



Alignment Document
State of Idaho and Aventa Learning Consumer Math

Consumer Math
2005-2007 Benchmark Blueprint

Standards	Goals	Benchmarks	Unit Name	Course Topic Description
9.M.1 Number and Operation	9.M.1.1 Understand and use numbers.	9.M.1.1.1 Apply properties of rational numbers.	All about Jobs	Review of Order of Operations
		9.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations.	Checking and Savings Accounts	Checking Accounts
			Checking and Savings Accounts	Savings Accounts
			Checking and Savings Accounts	The Check Register
			Checking and Savings Accounts	Simple Interest
			Checking and Savings Accounts	Compound Interest
			All about Jobs	Addition and Subtraction of Decimals
			All about Jobs	Multiplication and Division of Whole Numbers and Decimals
All about Jobs	Computing Pay by Hourly Wages			



			All about Jobs	Fractions, Decimals, and Percents
			All about Jobs	Percents to Decimals or Fractions
			All about Jobs	Percent of a Number
			All about Jobs	Wages and Tips
			Automobile Expenses	Used Cars
			Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Preventative Maintenance and Repairs
			Automobile Expenses	Automobile Insurance
			Automobile Expenses	Insurance Ratings Factors
			Automobile Expenses	Car Rental Costs
			Automobile Expenses	Comparing Costs



			Wages	Addition and Subtraction of Common Fractions
			Wages	Division of Fractions
			Deductions, Taxes, and Insurance	Federal Income Tax
			Deductions, Taxes, and Insurance	Multiplication of Fractions
			Deductions, Taxes, and Insurance	Time Sheets And Time Cards
			Deductions, Taxes, and Insurance	Salary and Commission
			Deductions, Taxes, and Insurance	Payroll Deductions
			Deductions, Taxes, and Insurance	FICA Deductions
			Deductions, Taxes, and Insurance	Health and Life Insurance
			Deductions, Taxes, and Insurance	Filling Out the Form
			Recreation and Spending	Movies and Shows
			Recreation and Spending	Parks and Sports
			Recreation and	Costs of Recreation



			Spending	
			Recreation and Spending	Health Clubs and Fitness Classes
			Recreation and Spending	Buying Clothes
			Recreation and Spending	Catalog Shopping
			Recreation and Spending	Buying Food and Eating Out
			Recreation and Spending	Eating Out
			Transportation	Busses, Trains, Subways, and Taxis
			Transportation	Distance
			Transportation	Estimating Using Mileage Charts
			Transportation	Taking a Road Trip
			Personal Finances	Net Worth and Purchasing Power
			Personal Finances	Purchasing Power
			Personal Finances	Budgeting Expenses
			Personal Finances	The Costs of Raising a Family
			Credit	Using Credit Cards



			Credit	Credit Finance Charges
			Credit	Loans
			Credit	Installment Buying
			Credit	Finding the APR
			Housing	Maximum Rent
			Housing	Buying a House
			Housing	The Mortgage
			Housing	Taxes and Insurance
			Housing	Homeowner's Insurance
			Housing	Decorating and Remodeling
			Housing	Scale Drawings
		9.M.1.1.3 Apply properties of exponents.	Checking and Savings Accounts	Exponential Equations
			Checking and Savings Accounts	Graphing Exponential Equations Exponential Graphs
			Checking and Savings Accounts	Plotting a Decay Curve
			Housing	To Find the Value of a House with Appreciation
		9.M.1.1.4 Identify exact and approximate roots without simplification.		
		9.M.1.1.5 Solve problems using number theory concepts (factors, multiples,		

		primes).		
		9.M.1.1.6 Use appropriate vocabulary.		
	9.M.1.2 Perform computations accurately.	9.M.1.2.1 Use the order of operations and perform operations with rational numbers.	All about Jobs	Review of Order of Operations
	9.M.1.3 Estimate and judge reasonableness of results.	9.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results.	Recreation and Spending	Buying Food and Eating Out
			Transportation	Estimating Using Mileage Charts
			Checking and Savings Accounts	Savings and Graphs
			Housing	Closing Costs
			Housing	The Mortgage
			Housing	Closing Costs
			Housing	Decorating and Remodeling
		9.M.1.3.2 Identify that error accumulates in a computation when there is rounding.		Scale Drawings
9.M.2 Concepts and Principles of Measurement	9.M.2.1 Understand and use U.S. customary and metric measurements.	9.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms and cylinders.	Housing	Decorating and Remodeling
			Housing	Scale Drawings
	9.M.2.2 Apply the concepts of rates, ratios, and proportions.	9.M.2.1.2 Solve problems involving circumference, perimeter, or area of triangles, circles, and rectangles.	Housing	Decorating and Remodeling
			Housing	Scale Drawings
		9.M.2.2.1 Use rates, ratios, proportions, and map scales in problem-solving situations.	Housing	Scale Drawings
			Personal Finances	Writing Linear Equations



