OVERALL CLAIM: Students can demonstrate progress toward college and career readiness in mathematics.	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.
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:** Analyze proportional relationships and use them to solve real-world and mathematical problems. 7.RP.1-3	Level 1 students should be able to identify proportional relationships presented in graphical, tabular, or verbal formats in familiar contexts.	Level 2 students should be able to find whole number proportionality constants in relationships presented in graphical, tabular, or verbal formats in familiar contexts. They should also be able to identify proportional relationships presented in equation formats and find unit rates involving whole numbers.	Level 3 students should be able to identify, represent, and analyze proportional relationships in various formats; find unit rates associated with ratios of fractions; and use unit rates to solve one-step problems involving rational numbers. They should be able to analyze a graph of a proportional relationship in order to explain what the points (x, y) and $(1, r)$ represent, where r is the unit rate, and use this information to solve problems.	Level 4 students should be able to solve real-world problems involving proportional relationships and measurement conversions in various formats (e.g., verbally, tabularly, graphically) in a contextual scenario that involves identifying relationships between elements presented in various formats.
THRESHOLD ALD **Ratios and Proportional Relationships Target A**		The student who just enters Level 2 should be able to: • Identify proportional relationships presented in equation formats and find unit rates involving whole numbers.	The student who just enters Level 3 should be able to: • Represent proportional relationships in graphs and tables and solve one-step rate-related problems.	The student who just enters Level 4 should be able to: • Solve real-world problems involving proportional relationships that require one step with measurement conversions.
The Number System				
RANGE ALD **Target B:** Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. 7.NS.1-3	Level 1 students should be able to add, subtract, multiply, and divide nonnegative rational numbers. They should be able to add, subtract, multiply, and divide rational numbers with a number line or other manipulative.	Level 2 students should be able to apply and extend previous understandings and properties of addition and subtraction to add and subtract with rational numbers; identify the absolute value of a rational number and understand when opposites combine to make 0; and convert between familiar fractions and decimals.	Level 3 students should be able to solve mathematical problems using the four operations on rational numbers and convert from a fraction to a decimal. They should be able to extend previous understandings of subtraction to realize it is the same as adding the additive inverse. They should also be able to understand $p + q$ as a number located $|q|$ units from p on a number line in either direction depending on the sign of q. They should also know, understand, and use the rules for multiplying and dividing signed numbers.	Level 4 students should be able to apply previous understandings of operations to solve real-world problems involving rational numbers with addition, multiplication, subtraction, and division.

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		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 **The Number System Target B**		• Convert between familiar fractions and decimals.	• Solve mathematical problems using addition, subtraction, and multiplication on rational numbers. • Understand that $(-1)(-1) = 1$. • Convert common fractions and fractions with denominators that are a factor of a power of 10 to decimals.	• Solve real-world problems with integers and proper fractions, using addition, multiplication, subtraction, and division.

Expressions and Equations				
RANGE ALD **Target C:** Use properties of operations to generate equivalent expressions. 7.EE.1-2	Level 1 students should be able to apply properties of operations as strategies to add and subtract linear expressions with integer coefficients.	Level 2 students should be able to apply properties of operations as strategies to factor and expand linear expressions with integer coefficients. They should also be able to add and subtract linear expressions with rational coefficients.	Level 3 students should be able to apply properties of operations as strategies to factor and expand linear expressions with rational coefficients. They should understand that rewriting an expression can shed light on how quantities are related in a familiar problem-solving context with minimal scaffolding.	Level 4 students should understand that rewriting an expression can shed light on how quantities are related in an unfamiliar problem-solving context with no scaffolding.
RANGE ALD **Target D:** Solve real-life and mathematical problems using numerical and algebraic expressions and equations. 7.EE.3-4	Level 1 students should be able to solve multi-step problems with integers or common fractions with denominators of 2 through 10, 25, 50, or 100 and decimals to the hundredths place; solve equations in the form of $px + q = r$, where p, q, and r are integers; and distinguish between inequalities and equations with integer coefficients with or without real-world context.	Level 2 students should be able to solve multi-step problems with rational numbers and solve equations in the form of $px + q = r$ or $p(x + q) = r$, where p, q, and r are rational numbers. Students should be able to use variables to represent quantities in familiar real-world and mathematical situations. They should also be able to create equations with variables to solve familiar problems with a high degree of scaffolding.	Level 3 students should be able to solve and graph solution sets to inequalities with one variable. They should be able to use variables to represent and reason with quantities in real-world and mathematical situations with minimal scaffolding. They should also be able to construct equations with variables to solve problems.	Level 4 students should be able to use variables to represent and reason with quantities in real-world and mathematical situations with no scaffolding. They should be able to construct inequalities with more than one variable to solve problems.
THRESHOLD ALD **Expressions and Equations** **Targets C and D**		• Apply properties of operations to expand linear expressions with integer coefficients. • Solve multi-step problems with decimal numbers. • Solve equations in the form of $px + q = r$, where p, q, and r are decimal numbers.	• Add, subtract, and factor linear expressions with decimal coefficients. • Graph the solution set to a given inequality in the form of $x > p$ or $x < p$, where p is a rational number. • Understand that rewriting an expression can shed light on how quantities are related in a familiar problem-solving context with a moderate degree of scaffolding. • Use variables to reason with quantities in real-world and mathematical situations with a high degree of scaffolding.	• Construct inequalities with two variables to solve problems.

