



# SuccessMaker®

**Alabama Mathematics Course of Study 2019  
Grade 6**

**Alignments to SuccessMaker  
Providing rigorous intervention  
for K-8 learners with unparalleled precision**

Alabama Mathematics Standards Code	Alabama Mathematics Course of Study 2019 Grade 6	SuccessMaker Item Description	Item ID
PR	Proportional Reasoning		
	Develop an understanding of ratio concepts and use reasoning about ratios to solve problems.		
PR.1	Use appropriate notations [ $a/b$ , $a$ to $b$ , $a:b$ ] to represent a proportional relationship between quantities and use ratio language to describe the relationship between quantities.	Solve a problem in context using proportions.	SMMA_LO_01635
		Identify the correct proportion for the context, and then solve.	SMMA_LO_01826
		Solve a proportion problem in context.	SMMA_LO_01284
		Students use proportions to calculate their weight on Mars.	SMMA_LO_02513
		Form a proportion that can be used to solve for the height of an object.	SMMA_LO_00660
		Determine the fraction needed to complete the proportion.	SMMA_LO_01827
		Ratios and Equations Targeted Lesson 14: Graphing Proportional Relationships	
		Fractions and Decimals Targeted Lesson 37: Decimal Operations Word Problems	
PR.2	Use unit rates to represent and describe ratio relationships.	Identify two unit rates for a given word problem.	SMMA_LO_02114
		Graph proportional relationships and interpret the unit rate as the slope of the graph.	SMMA_LO_02073
		Ratios and Equations Targeted Lesson 12: Rates, Formulas, and Graphs	
		Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02001
		Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02002
		Ratios and Equations Targeted Lesson 14: Graphing Proportional Relationships	

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PR.3	Use ratio and rate reasoning to solve mathematical and real-world problems (including but not limited to percent, measurement conversion, and equivalent ratios) using a variety of models, including tables of equivalent ratios, tape diagrams, double number lines, and equations.	Convert light years to kilometers and kilometers to light years.	SMMA_LO_01339
		Find the unit price of an item (products 2 x 6 to 25 x 32).	SMMA_LO_00830
		Calculate, compare, and use units rates to find the best prices for bakery ingredients.	SMMA_LO_02510
		Solve a problem in context using proportions.	SMMA_LO_01635
		Identify two unit rates for a given word problem.	SMMA_LO_02114
		Students use calculations on rational numbers to figure out the speed at which James Cameron descended into Mariana Trench	SMMA_LO_02514
		Identify the correct proportion for the context, and then solve.	SMMA_LO_01826
		Ratios and Equations Targeted Lesson 12: Rates, Formulas, and Graphs	
		Find the total money earned, given the number of hours worked and the hourly rate.	SMMA_LO_01630
		Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02001
		Given a rate and a model, find a distance.	SMMA_LO_01575
		Solve a proportion problem in context.	SMMA_LO_01284
		Given the number of kilowatt-hours used and a price, find the total cost of power.	SMMA_LO_01336
		Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02002
		Convert Measurement units either by making a table or by multiplying by a unit rate.	SMMA_LO_02117
		Determine the fraction needed to complete the proportion.	SMMA_LO_01827

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		Ratios and Equations Targeted Lesson 14: Graphing Proportional Relationships	
		Find the amount of an ingredient needed to make two, three or four times a recipe.	SMMA_LO_01627
		Find the number of hours worked given the hourly rate and total earned.	SMMA_LO_01625
		Fractions and Decimals Targeted Lesson 37: Decimal Operations Word Problems	
NO	Number Systems and Operations		
	Use prior knowledge of multiplication and division to divide fractions.		
NO.4	Interpret and compute quotients of fractions using visual models and equations to represent problems.	Divide a mixed number by a fraction; simplify if necessary.	SMMA_LO_01789
		Divide a fraction by a fraction; simplify if necessary.	SMMA_LO_01788
		Divide fractions; simplify if necessary.	SMMA_LO_00487
		Divide fractions; simplify.	SMMA_LO_00512
		Identify the equivalent expression for a fraction, whole number, or a mixed numbers being divided by a fraction, a whole number, or a mixed number.	SMMA_LO_00511
		Divide a fraction by a mixed number; simplify if necessary.	SMMA_LO_00491
NO.4.a	Use quotients of fractions to analyze and solve problems.	Fractions and Decimals Targeted Lesson 25: Fraction Operations Word Problems	
		Determine the sale price of an item when the price is reduced by one-half, one-third, or one-fourth.	SMMA_LO_01285
		Solve a one-step equation (fractions, multiplication and division).	SMMA_LO_01847
	Compute multi-digit numbers fluently and determine common factors and multiples.		

