



Alignment Document

State of Alabama And Aventa Learning Consumer Math

Consumer Math 2005-2007 Benchmark Blueprint

State Standard Number	State Standard Area / Description	Unit Name	Course Topic Description
0	Algebra I		
0	Number and Operations		
1	Simplify numerical expressions using properties of real numbers and order of operations, including those involving square roots, radical form, or decimal approximations.	All About Jobs	Order of Operations
		Wages	Evaluating Expressions and Formulas
1.1	Applying laws of exponents to simplify expressions, including those containing zero and negative integral exponents		
0	Algebra		
2	Analyze linear functions from their equations, slopes, and intercepts.		
2.1	Finding the slope of a line from its equation or by applying the slope formula	Personal Finances	Graphing Using Slope-Intercept Form
		Personal Finances	Writing Linear Equations
2.2	Determining the equations of linear functions given two points, a point and the slope, tables of values, graphs, or ordered pairs	Personal Finances	Writing Linear Equations
2.3	Graphing two-variable linear equations and inequalities on the Cartesian plane	Personal Finances	Graphing Using Slope and Y-Intercept
		Personal Finances	Graphing an Equation Using Points

3	Determine characteristics of a relation, including its domain, range, and whether it is a function, when given graphs, tables of values, mappings, or sets of ordered pairs.		
3.1	Finding the range of a function when given its domain		
4	Represent graphically common relations, including $x = \text{constant}$, $y = \text{constant}$, $y = x$, $y = \text{square root of } x$, $y = x^2$, and $y = x $.		
4.1	Identifying situations that are modeled by common relations, including $x = \text{constant}$, $y = \text{constant}$, $y = x$, $y = \text{square root of } x$, $y = x^2$, and $y = x $		
5	Perform operations of addition, subtraction, and multiplication on polynomial expressions.		
5.1	Dividing by a monomial		
6	Factor binomials, trinomials, and other polynomials using GCF, difference of squares, perfect square trinomials, and grouping.		
7	Solve multistep equations and inequalities including linear, radical, absolute value, and literal equations.		
7.1	Writing the solution of an equation or inequality in set notation		
7.2	Graphing the solution of an equation or inequality	Personal Finances	Graphing an Equation Using Points
		Personal Finances	Graphing Using Slope and Y-Intercept
		Checking and Savings Accounts	Graphing Exponential Equations
		Checking and Savings Accounts	Plotting a Decay Curve
7.3	Modeling real-world problems by developing and solving equations and inequalities, including those involving direct and inverse variation	Wages	Solving Two-Step Equations
		Wages	Evaluating Expressions and Formulas
		Wages	Salary and Commission
		Wages	Solving Equations: Addition and Subtraction

		Wages	Commission
		Wages	Solving Equations: Multiplication and Division
		Checking and Savings Accounts	Exponential Equations
		Checking and Savings Accounts	Checking Accounts
		Checking and Savings Accounts	Savings Accounts
		Transportation	Distance
		Personal Finances	Personal Finances
		Personal Finances	The Costs of Raising a Family
		Automobile Expenses	Used Cars
8	Solve systems of linear equations and inequalities in two variables graphically or algebraically.		
8.1	Modeling real-world problems by developing and solving systems of linear equations and inequalities	Finances	Open Response-Making Consumer Choices
9	Solve quadratic equations using the zero product property.		
9.1	Approximating solutions graphically and numerically		
0	Geometry		
10	Calculate length, midpoint, and slope of a line segment when given coordinates of its endpoints on the Cartesian plane.		
10.1	Deriving the distance, midpoint, and slope formulas		
0	Measurement		
11	Solve problems algebraically that involve area and perimeter of a polygon, area and circumference of a circle, and volume and surface area of right circular cylinders or right rectangular prisms.		
11.1	Applying formulas to solve word problems	Housing	Decorating
0	Data Analysis and Probability		



12	Compare various methods of data reporting, including scatterplots, stem-and-leaf plots, histograms, box-and-whisker plots, and line graphs, to make inferences or predictions.	Deductions, Taxes, and Insurance	Tables and Graphs
		Deductions, Taxes, and Insurance	Mean, Median, and Mode
12.1	Determining effects of linear transformations of data		
12.2	Determining effects of outliers		
12.3	Evaluating the appropriateness of the design of a survey		
13	Identify characteristics of a data set, including measurement or categorical and univariate or bivariate.		
14	Use a scatterplot and its line of best fit or a specific line graph to determine the relationship existing between two sets of data, including positive, negative, or no relationship.		
15	Estimate probabilities given data in lists or graphs.		
15.1	Comparing theoretical and experimental probabilities		