



Alignment Document
State of Mississippi and Aventa Learning Consumer Math

Consumer Math
2005-2007 Benchmark Blueprint

Strands	Standards	Benchmarks	Unit Name	Course Topic Description
Number and Operations	AI.1 Understand relationships between numbers and their properties and perform operations fluently.	AI.1.a Apply properties of real numbers to simplify algebraic expressions, including polynomials.	Wages	Symmetry: A useful property
		AI.1.b Use matrices to solve mathematical situations and contextual problems.	Checking and Savings Accounts	Order of Operations
Algebra	AI.2 Understand, represent, and analyze patterns, relations, and functions.	AI.2.a Solve, check, and graph multi-step linear equations and inequalities in one variable, including rational coefficients in mathematical and real-world situations.	Automobile Expenses	Buying a New Automobile
			Automobile Expenses	Finding the Total Cost
			Automobile Expenses	Auto Loans
			Automobile Expenses	Operating Expenses
			Automobile Expenses	Finding the MPG Cost = (Miles Driven / MPG) (CPG)
Automobile Expenses	Total Premium = (Annual Base Premium) (Rating Factor)			



			Automobile Expenses	Calculate Rental Costs
			Transportation	Busses, Trains, Subways, and Taxis multi step problem solving
			Transportation	Finding Travel Time
			Transportation	Distance
			Transportation	Distance Formula
			Transportation	Finding distance, finding time, finding rate
			Transportation	Using the Distance Formula
			Transportation	Taking a Road Trip multiplication of decimals
			Recreation and Spending	Health Clubs and Fitness Classes
			Recreation and Spending	Parks and Sports
			Recreation and Spending	Add/subtract decimals
			Recreation and Spending	Costs of Recreation
			Recreation and Spending	Health Clubs and Fitness Classes- Percents of the Total
			Recreation and	Buying Clothes and Shopping



			Spending	
			Recreation and Spending	Sales Tax = (rate of tax)(total of purchases)
			Recreation and Spending	Catalog Shopping add & multiply decimals
			Recreation and Spending	Buying Food and Eating Out
			Recreation and Spending	Unit Price = Price / # Units
			Recreation and Spending	Eating Out Add multiply decimals
			Personal Finances	Budgeting Expenses
			Personal Finances	Budgets
			Personal Finances	Net Worth and Purchasing Power
			Personal Finances	Inflation Rate = Price Increase / Original Price
			Personal Finances	Budgets: Percent of Income
			Personal Finances	An Equation for Cost of raising a child
			Housing	Scale Drawings
			Housing	Renting an Apartment
			Housing	Maximum Rent



			Housing	Buying a House
			Housing	Maximum Loan for a House = 2 (Annual Gross Pay)
			Housing	Maximum Spent on a House = Maximum Loan + Down Payment
			Housing	To Find the Value of a House with Appreciation
			Housing	The Mortgage
			Housing	Monthly Payment = (Amount Financed / 1000) (Amount from Payment Table)
			Housing	Costs of the Mortgage
			Housing	Taxes and Insurance
			Housing	Finding the Real Estate Tax
			Wages	Review of Fractions
			Wages	Addition and Subtraction of Common Fractions
			Wages	Multiplication of Fractions
			Wages	Division of Fractions
			Wages	Time Sheets And Time Cards
			Wages	Regular Hours



			Wages	Overtime Pay
			Wages	Salary and Commission
			Wages	Gross Pay (Number of Pay Periods) = Yearly Salary
			Wages	Commission Rate of Percent of Sales
			All about jobs	Decimal Review
			All about jobs	Addition and Subtraction of Decimals
			All about jobs	Multiplication and Division of Whole Numbers and Decimals
			All about jobs	Working with Wages
			All about jobs	Computing Pay by Hourly Wages
			All about jobs	Review of Percents
			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	Review of Order of Operations
			All about jobs	Wages and Tips



			All about jobs	Gross Pay = Hourly Wage (Hours Worked) + (% Tip)(Cost of Meals)
			Deductions, Taxes, and Insurance	Payroll Deductions
			Deductions, Taxes, and Insurance	Gross Pay - Total Deductions = Net Pay
			Deductions, Taxes, and Insurance	Net Pay / Gross Pay = Percent of Gross Pay
			Deductions, Taxes, and Insurance	FICA Deductions
			Deductions, Taxes, and Insurance	Social Security Tax = 7.65 % of gross pay
			Deductions, Taxes, and Insurance	Finding the Premium
			Deductions, Taxes, and Insurance	Finding the Deduction
			Deductions, Taxes, and Insurance	Life Insurance
			Deductions, Taxes, and Insurance	(Coverage Amount / Premium Scale) (Rate) = Annual Premium
			Deductions, Taxes, and Insurance	Adjusted Gross Income (AGI) Taxable Income
			Checking and	Checking Accounts