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NO.5	Fluently divide multi-digit whole numbers using a standard algorithm to solve real-world and mathematical problems.	Divide using the long division algorithm (three-digit number, two-digit divisor, remainder).	SMMA_LO_00304
		Find the missing exponent in a multiplication or division number sentence.	SMMA_LO_01111
		Solve a division problem in context (remainder).	SMMA_LO_01616
		Make a picture to solve a quotitive division problem (dividends to 20).	SMMA_LO_01565
		Identify the expression that represents a division problem in context; then solve the problem (dividends 12 to 81).	SMMA_LO_01605
		Interpret the quotient and remainder of a division problem in context (three-digit dividends).	SMMA_LO_01617
		Identify the method to solve a division problem with extra information.	SMMA_LO_01268
		Multiplication and Division Targeted Lesson 33: Relating Division to Multiplication	
		Divide (combinations 6 x 20 to 9 x 90).	SMMA_LO_00293
		Identify a picture that represents a division problem (math facts).	SMMA_LO_01245
		Divide using the long division algorithm (one-digit divisor, no remainder).	SMMA_LO_00294
		Divide using the long division algorithm (one-digit divisor, remainder).	SMMA_LO_00292
		Solve a division problem about money with extra information (round quotient to the nearest whole number).	SMMA_LO_01585
		Divide (combinations 2 x 20 to 5 x 90, three-digit dividend, one or two-digit divisor, no remainder).	SMMA_LO_00291
		Practice division using basic facts; dividend, divisor less than or equal to 30.	SMMA_SG_00740
		Solve a one-step division problem (math facts $2 \div 2$ to $9 \div 9$ ).	SMMA_LO_01600

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		Practice division using basic facts; dividend, divisor less than or equal to 100.	SMMA_SG_00840
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	SMMA_LO_00297
		Practice division using basic facts; dividend, divisor less than or equal to 50.	SMMA_SG_00770
		Multiplication and Division Targeted Lesson 8: Representing Division	
		Multiplication and Division Targeted Lesson 13: Multiplication and Division	
		Divide using the long division algorithm (one-digit divisor, remainder).	SMMA_LO_00295
		Make a picture to solve a partitive division problem (dividends to 20).	SMMA_LO_01564
		Represent a quotient by using arrays, area models, or equations.	SMMA_LO_00300
		Multiplication and Division Targeted Lesson 14: More Multiplication and Division Word Problems	
		Divide using the long division algorithm (one-digit divisor, no remainder).	SMMA_LO_00290
		Multiplication and Division Targeted Lesson 9: Another Kind of Division	
		Practice division using basic facts; dividend, divisor less than or equal to 50.	SMMA_SG_00780
		Practice division using basic facts; dividend, divisor less than or equal to 30.	SMMA_SG_00720
		Practice division using basic facts; dividend, divisor less than or equal to 20.	SMMA_SG_00620
		Practice division using basic facts; dividend, divisor less than or equal to 20.	SMMA_SG_00600
		Practice division using basic facts; dividend, divisor less than or equal to 100.	SMMA_SG_00880