		Personal Finances Personal Finances Automobile Expenses Automobile Expenses Transportation Recreation and Spending Recreation and Spending Checking and Savings Accounts Checking and Savings Accounts Credit Credit Credit Credit Credit	Purchasing Power Budgets Other Car Topics Operating Expenses Distance Buying Food and Eating Out Buying Clothes and Shopping Simple Interest Compound Interest Using Credit Cards Credit Finance Charges Loans Installment Buying Finding the APR	
		9.M.2.2.2 Apply concepts of rates and direct and indirect measurements.	Personal Finances Transportation	Writing Linear Equations Distance

			Recreation and Spending	Buying Food and Eating Out
			Automobile Expenses	Other Car Topics
			Automobile Expenses	Operating Expenses
			Housing	Scale Drawings
		9.M.2.2.3 Construct equivalent units, comparable units, and conversions.	Housing	Decorating and Remodeling
			Housing	Scale Drawings
	9.M.2.3 Apply dimensional analysis.	9.M.2.3.1 Use customary and metric units and their relationship to one another and to real world applications involving length, area, capacity, weight, time, and temperature.	Transportation	Distance
			Housing	Decorating and Remodeling
			Housing	Scale Drawings
	9.M.2.4 Apply appropriate techniques and tools to determine measurements.	9.M.2.4.1 Determine and use appropriate units.	Housing	Decorating and Remodeling
			Housing	Scale Drawings
		9.M.2.4.2 Approximate error in measurement situations.	Housing	Decorating and Remodeling
9.M.3 Concepts and Language of Algebra and Functions	9.M.3.1 Use algebraic symbolism as a tool to represent mathematical relationships.	9.M.3.1.1 Represent mathematical relationships using variables, expressions, linear equations and inequalities.	Wages	Evaluating Expressions and Formulas
			Wage	Review of Equations
			Personal Finances	Graphing an Equation Using Points
			Personal Finances	Writing Linear Equations
			Recreation and Spending	Eating Out Buying Clothes and Shopping



			Transportation	Buses, Trains, Subways, and Taxis
			Transportation	Distance
			Housing	Maximum Rent
			Housing	Buying a House
			Housing	The Mortgage
			Housing	Taxes and Insurance
			Housing	Homeowner's Insurance
			Housing	Decorating and Remodeling
			Automobile Expenses	Used Cars
			Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Preventative Maintenance and Repairs
			Automobile Expenses	Automobile Insurance
			Automobile Expenses	Insurance Ratings Factors



			Automobile Expenses	Car Rental Costs
			Automobile Expenses	Comparing Costs
			Credit	Using Credit Cards
			Credit	Credit Finance Charges
			Credit	Loans
			Credit	Installment Buying
			Credit	Finding the APR
	9.M.3.2 Evaluate algebraic expressions.	9.M.3.2.1 Use appropriate procedures for manipulating and simplifying algebraic expressions involving variables, integers, and rational numbers.	Wages	Commission
			Wages	Solving Equations: Addition and Subtraction
			Wages	Salary and Commission
			Wages	Solving Two-Step Equations
			Wages	Solving Equations: Multiplication and Division
			Recreation and Spending	Buying Food and Eating Out
			Transportation	Busses, Trains, Subways, and Taxis
			Transportation	Distance
			Personal Finances	The Costs of Raising a Family



			Personal Finances	Graphing an Equation Using Points
			Personal Finances	Writing Linear Equations
			Housing	Maximum Rent
			Housing	Buying a House
			Housing	The Mortgage
			Housing	Taxes and Insurance
			Housing	Homeowner's Insurance
			Housing	Decorating and Remodeling
			Housing	Scale Drawings
			Automobile Expenses	Used Cars
			Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Preventative Maintenance and Repairs
			Automobile Expenses	Automobile Insurance