			Savings Accounts	
			Checking and Savings Accounts	Add subtract decimals
			Checking and Savings Accounts	The Check Register
			Checking and Savings Accounts	Savings Accounts
			Checking and Savings Accounts	Simple Interest
			Checking and Savings Accounts	Compound Interest
			Checking and Savings Accounts	Order of Operations
			Credit	Credit Finance Charges-percent of decimals
			Credit	Loans Using Tables to Find Monthly Payments mult % and dec.
			Credit	Installment Buying
			Credit	Finding the APR
		AI.2.b Solve and graph absolute value equations and inequalities in one variable.		
		AI.2.c Analyze the relationship between x and y values, determine whether a relation is a function, and identify domain and range.		



		AI.2.d Explain and illustrate how a change in one variable may result in a change in another variable and apply to the relationships between independent and dependent variables.	Wages	Review of Equations
		AI.2.e Graph and analyze linear functions.	Personal Finances	Graphs of Equations
			Personal Finances	The Coordinate System
			Personal Finances	Writing Linear Equations
			Personal Finances	To use an equation to predict
			Personal Finances	Graphing an Equation Using Points
			Personal Finances	Graphing Using Slope and Y-Intercept
			Personal Finances	Purchasing Power and Graphs
			Checking and Savings Accounts	Finding Ordered Pairs for an Exponential Equation
			Checking and Savings Accounts	Exponential Graphs
			Checking and Savings Accounts	Graphing Exponential Equations Growth or Decay?
			Checking and Savings Accounts	Finding the Y-intercept
			Checking and Savings Accounts	Graphing Exponential Equations Predicting From the Curve
			Checking and	Plotting a Decay Curve

			Savings Accounts	
			Checking and Savings Accounts	Predicting from a Decay Equation
			Checking and Savings Accounts	Savings and Graphs
			Checking and Savings Accounts	Estimating and Comparing
			Checking and Savings Accounts	Comparing different periods of compounding
			Checking and Savings Accounts	Compare graphs of simple and compound interest
			Automobile Expenses	Car Cost Comparison Using Graphs
		Al.2.f Use algebraic and graphical methods to solve systems of linear equations and inequalities in mathematical and real-world situations.		
		Al.2.g Add, subtract, multiply, and divide polynomial expressions.		
		Al.2.h Factor polynomials by using Greatest Common Factor (GCF) and factor quadratics that have only rational roots.		
		Al.2.i Determine the solutions to quadratic equations by using graphing, tables, completing the square, the Quadratic formula, and factoring.		
		Al.2.j Justify why some polynomials are prime over the rational number system.		
		Al.2.k Graph and analyze absolute value		

		and quadratic functions.		
		AI.2.I Write, graph, and analyze inequalities in two variables.		
Geometry	AI.3 Understand how algebra and geometric representations interconnect and build on one another.	AI.3.a Apply the concept of slope to determine if lines in a plane are parallel or perpendicular.	Personal Finances	Graphing Using Slope and Y-Intercept
		AI.3.b Solve problems that involve interpreting slope as a rate of change.	Personal Finances	Writing Linear Equations
Measurement	AI.4 Demonstrate and apply various formulas in problem-solving situations.	AI.4.a Solve real-world problems involving formulas for perimeter, area, distance, and rate.	Wages	Commission Rate of Percent of Sales
			Deductions, Taxes, and Insurance	Life Insurance
			Deductions, Taxes, and Insurance	(Coverage Amount / Premium Scale) (Rate) = Annual Premium
			Recreation and Spending	Buying Clothes and Shopping Sales Tax = (rate of tax)(total of purchases)
			Transportation	Distance
			Transportation	Distance Formula
			Transportation	Finding distance, finding time, finding rate
			Transportation	Estimating Using Mileage Charts
			Transportation	Using the Distance Formula
			Personal Finances	Inflation Rate = Price Increase / Original Price

			Housing	Decorating and Remodeling
			Housing	Perimeter = $2(\text{Length}) + 2(\text{Width})$
			Housing	Area of the Walls in Square Feet = Perimeter (Height)
			Housing	Scale Drawings
			Housing	Solve a Proportion
			Housing	Finding Dimensions for a Scale Drawing
		A1.4.b Explain and apply the appropriate formula to determine length, midpoint, and slope of a segment in a coordinate plane. (i.e., distance formula, Pythagorean Theorem).		
		A1.4.c Represent polynomial operations with area models.		
Data Analysis & Probability	A1.5 Represent, analyze and make inferences based on data with and without the use of technology.	A1.5.a Draw conclusions and make predictions from scatter plots.		
		A1.5.b Use linear regression to find the line-of-best fit from a given set of data.		