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		Divide using the long division algorithm (three-digit dividend, one-digit divisor, no remainder).	SMMA_LO_00296
		Multiplication and Division Targeted Lesson 12: Connecting Representations in a Problem	
		Identify a reasonable answer for a division problem.	SMMA_LO_00246
		Multiply or divide two numbers with exponents (same base, exponents less than 18).	SMMA_LO_01104
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	SMMA_LO_00298
		Practice division using basic facts; dividend, divisor less than or equal to 50.	SMMA_SG_00810
		Solve a division problem in context by rounding the quotient to the next whole number (model shown).	SMMA_LO_01573
		Make a picture to solve a division problem (math facts).	SMMA_LO_01238
		Divide (combinations 2 x 13 to 5 x 19, no remainder).	SMMA_LO_00305
		Identify the equivalent expression for a fraction, whole number, or a mixed numbers being divided by a fraction, a whole number, or a mixed number.	SMMA_LO_00511
		Practice division using basic facts; dividend, divisor less than or equal to 30.	SMMA_SG_00730
		Choose the best estimate for a long division problem (three-digit dividends, two-digit divisors).	SMMA_LO_00315
		Practice division using basic facts; dividend, divisor less than or equal to 100.	SMMA_SG_00820
		Practice division using basic facts; dividend, divisor less than or equal to 20.	SMMA_SG_00670
NO.6	Add, subtract, multiply, and divide decimals using a standard algorithm.	Align the decimal numbers in a vertical subtraction problem; then solve (decimals to thousandths).	SMMA_LO_00233

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		Fractions and Decimals Targeted Lesson 33: Decimal Sequences	
		Fractions and Decimals Targeted Lesson 36: Multiplying and Dividing Decimals	
		Move the decimal point in the divisor and dividend in a long division problem.	SMMA_LO_00247
		Identify the location of the decimal point of the product of two decimals (factors, tenths to hundredths).	SMMA_LO_00222
		Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.	SMMA_LO_00249
		Align the decimal numbers for a vertical addition problem; then solve (to thousandths).	SMMA_LO_00226
		Align the decimal numbers for a vertical subtraction problem; then solve (to thousandths).	SMMA_LO_00228
		Align the decimal numbers in a vertical addition problem; then solve (hundredths, regrouping).	SMMA_LO_00211
		Subtract decimals with regrouping (to ten-thousandths).	SMMA_LO_00243
		Subtract the decimal numbers provided on a data table.	SMMA_LO_01786
		Fractions and Decimals Targeted Lesson 35: Multiplying Decimals	
		Find the missing factor and quotient in two related number sentences (products $0.2 \times 2$ to $0.9 \times 5$ ).	SMMA_LO_00219
		Align the decimal numbers in a vertical subtraction problem; then solve (hundredths, regrouping).	SMMA_LO_00212
		Fractions and Decimals Targeted Lesson 34: Adding and Subtracting Decimals	
		Determine the missing factor in the multiplication number sentence (decimals, to ten-thousandths).	SMMA_LO_00240

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NO.7	Use the distributive property to express the sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with no common factor.	Find the greatest common factor for two to three numbers.	SMMA_LO_01110
		Identify a common factor of two numbers (4 to 81).	SMMA_LO_01088
		Ratios and Equations Targeted Lesson 1: Greatest Common Factor	
NO.8	Find the greatest common factor (GCF) and least common multiple (LCM) of two or more whole numbers.	Ratios and Equations Targeted Lesson 2: Least Common Multiple	
		Given the prime factorization of two numbers, find the common multiple.	SMMA_LO_01108
		Find the greatest common factor for two to three numbers.	SMMA_LO_01110
		Ratios and Equations Targeted Lesson 1: Greatest Common Factor	
NO.8.a	Use factors and multiples to determine prime factorization.	Identify the prime factorization of a two-digit number.	SMMA_LO_01093
		Given the prime factorization of two numbers, find the common multiple.	SMMA_LO_01108
		Using a factor tree, find the prime factors of a number (2 to 32).	SMMA_LO_01087
	Apply knowledge of the number system to represent and use rational numbers in a variety of forms.		
NO.9	Use signed numbers to describe quantities that have opposite directions or values and to represent quantities in real-world contexts.	Ratios and Equations Targeted Lesson 3: Negative Numbers and Number Lines	
NO.10	Locate integers and other rational numbers on a horizontal or vertical line diagram.	Locate the missing integer on a number line (-3 to -12).	SMMA_LO_00101
		Drag rational and irrational values to their correct positions on a number line.	SMMA_LO_02141