			Automobile Expenses	Insurance Ratings Factors
			Automobile Expenses	Car Rental Costs
			Automobile Expenses	Comparing Costs
			Credit	Using Credit Cards
			Credit	Credit Finance Charges
			Credit	Loans
			Credit	Installment Buying
			Credit	Finding the APR
	9.M.3.3 Solve algebraic equations and inequalities.	9.M.3.3.1 Use appropriate procedures to solve multi-step, first-degree equations and inequalities; such as $3(2x - 5) = 5x + 7$ or $3(2x - 5) > 5x + 7$.	Wages	Commission
			Wages	Solving Equations: Addition and Subtraction
			Wages	Salary and Commission
			Wages	Solving Two-Step Equations
			Wages	Solving Equations: Multiplication and Division
			Recreation and Spending	Buying Food and Eating Out
			Transportation	Busses, Trains, Subways, and Taxis



			Transportation	Distance
			Personal Finances	The Costs of Raising a Family
			Housing	Maximum Rent
			Housing	Buying a House
			Housing	The Mortgage
			Housing	Taxes and Insurance
			Housing	Homeowner's Insurance
			Housing	Decorating and Remodeling
			Automobile Expenses	Used Cars
			Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Preventative Maintenance and Repairs
			Automobile Expenses	Automobile Insurance
			Automobile Expenses	Insurance Ratings Factors

			Automobile Expenses	Car Rental Costs
			Automobile Expenses	Comparing Costs
			Credit	Using Credit Cards
			Credit	Credit Finance Charges
			Credit	Loans
			Credit	Installment Buying
			Credit	Finding the APR
		9.M.3.3.2 Differentiate between linear and non-linear equations and graphs.	Checking and Savings Accounts	Plotting a Decay Curve
			Checking and Savings Accounts	Exponential Equations
			Checking and Savings Accounts	Graphing Exponential Equations Savings and Graphs
			Personal Finances	Graphs of Equations
			Personal Finances	Graphing Using Slope and Y-Intercept
			Personal Finances	Graphing an Equation Using Points
			Personal Finances	Writing Linear Equations
	9.M.3.4 Solve simple linear systems of equations.	9.M.3.4.1 Use appropriate procedures to solve linear systems of equations involving two variables; such as $x + y = 7$ and $2x + 3y = 21$.	Personal Finances	Writing Linear Equations
			Personal Finances	Graphing an Equation Using Points

			Personal Finances	Graphing Using Slope and Y-Intercept
			Housing	Decorating and Remodeling
9.M.3.5 Understand the concept of functions.	9.M.3.5.1 Given graphs, charts, ordered pairs, mappings, or equations, determine whether a relation is a function.		Checking and Savings Accounts	Graphing Exponential Equations Exponential Equations
			Checking and Savings Accounts	Plotting a Decay Curve
			Checking and Savings Accounts	Exponential Graphs
			Checking and Savings Accounts	Savings and Graphs
			Personal Finances	Graphing Using Slope and Y-Intercept
			Personal Finances	Graphing an Equation Using Points
			Personal Finances	Writing Linear Equations
	9.M.3.5.2 Evaluate functions written in functional notation.			
	9.M.3.5.3 Given a function, identify domain and range.			
9.M.3.6 Apply functions to a variety of problems.	9.M.3.6.1 Model and solve real-world phenomena using multi-step, first degree, single variable equations and inequalities, linear equations, and two-variable linear systems of equations.		Checking and Savings Accounts	The Check Register
			Checking and Savings Accounts	Checking Accounts
			Checking and Savings Accounts	Savings Accounts



			Automobile Expenses	Used Cars
			Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Preventative Maintenance and Repairs
			Automobile Expenses	Automobile Insurance
			Automobile Expenses	Insurance Ratings Factors
			Automobile Expenses	Car Rental Costs
			Automobile Expenses	Comparing Costs
			Personal Finances	The Costs of Raising a Family
			Personal Finances	Writing Linear Equations
			Personal Finances	Graphing Using Slope and Y-Intercept
			Personal Finances	Graphing an Equation Using Points



			Wages	Commission
			Wages	Solving Equations: Addition and Subtraction
			Wages	Salary and Commission
			Wages	Solving Two-Step Equations
			Wages	Solving Equations: Multiplication and Division
			Housing	Maximum Rent
			Housing	Buying a House
			Housing	The Mortgage
			Housing	Taxes and Insurance
			Housing	Homeowner's Insurance
			Housing	Decorating and Remodeling
			Credit	Using Credit Cards
			Credit	Credit Finance Charges
			Credit	Loans
			Credit	Installment Buying
			Credit	Finding the APR
		9.M.3.6.2 Use graphs and sequences to represent and solve problems.	Personal Finances	Graphing Using Slope and Y-Intercept

