	POLICY ALD: The Level 1 student demonstrates minimal understanding of and ability to apply the mathematics knowledge and skills needed for success in college and careers, as specified in the Common Core State Standards.	POLICY ALD: The Level 2 student demonstrates partial understanding of and ability to apply the mathematics knowledge and skills needed for success in college and careers, as specified in the Common Core State Standards.	POLICY ALD: The Level 3 student demonstrates adequate understanding of and ability to apply the mathematics knowledge and skills needed for success in college and careers, as specified in the Common Core State Standards.	POLICY ALD: The Level 4 student demonstrates thorough understanding of and ability to apply the mathematics knowledge and skills needed for success in college and careers, as specified in the Common Core State Standards.
OVERALL CLAIM: Students can demonstrate progress toward college and career readiness in mathematics.				
CLAIM 1: Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.	CONTENT ALD: The Level 1 student can minimally explain and in a minimal way apply mathematical concepts. The Level 1 student interprets and carries out mathematical procedures with minimal precision and fluency.	CONTENT ALD: The Level 2 student can partially explain and partially apply mathematical concepts. The Level 2 student interprets and carries out mathematical procedures with partial precision and fluency.	CONTENT ALD: The Level 3 student can adequately explain and adequately apply mathematical concepts. The Level 3 student interprets and carries out mathematical procedures with adequate precision and fluency.	CONTENT ALD: The Level 4 student can thoroughly explain and accurately apply mathematical concepts. The Level 4 student interprets and carries out mathematical procedures with high precision and fluency.
Concepts and Procedures: Domain #1				
Ratios and Proportional Relationships				
RANGE ALD **Target A:** Understand ratio concepts and use ratio reasoning to solve problems. 6.RP.1-3	Level 1 students should be able to describe a ratio relationship between two whole number quantities, find missing values in tables that display a proportional relationship, and plot the pairs of values from a table on the coordinate plane. They should be able to find a percent as a rate per hundred and convert measurement units.	Level 2 students should be able to understand the concept of unit rate in straightforward, well-posed problems and solve straightforward, well-posed, one-step problems requiring ratio reasoning.	Level 3 students should be able to use ratio reasoning to solve and understand the concept of unit rates in unfamiliar or multi-step problems, including instances of unit pricing and constant speed, and solve percent problems by finding the whole, given a part and the percent. They should be able to describe a ratio relationship between any two number quantities (denominators less than or equal to 12).	Level 4 students should be able to solve unfamiliar or multi-step problems by finding the whole, given a part and the percent; explain ratio relationships between any two number quantities; and identify relationships between models or representations.
THRESHOLD ALD **Ratios and Proportional Relationships Target A**		The student who just enters Level 2 should be able to: • Find unit rates given two whole number quantities where one evenly divides the other.	The student who just enters Level 3 should be able to: • Solve unit rate problems. • Solve percent problems by finding the whole, given a part and the percent. • Describe a ratio relationship between any two number quantities and understand the concept of unit rate in problems (denominators less than or equal to 12).	The student who just enters Level 4 should be able to: • Solve unfamiliar or multi-step problems by finding the whole, given a part and the percent. • Understand and explain ratio relationships between any two number quantities. • Identify relationships between models or representations.

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http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/11/Smarter-Balanced-Math-ALDs.pdf