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NO.10.b	Use rational numbers in real-world and mathematical situations, explaining the meaning of 0 in each situation.	Represent addition and subtraction of rational numbers (fractions) on a number line.	SMMA_LO_02153
		Find the missing negative addend in a number sentence (sums 1 to 8).	SMMA_LO_00105
		Find the missing addend in a number sentence (missing addends -10 to 10, sums -20 to 20).	SMMA_LO_00110
		Find three consecutive integers when given their sum.	SMMA_LO_01639
		Find the missing addend in a number sentence (sums -20 to 20).	SMMA_LO_00122
		Students use calculations on rational numbers to figure out the speed at which James Cameron descended into Mariana Trench	SMMA_LO_02514
		Evaluate the expression $-(-a - b)$ , where $a$ and $b$ have values from 1 to 9.	SMMA_LO_01532
		Ratios and Equations Targeted Lesson 7: Subtracting Positive and Negative Numbers	
		Find the missing subtrahend in a number sentence (minuends 0 to 10, subtrahends 2 to 11, negative differences).	SMMA_LO_01509
		Evaluate $-(-a + b)$ , where $1 < a$ , $b < 9$ .	SMMA_LO_00128
		Ratios and Equations Targeted Lesson 8: Relating Addition and Subtraction of Positive and Negative Numbers	
		Evaluate the expression $-(-a - b)$ , where $a$ and $b$ have values from 1 to 9.	SMMA_LO_01531
		Find the missing two-digit addend in a number sentence (sums are 0, missing addend is first).	SMMA_LO_00104
		Ratios and Equations Targeted Lesson 10: Determining the Sign	
		Find the missing addend in a number sentence (three addends, -10 to 10).	SMMA_LO_00123

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		Ratios and Equations Targeted Lesson 9: Multiplying and Dividing Positive and Negative Numbers	
		Find the missing two-digit addend in a number sentence (sums are 0).	SMMA_LO_00103
		Find the missing subtrahend in a number sentence (minuends -9 to 0, differences -9 to 0).	SMMA_LO_01512
		Find the missing positive or negative factor in a number sentence.	SMMA_LO_00918
		Ratios and Equations Targeted Lesson 6: Adding Positive and Negative Numbers	
NO.11	Find the position of pairs of integers and other rational numbers on the coordinate plane.		
NO.11.a	Identify quadrant locations of ordered pairs on the coordinate plane based on the signs of the $x$ and $y$ coordinates.	Ratios and Equations Targeted Lesson 29: Coordinates	
		Graph points on a coordinate plane based on a real-world context.	SMMA_LO_02112
NO.11.b	Identify $(a, b)$ and $(a, -b)$ as reflections across the $x$ -axis.	Given two points, describe how the points are related: reflected across the $x$ -axis, reflected across the $y$ -axis, or reflected across both axes.	SMMA_LO_02108
		Identify a set of geometric figures that show a reflection (flip).	SMMA_LO_00648
		Identify a reflection, a rotation, and a translation of a geometric figure.	SMMA_LO_00665
		Identify a transformation as a slide, flip, or a turn.	SMMA_LO_01776
NO.11.c	Identify $(a, b)$ and $(-a, b)$ as reflections across the $y$ -axis.	Given two points, describe how the points are related: reflected across the $x$ -axis, reflected across the $y$ -axis, or reflected across both axes.	SMMA_LO_02108
		Identify a set of geometric figures that show a reflection (flip).	SMMA_LO_00648
		Identify a reflection, a rotation, and a translation of a geometric figure.	SMMA_LO_00665

