compound Events (Dependent and Independent)
S&P-6	The student demonstrates a conceptual understanding of probability and counting techniques by designing and conducting a simulation to study a problem and communicate the results (L) (M6.3.6)	MPA-089	Using Tree Diagrams
		MPA-091	Finding the Number of Combinations of a Set of Objects
		MPA-090	Finding the Probability of Simple Real-Life Events
	PROBLEM SOLVING		
PS-1	The student demonstrates an ability to problem solve by selecting, modifying, and applying a variety of problem-solving strategies (e.g., working backwards, drawing a picture, Venn diagrams) and verifying the results (M7.3.2)	Throughout	Standard is demonstrated throughout. For examples, please see the following:
		MM1-355	Solving Multiple-Step Problems
		MM1-425	Classifying Information from a Mathematical Story
		MPA-003	Using Four-Step Plan for Problem Solving
		MPA-116	Solving Real-Life Problems by Using Guess-and-Check and Working Backwards
PS-2	The student demonstrates an ability to problem solve by evaluating, interpreting, and justifying solutions to problems (M7.3.3)	MPA-014	Evaluating Expressions for Given Variables
		MM1-620	Using the Order of Operations in Algebraic Expressions
		MM1-355	Solving Multiple-Step Problems
		MM1-425	Classifying Information from a Mathematical Story
		MM1-390	Understanding Data in Bar Graphs, Line Graphs, and Stem-and-Leaf Plots
		MM1-400	Interpreting Double Bar Graphs
		MM1-405	Interpreting and Constructing Circle Graphs
		MM1-625	Solving Algebraic Equations Using the Inverse Operations of Addition and Subtraction
		MM1-630	Solving Algebraic Equations Using the Inverse Operations of Multiplication and Division
		MM1-641	Graphing the Solution to an Algebraic Equation
		MM1-430	Using Graphs to Solve Story Problems
PS-3	The student communicates his or her mathematical thinking by representing mathematical problems numerically, graphically, and/or symbolically; or using appropriate vocabulary, symbols, or technology to explain, justify, and defend strategies and solutions (M8.3.1, M8.3.2, & M8.3.3)	Throughout	Standard is demonstrated throughout. For examples, please see the following:
		MM1-017	Identifying Exponential and Standard Form of a Number
		MM1-020	Identifying and Finding Number Patterns Using Whole Numbers
		MM1-065	Solving Division in Three Forms
		MM1-025	Identifying the Properties of Addition
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
		MM1-050	Identifying Special Patterns in Multiplication
		MPA-122	Modeling Multiplication and Division of Decimals
		MPA-123	Modeling Multiplication and Division of Fractions
PS-4	The student demonstrates an ability to use logic and reason by using informal deductive and inductive reasoning in concrete contexts or stating counterexamples to disprove statements; or justifying and defending the validity of mathematical strategies and solutions using	Throughout	Standard is demonstrated throughout. For examples, please see the following:

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	examples (M9.3.1, M9.3.2, & M9.3.3)		
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-007	Solving Problems Using Logical Reasoning Skills
PS-5	The student demonstrates the ability to apply mathematical skills and processes across the content strands by using real-world contexts such as science, humanities, peers, and community (M10.3.1 & M10.3.2)	Throughout	Standard is demonstrated throughout. All opening and closing videos include real-world contexts. For examples, please see the following:
		MM1-195	Identifying the Mathematical Question Given in a Word Problem
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
		MM1-355	Solving Multiple-Step Problems
		MPA-116	Solving Real-Life Problems by Using Guess-and-Check and Working Backwards
		MM1-605	Converting Fahrenheit and Celsius
		MM1-610	Finding Simple Interest
		MM1-635	Calculating Distance, Rate, or Time by Solving Equations
		MM1-640	Solving Algebraic Word Problems

** Indicates the benchmark standards that are assessed at the local district level.

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

Note: Standards were taken from the Grade 7 Alaska Mathematics Performance Standards K-12 document adopted by the Alaska State Board of Education and Early Development on June 10, 2005.