The Number System				
RANGE ALD **Target B:** Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 6.NS.1	Level 1 students should be able to apply and extend previous understandings of multiplication and division to multiply a fraction by a fraction, divide a fraction by a whole number, and be able to connect to a visual model. They should understand the effect that a fraction greater than or less than 1 has on a whole number when multiplied and use or create visual models when multiplying a whole number by a fraction between 0 and 1.	Level 2 students should be able to apply and extend previous understandings of multiplication and division to divide a whole number by a fraction between 0 and 1, divide a mixed number by a whole number, and be able to connect to a visual model.	Level 3 students should be able to apply and extend previous understandings of multiplication and division to divide a fraction by a fraction and be able to connect to a visual model.	Level 4 students should be able to use visual models in settings where smaller fractions are divided by larger fractions. They should also understand and apply the fact that a fraction multiplied or divided by 1 in the form of a/a is equivalent to the original fraction.
RANGE ALD **Target C:** Compute fluently with multi-digit numbers and find common factors and multiples. 6.NS.2-4	Level 1 students should be able to add, subtract, and multiply multi-digit whole numbers and decimals to hundredths. They should be able to use the distributive property to express the sum of two whole numbers with a common factor.	Level 2 students should be able to divide multi-digit whole numbers and add and subtract multi-digit decimal numbers. They should be able to find common factors of two numbers less than or equal to 100 and multiples of two numbers less than or equal to 12.	Level 3 students should be able to fluently divide multi-digit numbers and add, subtract, multiply, and divide multi-digit decimal numbers. They should be able to find the greatest common factor of two numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.	Level 4 students should be able to make generalizations regarding multiples and factors of sets of numbers (e.g., state that a particular set of numbers is relatively prime).
THRESHOLD ALD **The Number System Targets B and C**		The student who just enters Level 2 should be able to: • Divide a whole number by a fraction between 0 and 1 and be able to connect to a visual model. • Add and subtract multi-digit decimals. • Find common factors of two numbers less than or equal to 40. • Find multiples of two numbers less than or equal to 12.	The student who just enters Level 3 should be able to: • Apply and extend previous understandings of multiplication and division to divide a mixed number by a fraction and be able to connect to a visual model. • Multiply and divide multi-digit decimal numbers. • Find the greatest common factor of two numbers less than or equal to 100 and the least common multiple of two numbers less than or equal to 12.	The student who just enters Level 4 should be able to: • Use visual models in settings where smaller fractions are divided by larger fractions. • Understand and apply the fact that a fraction multiplied or divided by 1 in the form of a/a is equivalent to the original fraction.
Expressions and Equations				
RANGE ALD **Target E:** Apply and extend previous understandings of arithmetic to algebraic expressions. 6.EE.1-4	Level 1 students should be able to evaluate numerical expressions without exponents; write one- or two-step numerical expressions; and identify parts of an expression, using terms (e.g., coefficient, term, sum, product, difference, quotient, factor).	Level 2 students should be able to evaluate numerical expressions with nonnegative integer exponents that do not need to be distributed across a set of parentheses. They should be able to apply and extend previous understandings of arithmetic to evaluate expressions with variables that do not contain exponents. They should also be able to write one- and two-step algebraic expressions that introduce a variable and identify equivalent expressions.	Level 3 students should be able to write and evaluate numerical expressions with nonnegative integer exponents and expressions from formulas in real-world problems, and they should be able to apply and extend previous understandings of arithmetic to evaluate expressions with variables that include nonnegative integer exponents. They should be able to apply properties of operations to generate equivalent expressions.	Level 4 students should be able to apply the understanding of the properties of operations and use the properties to show why two expressions are equivalent.
RANGE ALD **Target F:** Reason about and solve one-variable equations and inequalities. 6.EE.5-8	Level 1 students should be able to use substitution to determine when a given number makes an equation or inequality true.	Level 2 students should be able to solve one-variable equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are nonnegative rational numbers. They should be able to identify and use variables when writing equations.	Level 3 students should be able to write one-variable equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are nonnegative rational numbers. They should be able to reason about and solve equations and inequalities by writing and graphing their solutions on a number line.	Level 4 students should be able to solve equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are rational numbers. They should be able to write and graph solutions on the number line.

RANGE ALD **Target G:** Represent and analyze quantitative relationships between dependent and independent variables. 6.EE.9	Level 1 students should be able to identify a table that represents a relationship between two variables of the forms $y = kx$ and $y = x \pm c$ with rational numbers and plot points corresponding to equations on coordinate planes.	Level 2 students should be able to use variables to represent and analyze two quantities that change in relationship to each other of the form $y = kx$ or $y = x \pm c$ with rational numbers; identify and create an equation that expresses one quantity in terms of another; and use graphs and tables to represent the relationship.	Level 3 students should be able to use graphs, tables, or context to analyze the relationship between dependent and independent variables and relate them to a linear equation.	Level 4 students should be able to use graphs, tables, or context to analyze nonlinear polynomial relationships between dependent and independent variables and relate them to nonlinear polynomial equations.
THRESHOLD ALD **Expressions and Equations Targets E, F, and G**		The student who just enters Level 2 should be able to: • Evaluate expressions with and without variables and without exponents. • Write one- and two-step algebraic expressions introducing a variable. • Solve one-variable equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are nonnegative rational numbers. • Given a table of values for a linear relationship ($y = kx$ or $y = x \pm c$), create the equation.	The student who just enters Level 3 should be able to: • Write and evaluate numerical expressions without exponents and expressions from formulas in real-world problems. • Identify equivalent expressions. • Write one-variable equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are nonnegative rational numbers. • Graph solutions to equations and inequalities on the number line. • Create the graph, table, and equation for a linear relationship ($y = kx$ or $y = x \pm c$) and make connections between the representations.	The student who just enters Level 4 should be able to: • Using the properties of operations, show why two expressions are equivalent. • Solve equations and inequalities of the form $x + p =/\leq/\geq/</> q$ or $px =/\leq/\geq/</> q$, where p and q are rational numbers. • Create the graph, table, and equation for nonlinear polynomial relationships, making connections between the representations.
Concepts and Procedures: Domain #2				
The Number System				
RANGE ALD **Target D:** Apply and extend previous understandings of numbers to the system of rational numbers. 6.NS.5-8	Level 1 students should be able to place all integers on a number line and integer pairs on a coordinate plane with one-unit increments on both axes.	Level 2 students should be able to apply and extend previous understandings of whole numbers to order rational numbers and interpret statements of their order in the context of a situation. They should be able to place all rational numbers on a number line and integer pairs on a coordinate plane with various axis increments. They should be able to relate changes in sign to placements on opposite sides of the number line and understand the absolute value of a number as its distance from zero on a number line.	Level 3 students should be able to apply and extend previous understandings of numbers to relate statements of inequality to relative positions on a number line, place points with rational coordinates on a coordinate plane, and solve problems involving the distance between points when they share a coordinate. They should be able to understand absolute value and ordering by using number lines and models and relate reflection across axes to changes in sign.	
THRESHOLD ALD **The Number System Target D**		The student who just enters Level 2 should be able to: • Order fractions and integers. • Place integer pairs on a coordinate plane with axis increments of 2, 5, or 10.	The student who just enters Level 3 should be able to: • Place points with rational coordinates on a coordinate plane and combine absolute value and ordering, with or without models ($|-3|<|-5|$).	
Geometry				
RANGE ALD **Target H:** Solve real-world and mathematical problems involving area, surface area, and volume. 6.G.1-4	Level 1 students should be able to find areas of right triangles; draw polygons with positive coordinates on a grid with a scale in one-unit increments, given nonnegative integer-valued coordinates for the vertices; and find the volume of right rectangular prisms with one side expressed as a fraction or a mixed number in halves or fourths.	Level 2 students should be able to find areas of special quadrilaterals and triangles; draw polygons in the four-quadrant coordinate plane with scales in one-unit increments, given integer-valued coordinates for the vertices; and find the volume of right rectangular prisms with one side expressed as a fraction or a mixed number.	Level 3 students should be able to solve problems that involve finding areas of polygons and special quadrilaterals and triangles and find the volume of right rectangular prisms with all sides expressed as a fraction or a mixed number. They should be able to solve problems by drawing polygons in the four-quadrant coordinate plane with scales in various integer increments, given integer-valued coordinates for the vertices or coordinates containing a mix of integers and half, quarter, or tenth units.	Level 4 students should be able to solve problems by finding surface areas of three-dimensional shapes composed of rectangles and triangles. They should be able to find the volume of a compound figure composed of right rectangular prisms to solve problems.