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		Identify a transformation as a slide, flip, or a turn.	SMMA_LO_01776
NO.11.d	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane, including finding distances between points with the same first or second coordinate.	Complete a table of values and graph the equation of a linear function.	SMMA_LO_01837
		Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	SMMA_LO_01809
		Complete an input/output table given a two-step rule; then plot the ordered pairs on coordinate grid.	SMMA_LO_01758
		Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	SMMA_LO_01757
		Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	SMMA_LO_01808
		Graph a set of ordered pairs from a table on a coordinate plane.	SMMA_LO_01810
		Ratios and Equations Targeted Lesson 29: Coordinates	
		Make a table and a graph when given a rule in the form $y = ax$ or $y = x + a$ .	SMMA_LO_02139
		Graph points on a coordinate plane based on a real-world context.	SMMA_LO_02112
		Complete a table of values and graph the equation of a quadratic function.	SMMA_LO_01836
NO.12	Explain the meaning of absolute value and determine the absolute value of rational numbers in real-world contexts.	Find distances between points with the same first coordinate or the same second coordinate by using coordinates and absolute value.	SMMA_LO_02113
		Ratios and Equations Targeted Lesson 5: Absolute Value	
		Identify absolute value as a distance from zero on a number line.	SMMA_LO_01823

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NO.13	Compare and order rational numbers and absolute value of rational numbers with and without a number line in order to solve real-world and mathematical problems.	Compare two expressions using the additive inverse property.	SMMA_LO_00120
		Compare rational numbers in real-world contexts.	SMMA_LO_02109
		Ratios and Equations Targeted Lesson 4: Understanding Positive and Negative Numbers	
AF	Algebra and Functions		
	Apply knowledge of arithmetic to read, write, and evaluate algebraic expressions.		
AF.14	Write, evaluate, and compare expressions involving whole number exponents.	Give the value of a number (1 to 10) raised to a power (1 to 5).	SMMA_LO_01098
AF.15	Write, read, and evaluate expressions in which letters represent numbers in real-world contexts.	Evaluate an expression within a context (multiplication).	SMMA_LO_01740
		Evaluate an algebraic expression (integers -10 to 10).	SMMA_LO_01842
		Given the value for the variable, evaluate an addition expression (sums 4 to 12).	SMMA_LO_01683
		Evaluate an algebraic expression with exponents (integers -10 to 10).	SMMA_LO_01818
		Evaluate the expression $mx + c$ or $mx - c$ .	SMMA_LO_01739
		Find the final temperature given the initial temperature and the temperature increase.	SMMA_LO_01632
		Ratios and Equations Targeted Lesson 22: Evaluating Algebraic Expressions	
		Ratios and Equations Targeted Lesson 24: Equivalent Expressions	
		Evaluate an algebraic expression with three variables (-5.9 to 5.9).	SMMA_LO_01843
		Ratios and Equations Targeted Lesson 10: Determining the Sign	
		Evaluate an expression with variables using substitution and a value chart (addition, sums to 18).	SMMA_LO_01685

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AF.15.a	Interpret a variable as an unknown value for any number in a specified set, depending on the context.	Ratios and Equations Targeted Lesson 20: Algebraic Expressions	
AF.15.b	Write expressions to represent verbal statements and real-world scenarios.	Identify the number sentence that can be used to solve a two-step problem in context.	SMMA_LO_01297
		Identify the equation that translates the written phrase ( $ax + b = c$ ).	SMMA_LO_00386
		Identify the two-step equation that is a translation of the written phrase within a context.	SMMA_LO_01814
		Identify the equation translated from a written phrase.	SMMA_LO_01852
		Identify the one-step equation that is a translation of the written phrase within a context.	SMMA_LO_01813
		Identify the equation that translates the written phrase ( $ax + b = c$ ).	SMMA_LO_00385
AF.15.c	Identify parts of an expression using mathematical terms such as sum, term, product, factor, quotient, and coefficient.	Ratios and Equations Targeted Lesson 20: Algebraic Expressions	
		Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient).	SMMA_LO_02057
AF.15.d	Evaluate expressions (which may include absolute value and whole number exponents) with respect to order of operations.	Ratios and Equations Targeted Lesson 19: Parentheses and Order of Operations	
		Evaluate an expression using the order of operations.	SMMA_LO_01091
		Give the value of a number (1 to 10) raised to a power (1 to 5).	SMMA_LO_01098
		Ratios and Equations Targeted Lesson 10: Determining the Sign	
AF.16	Generate equivalent algebraic expressions using the properties of operations, including inverse, identity, commutative, associative, and distributive.	Multiplication and Division Targeted Lesson 33: Relating Division to Multiplication	
		Evaluate the expression $-(-a - b)$ , where $a$ and $b$ have values from 1 to 9.	SMMA_LO_01532