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Concepts and Procedures: Domain #2			
Geometry			
RANGE ALD **Target E:** Draw, construct, and describe geometrical figures and describe the relationships between them. 7.G.1-3	Level 1 students should be able to draw or construct geometric shapes with given conditions by freehand, with ruler and protractor, and by using technology.	Level 2 students should be able to describe geometric shapes with given conditions and determine whether or not a set of any three given angle or side-length measures can result in a unique triangle, more than one triangle, or no triangle at all. They should be able to describe the relationship between a geometric figure and its scale drawing by finding the scale factor between them.	Level 3 students should be able to compute actual lengths and areas from a scale drawing and reproduce a scale drawing using a different scale. They should be able to describe the two-dimensional figures that result from slicing prisms and pyramids by planes that are parallel to a face.	Level 4 students should be able to describe the two-dimensional figures that result from slicing cones, spheres, cylinders, or other three-dimensional figures with rectangular or triangular faces by planes that are not parallel to a given face.
RANGE ALD **Target F:** Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. 7.G.4-6	Level 1 students should be able to identify appropriate formulas for the area and circumference of a circle; calculate the area of triangles and rectangles and the volume of cubes; classify pairs of angles as supplementary, complementary, vertical, or adjacent; and measure angles with appropriate tools.	Level 2 students should be able to use supplementary, complementary, vertical, or adjacent angles to solve problems with angles expressed as numerical measurements in degrees; calculate the circumference of a circle; and calculate the area of circles, quadrilaterals, and polygons and the volume of right rectangular prisms.	Level 3 students should be able to use supplementary, complementary, vertical, and adjacent angles to solve one- or two-step problems with angle measures expressed as variables in degrees; use formulas for the area and circumference of a circle to solve problems; and solve problems involving the area of polygons, the surface area of three-dimensional objects composed of triangles and/or quadrilaterals, and the volume of right prisms.	Level 4 students should be able to solve problems involving surface area and volume of three-dimensional figures with polygonal faces. They should be able to use supplementary, complementary, vertical, and adjacent angles to solve multi-step problems with angle measures expressed as variables in degrees.
THRESHOLD ALD **Geometry Targets E and F**		The student who just enters Level 2 should be able to: • Describe geometric shapes with given conditions. • Use vertical angles expressed as numerical measurements to solve problems. • Calculate the area of a circle when the formula is provided and the area of quadrilaterals.	The student who just enters Level 3 should be able to: • Create a scale drawing of a given figure when a scale factor is given. • Determine the surface area of a right prism. • Use vertical angles expressed as variables to solve two-step problems.	The student who just enters Level 4 should be able to: • Describe the two-dimensional figures that result from slicing spheres and cones.
Statistics and Probability			
RANGE ALD **Target G:** Use random sampling to draw inferences about a population. 7.SP.1-2	Level 1 students should be able to describe what a representative sample entails and identify biased and unbiased samples of a population.	Level 2 students should be able to determine whether or not a sample is random and understand that random samples of an appropriate population are representative samples that support valid results. They should be able to use data from a random sample to draw obvious inferences about a population presented in a familiar context.	Level 3 students should be able to use data from a random sample to draw inferences about a population with an unknown characteristic of interest presented in an unfamiliar context.	Level 4 students should be able to generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.
RANGE ALD **Target H:** Draw informal comparative inferences about two populations. 7.SP.3-4	Level 1 students should be able to use the mean to compare and draw inferences about two different populations.	Level 2 students should be able to use range to draw comparisons about two different populations. They should be able to informally compare the visual overlap of two numerical data distributions with similar variability in familiar contexts.	Level 3 students should be able to informally assess the degree of visual overlap of two numerical data distributions with similar variability, measuring the difference between the centers in any context.	Level 4 students should be able to use measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.
RANGE ALD **Target I:** Investigate chance processes and develop, use, and evaluate probability models. 7.SP.5-8	Level 1 students should be able to determine the theoretical probability of a simple event; understand that probabilities are numbers between 0 (impossible) and 1 (always) and that a probability around 1/2 indicates an event that is neither unlikely nor likely.	Level 2 students should be able to approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency. They should be able to predict the approximate relative frequency given the probability.	Level 3 students should be able to find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. They should be able to compare theoretical and experimental results from a probability experiment.	Level 4 students should be able to design, describe, and construct a simulation experiment to generate frequencies for compound events. They should be able to explain what might account for differences between theoretical and experimental results and evaluate the associated probability model.

THRESHOLD ALD **Statistics and Probability** **Targets G, H, and I**		The student who just enters Level 2 should be able to: • Determine whether or not a sample is random. • Find the range of a set of data about a given population. • Approximate the probability of a chance event by collecting data.	The student who just enters Level 3 should be able to: • Use random sampling to draw inferences about a population in familiar contexts. • Informally assess the degree of visual overlap of two numerical data distributions. • Calculate the theoretical probability of a compound event.	The student who just enters Level 4 should be able to: • Generate multiple samples (or simulated samples) of the same size. • Determine which measures of variability should be used to draw informal comparative inferences about two populations. • Construct a simulation experiment and generate frequencies for compound events.

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