			Personal Finances	Graphing an Equation Using Points	
			Personal Finances	Graphs of Equations	
			Checking and Savings Accounts	Plotting a Decay Curve	
			Checking and Savings Accounts	Graphing Exponential Equations Exponential Graphs	
			Automobile Expenses	Comparing Costs	
9.M.4 Concepts and Principles of Geometry	9.M.4.1 Apply concepts of size, shape, and spatial relationships.	9.M.4.1.1 Recognize congruency and similarity of two-dimensional figures.			
		9.M.4.1.2 Recognize similarity as it relates to size variations in two-dimensional objects.			
	9.M.4.2 Apply the geometry of right triangles.	9.M.4.2.1 Given the Pythagorean Theorem, calculate a missing side length of a right triangle where the legs and hypotenuse are natural numbers.			
		9.M.4.3 Apply graphing in two dimensions.	9.M.4.3.1 Identify attributes of the Cartesian Coordinate System, such as quadrants, origin, and axes.	Personal Finances	Graphs of Equations
	9.M.4.3.2 Graph scatter plots and identify informal trend lines (e.g., eyeball fit lines).				
	9.M.4.3.3 Identify positive and negative correlations.				
	9.M.4.4 Represent and graph linear relationships.	9.M.4.4.1 Create graphs and equations for linear relationships.		Personal Finances	Graphs of Equations
				Personal Finances	Graphing an Equation Using Points
		Personal Finances	Graphing Using Slope and Y-Intercept		

		<p>9.M.4.4.2 Represent linear relationships using tables, graphs, and mathematical symbols.</p>	<p>Personal Finances Personal Finances Personal Finances Checking and Savings Accounts</p>	<p>Graphs of Equations Graphing Using Slope and Y-Intercept Graphing an Equation Using Points Exponential Equations</p>
<p>9.M.5 Data Analysis, Probability, and Statistics</p>	<p>9.M.5.1 Represent data with a variety of formats.</p>	<p>9.M.5.1.1 Analyze and interpret tables, charts, and graphs, including scatter plots, broken line graphs, and box-and-whisker plots.</p>	<p>Personal Finances Recreation and Spending Recreation and Spending Recreation and Spending Recreation and Spending Recreation and Spending Automobile Expenses Transportation Transportation Deductions, Taxes,</p>	<p>Writing Linear Equations Graphing Using Slope and Y-Intercept Movies and Shows Costs of Recreation Parks and Sports Eating Out Catalog Shopping Preventative Maintenance and Repairs Air Travel and Time Zones Estimating Using Mileage Charts Life Insurance</p>



			and Insurance	
			Deductions, Taxes, and Insurance	Tables and Graphs
			Deductions, Taxes, and Insurance	Federal Tax Table
			Deductions, Taxes, and Insurance	Filling Out the Form
			Personal Finances	Net Worth and Purchasing Power
			Personal Finances	The Costs of Raising a Family
			Personal Finances	Budgeting Expenses
			Credit	Using Tables to Find Monthly Payments
			Credit	Thinking about Credit
	9.M.5.2 Collect, organize, and display data.	9.M.5.2.1 Collect, organize, and display data in tables, charts, and graphs.	Recreation and Spending	Catalog Shopping
			Recreation and Spending	Parks and Sports
			Recreation and Spending	Movies and Shows
			Recreation and Spending	Costs of Recreation
			Recreation and Spending	Eating Out

			Automobile Expenses Transportation Deductions, Taxes, and Insurance Personal Finances Personal Finances Personal Finances	Preventative Maintenance and Repairs Estimating Using Mileage Charts Life Insurance Budgeting Expenses The Costs of Raising a Family Net Worth and Purchasing Power
9.M.5.3 Apply simple statistical measurements.	9.M.5.3.1 Interpret and use basic statistical concepts, including mean, median, mode, range, and distribution of data, including outliers. 9.M.5.3.2 Make predictions and draw conclusions based on statistical measures.	Deductions, Taxes, and Insurance	Mean, Median, and Mode	
		Checking and Savings Accounts Checking and Savings Accounts	Exponential Equations Exponential Graphs	
		Deductions, Taxes, and Insurance	Mean, Median, and Mode	
9.M.5.4 Understand basic concepts of probability.	9.M.5.4.1 Find probabilities based on dependent, independent, and compound events.			
	9.M.5.4.2 Contrast experimental and theoretical probability.			
9.M.5.5 Make predictions or decisions based on data.	9.M.5.5.1 Make predictions based on randomness, chance, equally likely events, and probability.			
	9.M.5.5.2 Use appropriate	Checking and	Exponential Graphs	



		tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data.	Savings Accounts	
			Checking and Savings Accounts	Exponential Equations
		9.M.5.5.3 Design, conduct, and interpret results of statistical experiments.		