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		Identify $-(a - b)$ as equivalent to $-a + b$ (a and b from 1 to 9).	SMMA_LO_01523
		Apply the Associative Property of Multiplication as a strategy to multiply whole numbers.	SMMA_LO_02037
		Evaluate a numerical expression $(a) + (b) - (c)$ , where a, b, and c have values from -9 to 9.	SMMA_LO_01527
		Evaluate $-a(a + b)$ , where $9 < a < 19$ , $1 < b < 9$ .	SMMA_LO_00127
		Evaluate $-(-a + b)$ , where $1 < a$ , $b < 9$ .	SMMA_LO_00128
		Add integers in an associative expression $((a + b) + c$ , three addends -10 to 10).	SMMA_LO_00113
		Identify $-(a + b)$ as equivalent to $-a + (-b)$ , where a and b are 1 to 9.	SMMA_LO_00115
		Evaluate the expression $-(a - b)$ , where a and b have values from 1 to 9.	SMMA_LO_01531
		Identify $-(a + b)$ as equivalent to $-a - b$ , where a and b are 1 to 9.	SMMA_LO_00116
		Multiplication and Division Targeted Lesson 31: Multiplying Multi-digit Numbers	
		Multiplication and Division Targeted Lesson 30: Using the Distributive Property	
		Identify $-(-a - b)$ as equivalent to $a + b$ (a and b from 1 to 9).	SMMA_LO_01524
		Identify $-(a + b)$ as equivalent to $-a - b$ , where a and b are 1 to 9.	SMMA_LO_00118
		Ratios and Equations Targeted Lesson 9: Multiplying and Dividing Positive and Negative Numbers	
		Use the commutative and associative properties of addition to find the missing number.	SMMA_LO_01090
		Apply the Commutative Property of Multiplication as a strategy to multiply and divide whole numbers.	SMMA_LO_02036
		Multiplication and Division Targeted Lesson 22: Solving Problems With Multiples of 10 and 10	

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AF.17	Determine whether two expressions are equivalent and justify the reasoning.	Identify $-(-a - b)$ as equivalent to $a + b$ ( $a$ and $b$ from 1 to 9).	SMMA_LO_01524
		Identify $-(a + b)$ as equivalent to $-a - b$ , where $a$ and $b$ are 1 to 9.	SMMA_LO_00118
	Use equations and inequalities to represent and solve real-world or mathematical problems.		
AF.18	Determine whether a value is a solution to an equation or inequality by using substitution to conclude whether a given value makes the equation or inequality true.	Identify two numbers that make an inequality true (0 to 9).	SMMA_LO_00994
		Determine whether a given value for $x$ is a solution for $ax + b = c$ ( $x$ is from -9 to 9).	SMMA_LO_00397
		Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	SMMA_LO_02061
		Determine whether the given values for $x$ and $y$ satisfy $y = ax + b$ .	SMMA_LO_00398
AF.19	Write and solve an equation in the form of $x + p = q$ or $px = q$ for cases in which $p$ , $q$ , and $x$ are all non-negative rational numbers to solve real-world and mathematical problems.	Solve for $a$ , $b$ , $c$ , or $d$ in $a/b \times c/d = e/f$ (combinations to 12 x 12).	SMMA_LO_00372
AF.20	Write and solve inequalities in the form of $x > c$ , $x < c$ , $x \geq c$ , or $x \leq c$ to represent a constraint or condition in a real-world or mathematical problem.	Identify whole numbers on a number line that satisfy the inequality (0 to 10).	SMMA_LO_01023
		Represent solutions for one-variable, one-step equations and inequalities on a number line.	SMMA_LO_00357
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem. Then represent the solution on a number line.	SMMA_LO_02065
		Ratios and Equations Targeted Lesson 28: Solving Inequalities	
		Match equations and inequalities with real-world situations.	SMMA_LO_02140