		The student who just enters Level 2 should be able to:	The student who just enters Level 3 should be able to:	The student who just enters Level 4 should be able to:
THRESHOLD ALD Geometry Target H		• Find areas of special quadrilaterals and triangles. • Draw polygons in the four-quadrant plane.	• Find areas of quadrilaterals and other polygons that can be decomposed into three or fewer triangles. • Find the volume of right rectangular prisms with fractional or mixed number side lengths.	• Solve problems by finding surface areas of triangular or rectangular prisms and triangular or rectangular pyramids.
Statistics and Probability				

RANGE ALD Target I: Develop understanding of statistical variability. 6.SP.1-3	Level 1 students should be able to identify questions that lead to variable responses posed in familiar contexts and recognize that such questions are statistical questions.	Level 2 students should be able to recognize that questions that lead to variable responses are statistical questions and vice versa, and they should relate the concept of varying responses to the notion of a range of possible responses. They should develop an understanding that the responses to a statistical question will have a representative center and a given set of numerical data. They should be able to identify a reasonable measure of central tendency with respect to a familiar context.	Level 3 students should be able to pose statistical questions and understand that the responses to a statistical question have a distribution described by its center, spread, and overall shape. They should also understand that a measure of center summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. They should be able to identify a reasonable center and spread with respect to a context.	Level 4 students should be able to justify the reasonableness of their identified center and spread with respect to an unfamiliar context. They should be able to create or complete a data set with given measures (e.g., mean, median, mode, interquartile range).
RANGE ALD Target J: Summarize and describe distributions. 6.SP.4-5	Level 1 students should be able to summarize or display numerical data on a number line, in dot plots, and in histograms; find the median of an odd number of data points; and find the mean when data points are nonnegative integers.	Level 2 students should be able to calculate mean and median, understand that mean and median can be different or the same, and use the measure of center to summarize data with respect to the context.	Level 3 students should be able to summarize or display data in box plots and find the interquartile range. They should be able to use the interquartile range along with the angle and measures of center to describe overall patterns in a data distribution, such as symmetry and clusters, and any striking deviations. They should also be able to examine a data set in context and explain the choice of the mean or median, as it relates to the data.	Level 4 students should be able to relate choice of measures of center and variability to the shape of the data distribution in context of the data; find mean absolute deviation and identify outliers with reference to the context of the situation; and predict effects on the mean and median, given a change in data points.
THRESHOLD ALD Statistics and Probability Targets I and J		• Understand that questions that lead to variable responses are statistical questions and vice versa. • Identify a reasonable measure of central tendency for a given set of numerical data. • Find mean and median.	• Identify a reasonable center and spread for a given context and understand how this relates to the overall shape of the data distribution. • Understand that a measure of center summarizes all of its values with a single number. • Summarize or display data in box plots. • Find the interquartile range. • Use range and measures of center to describe the shape of the data distribution as it relates to a familiar context. • Pose statistical questions.	• Predict effects on mean and median given a change in data points. • Complete a data set with given measures (e.g., mean, median, mode, interquartile range).