Advanced – Performance Level 4 (Score range: 628 to 890)
Students estimate with rational numbers; use fractions, decimals, percents, rations; represent fractions graphically, communicate problem-solving reasoning; analyze patterns, sentences, functions, relations using tables, graphs, algebraic notations; solve linear equations, make multiple applications of data; interpret line graph, use measures of central tendency, determine probability of event; use permutations, combinations; find area, surface area, perimeter, volume of figures; transform figures, estimate measurement using scale drawing; find missing dimensions of rectangular prisms, work computations backwards.

Proficient – Performance Level 3 (Score range: 577 to 627)
Students analyze, use patter, function rules, evaluate equations using substitutions; use proportions, integers, decimals, translate from algebraic notation; interpret circle graphs; find mean, median, mode, range; find probability of independent events; translate set of coordinates; identify similar, congruent figures; find area, volume, of figures; estimate map distances with ruler, scale.

Partially Proficient – Performance Level 2 (Score range: 521 to 576)
Students divide figures into equal parts; apply problem-solving skills, strategies, find one measure of central tendency; determine probability of simple events; interpret double-bar graph; extend lines to intersection.

Unsatisfactory – Performance Level 1 (Score range: 310 to 520)
Students plot data on graph, construct circle graph, visualize transformations of figures.

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 1 Students demonstrate exceptional use of number sense and use of numbers by • Estimating with rational numbers • Using the relationships of fractions, decimals, and percents in problem-solving situations • Using the relationship of the ratio of a part to a whole and applying it to problem-solving situations • Communicating the reasoning used in problem-solving situations Students may also demonstrate exceptional use of number sense and use of numbers by • Demonstrating the meaning of commonly used fractions using graphical representations and then applying the meaning in real-world situations	**Standard 1** No evidence of this standard at this performance level.	**Standard 1** Students demonstrate limited use of number sense and use of numbers by • Dividing a pictorial representation into the appropriate number of equal parts	**Standard 1** No evidence of this standard at this performance level.

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 2 Students demonstrate exceptional use of algebraic methods to explore, model, and describe patterns and functions by • Recognizing, representing, and analyzing patterns and functions in problem-solving situations • Representing, describing, and analyzing patterns and relationships in real-world situations • Using tables, graphs, and algebraic notations to describe and analyze patterns and relations in real-world situations • Evaluating a linear formula Students may also demonstrate exceptional use of algebraic methods to explore, model, and describe patterns and functions by • Analyzing functional relationships • Making multiple applications of the same data • Recognizing, representing, and analyzing patterns and functions in problem-solving situations • Analyzing functional relationships to explain how a change in one quantity results in a change in another • Translating written sentences into algebraic notation • Modeling real-world situations using functions and equations	**Standard 2** Students demonstrate use of algebraic methods to explore, model, and describe patterns and functions by • Recognizing, representing, and analyzing patterns and functions in problem-solving situations • Analyzing functional relationships to explain how a change in one quantity results in a change in another • Evaluating formulas • Applying proportional reasoning in problem-solving situations • Translating algebraic notation to real-world situations	**Standard 2** Students demonstrate limited use of algebraic methods to explore, model, and describe patterns and functions by • Applying problem-solving skills such as guess and check and working backwards	**Standard 2** Students demonstrate minimal use of algebraic methods to explore, model, and describe patterns and functions by • Plotting data from tables onto graphs

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 3 Students demonstrate exceptional use of data collection and analysis, statistics, and probability by • Interpreting line graphs to estimate the mean of real-world data • Communicating the reasoning when using measures of central tendency in problem-solving situations • Determining the probability of an event when changing a sample size without replacement • Determining the probability of compound events in real-world situations and justifying the reasoning • Solving real-world problems using permutations and combinations	**Standard 3** Students demonstrate use of data collection and analysis, statistics, and probability by • Making predictions using theoretical probability drawn from real-world situations • Interpreting circle graphs and using percents in problem-solving situations • Calculating mean, median, mode, and range in problem-solving situations • Calculating the probability of event A or B occurring in a union of independent events	**Standard 3** Students demonstrate limited use of data collection and analysis, statistics, and probability by • Finding one measure of central tendency • Applying problem-solving processes to determine simple probability • Reading and interpreting double-bar graphs	**Standard 3** Students demonstrate minimal use of data collection and analysis, statistics, and probability by • Reading bar graphs and using that information to construct circle graphs

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 4 Students demonstrate exceptional use of geometric concepts, properties, and relationships by • Finding the area of a 2-dimensional figure and applying in problem-solving situations • Transforming a geometric figure in the coordinate plane using reflections, translations, and rotations • Writing a ratio of "part-to-whole" using manipulatives • Analyzing how a change in shape affects the perimeter of geometric figures • Finding the volume of a cube Students may also demonstrate exceptional use of geometric concepts, properties, and relationships by • Relating area of a square to its perimeter • Communicating reasoning used in comparing areas in problem-solving situations	**Standard 4** Students demonstrate use of geometric concepts, properties, and relationships by • Renaming coordinates of a given point on a grid after a translation • Identifying similar and congruent shapes using manipulatives • Comparing areas of geometric figures using manipulatives • Finding the volume of rectangular prisms in problem-solving situations	**Standard 4** No evidence of this standard at this performance level.	**Standard 4** Students demonstrate minimal use of geometric concepts, properties, and relationships by • Visualizing transformations of 2-dimensional and 3-dimensional figures

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 5 Students demonstrate exceptional use of a variety of tools and techniques to measure by • Calculating the perimeter of all possible rectangles of a given area on a coordinate grid using whole numbers • Estimating measurements of an object in a scale drawing • Comparing volumes of rectangular prisms to find missing dimensions in problem-solving situations Students may also demonstrate exceptional use of a variety of tools and techniques to measure by • Finding and applying perimeter in problem-solving situations • Finding the surface area of rectangular prisms	**Standard 5** Students demonstrate use of a variety of tools and techniques to measure by • Constructing multiple rectangles of a given area with whole number side lengths on a coordinate grid • Estimating distances on maps using a ruler, whole numbers, and a fractional scale	**Standard 5** Students demonstrate limited use of a variety of tools and techniques to measure by • Extending two lines using a ruler to find the point of intersection	**Standard 5** No evidence of this standard at this performance level.

Advanced	Proficient	Partially Proficient	Unsatisfactory
Standard 6 Students demonstrate exceptional use of computational techniques in problem-solving situations by • Computing accurately using whole numbers, fractions, decimals, and percents • Computing accurately with the order of operations • Applying appropriate computational techniques in multistep, problem-solving situations Students may also demonstrate exceptional use of computational techniques in problem-solving situations by • Applying appropriate inverse operations in problem-solving situations	**Standard 6** Students demonstrate use of computational techniques in problem-solving situations by • Performing operations with integers • Performing operations with decimals • Applying appropriate computational methods involving ratio and proportion in basic problem-solving situations	**Standard 6** Students demonstrate limited use of computational techniques in problem-solving situations by • Applying order of operations using basic facts and whole numbers	**Standard 6** No evidence of this standard at this performance level.