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		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem.	SMMA_LO_02064
		Write and use inequalities to decide whether vegetables in a processing plant meet quality standards	SMMA_LO_02511
AF.20.b	Represent the solutions of inequalities on a number line and explain that the solution set may contain infinitely many solutions.	Represent solutions for one-variable, one-step equations and inequalities on a number line.	SMMA_LO_00357
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem. Then represent the solution on a number line.	SMMA_LO_02065
		Solve an inequality of the form $px + q > r$ or $px + q < r$ ; then graph the solution on a number line.	SMMA_LO_02084
	Identify and analyze relationships between independent and dependent variables.		
AF.21	Identify, represent, and analyze two quantities that change in relationship to one another in real-world or mathematical situations.	Identify independent and dependent quantities from tables and graphs.	SMMA_LO_02195
		Write an equation that represents the relationship between independent and dependent quantities from a table.	SMMA_LO_01741
AF.21.a	Use tables, graphs, and equations to represent the relationship between independent and dependent variables.	Write an equation that represents the relationship between independent and dependent quantities from a table.	SMMA_LO_01741
DSP	Data Analysis, Statistics, and Probability		
	Use real-world and mathematical problems to analyze data and demonstrate an understanding of statistical variability and measures of center.		

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DSP.22	Write examples and non-examples of statistical questions, explaining that a statistical question anticipates variability in the data related to the question.	Recognize statistical questions in which data with variability can be collected.	SMMA_LO_02172
DSP.23	Calculate, interpret, and compare measures of center (mean, median, mode) and variability (range and interquartile range) in real-world data sets.	Determine a student's grade point average based on five grades.	SMMA_LO_00179
		Determine the mode of a data set.	SMMA_LO_01719
		Determine the average (mean), median, mode, and range.	SMMA_LO_01210
		Identify the median of a data set with an even number of items and the two middle values are not equal.	SMMA_LO_01170
		Use MAD to identify the difference between the means of two data distributions.	SMMA_LO_02177
		Find the average (mean) of 3 numbers.	SMMA_LO_00151
		Determine the range, mean, or median of a data set in context.	SMMA_LO_02175
		Solve a problem in context by finding the average (mean) of three to seven numbers.	SMMA_LO_01619
		Determine the mean of a data set.	SMMA_LO_01727
		Determine the median of a data set.	SMMA_LO_01726
		Determine the range of a set of data represented in a line graph.	SMMA_LO_01176
		Determine the range of a set of data.	SMMA_LO_01766
		Determine the median of a set of data.	SMMA_LO_01768
		Determine minimum, maximum, range, median, and IQR in a box plot.	SMMA_LO_02219
		Determine the mean, median, MAD, or IQR of a data set.	SMMA_LO_02173
		Find the range of a set of data.	SMMA_LO_01166
		Identify the most frequent value (mode) using a line plot.	SMMA_LO_01164

Alabama Mathematics Standards Code	Alabama Mathematics Course of Study 2019 Grade 6	SuccessMaker Item Description	Item ID
		Identify the median of a data set with an even number of items and the two middle values are equal.	SMMA_LO_01169
		Determine the average (mean) of a data set of three to five customary weights or metric masses.	SMMA_LO_00836
		Determine the mode of a set of data.	SMMA_LO_01765
		Identify the median of a data set with an odd number of items.	SMMA_LO_01168
		Find the five values (upper and lower extremes, median, and upper and lower quartiles) from a set of data that are needed to create a box-and-whiskers plot.	SMMA_LO_01199
		Find two numbers within a range (two-digit).	SMMA_LO_00998
DSP.23.b	Interpret the measures of center and variability in the context of a problem.	Determine the range, mean, or median of a data set in context.	SMMA_LO_02175
		Find two numbers within a range (two-digit).	SMMA_LO_00998
DSP.24	Represent numerical data graphically, using dot plots, line plots, histograms, stem and leaf plots, and box plots.	Graph and interpret rainfall data in a chart.	SMMA_LO_01328
DSP.24.a	Analyze the graphical representation of data by describing the center, spread, shape (including approximately symmetric or skewed), and unusual features (including gaps, peaks, clusters, and extreme values).	Given a chart of tree growth, infer which of two years there was more rainfall.	SMMA_LO_01305
		Predict the effect of changing temperatures on the weather.	SMMA_LO_01312
		Identify the measure of center that best summarizes the data in a graph.	SMMA_LO_02202
		Identify all the towns with temperatures below 32 degrees Fahrenheit on a weather map.	SMMA_LO_01311
GM	Geometry and Measurement		

Alabama Mathematics Standards Code	Alabama Mathematics Course of Study 2019 Grade 6	SuccessMaker Item Description	Item ID
	Graph polygons in the coordinate plane to solve real-world and mathematical problems.		
GM.25	Graph polygons in the coordinate plane given coordinates of the vertices to solve real-world and mathematical problems.	Identify the set of vertices on a grid can be connected to form a figure (triangle, quadrilateral, rectangle, or square).	SMMA_LO_00625
		Draw polygons in the coordinate plane and find the length of a side.	SMMA_LO_02170
GM.25.c	Calculate perimeter and area of a polygon graphed in the coordinate plane.	Draw polygons in the coordinate plane and find the length of a side.	
	Solve real-world and mathematical problems to determine area, surface area, and volume.		
GM.26	Calculate the area of triangles, special quadrilaterals, and other polygons by composing and decomposing them into known shapes.	Find the combined area of two walkways and the total cost of paving stones to cover the walkway.	SMMA_LO_02501
		Find the sum of the areas of two figures (sums 3 to 8, nonstandard units).	SMMA_LO_00752
		Decompose Shapes into triangles and rectangles to find the area.	SMMA_LO_02168
		Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	SMMA_LO_02032
		Tile a rectangle to find its area; represent the area of the rectangle in two different ways (length times width and the sum of the areas of two smaller rectangles).	SMMA_LO_02031
GM.26.a	Apply the techniques of composing and decomposing polygons to find area in the context of solving real-world and mathematical problems.	Find the combined area of two walkways and the total cost of paving stones to cover the walkway.	SMMA_LO_02501
		Find the sum of the areas of two figures (sums 3 to 8, nonstandard units).	SMMA_LO_00752
		Decompose Shapes into triangles and rectangles to find the area.	SMMA_LO_02168

Alabama Mathematics Standards Code	Alabama Mathematics Course of Study 2019 Grade 6	SuccessMaker Item Description	Item ID
		Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	SMMA_LO_02032
		Tile a rectangle to find its area; represent the area of the rectangle in two different ways (length times width and the sum of the areas of two smaller rectangles).	SMMA_LO_02031
GM.28	Apply previous understanding of volume of right rectangular prisms to those with fractional edge lengths to solve real-world and mathematical problems.	Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00829
		Choose the best estimate for the volume of a rectangular prism.	SMMA_LO_00848
		Solve for a variable in the formula for volume of a rectangular prism (whole numbers and mixed numbers).	SMMA_LO_01817
		Compute the volume of right rectangular prisms using formulas.	SMMA_LO_02043
		Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	SMMA_LO_00174
		Find the volume of concrete needed to build a life-size model of Stonehenge	SMMA_LO_02508
		Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters.	SMMA_LO_01819
		Find the volume of a rectangular or triangular prism.	SMMA_LO_00838
		Find the volume of a right rectangular prism with fractional edge lengths.	SMMA_LO_02169
GM.28.a	Use models (cubes or drawings) and the volume formulas ( $V = lwh$ and $V = Bh$ ) to find and compare volumes of right rectangular prisms.	Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00829

Alabama Mathematics Standards Code	Alabama Mathematics Course of Study 2019 Grade 6	SuccessMaker Item Description	Item ID
		Solve for a variable in the formula for volume of a rectangular prism (whole numbers and mixed numbers).	SMMA_LO_01817
		Find the volume of a prism by packing the prism with unit cubes.	SMMA_LO_02042
		Compute the volume of right rectangular prisms using formulas.	SMMA_LO_02043
		Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	SMMA_LO_00174
		Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00833
		Find the volume of concrete needed to build a life-size model of Stonehenge	SMMA_LO_02508
		Find the volume of a right rectangular prism with fractional edge lengths.	SMMA_LO_02169

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