interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left.[4.2A]

represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.[4.2B]

compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =.[4.2C]

round whole numbers to a given place value through the hundred thousands place. [4.2D]

represent decimals, including tenths and hundredths, using concrete and visual models and money.[4.2E]

compare and order decimals using concrete and visual models to the hundredths. [4.2F]

relate decimals to fractions that name tenths and hundredths.[4.2G]

determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line.[4.2H]

represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$. [4.3A]

decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations.[4.3B]

determine if two given fractions are equivalent using a variety of methods.[4.3C]

compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or <. [4.3D]

represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations.[4.3E]

evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole. [4.3F]

represent fractions and decimals to the tenths or hundredths as distances from zero on a number line.[4.3G]

add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.[4.4A]

determine products of a number and 10 or 100 using properties of operations and place value understandings. [4.4B]

represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15. [4.4C]

use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.[4.4D]

represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations.[4.4E]

use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor.[4.4F]

round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers.[4.4G]

solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.[4.4H]

represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.[4.5A]

represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.[4.5B]

use models to determine the formulas for the perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special form for perimeter of a square ($4s$) and the area of a rectangle ($l \times w$).[4.5C]

solve problems related to perimeter and area of rectangles where dimensions are whole numbers.[4.5D]

identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.[4.6A]

identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure.[4.6B]

apply knowledge of right angles to identify acute, right, and obtuse triangles.[4.6C]

classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.[4.6D]

illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers.[4.7A]

illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that "cuts" *n* /360 out of any circle whose center is at the angle's vertex has a measure of n degrees. Angle measures are limited to whole numbers.[4.7B]

determine the approximate measures of angles in degrees to the nearest whole number using a protractor.[4.7C]

raw an angle with a given measure.[4.7D]

determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.[4.7E]

identify relative sizes of measurement units within the customary and metric systems.[4.8A]

convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table.[4.8B]

solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.[4.8C]

represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions.[4.9A]

solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot. [4.9B]

distinguish between fixed and variable expenses.[4.10A]

calculate profit in a given situation.[4.10B]

compare the advantages and disadvantages of various savings options.[4.10C]

describe how to allocate a weekly allowance among spending; saving, including for college, and sharing.[4.10D]

describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending.[4.10E]

solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers.[5.3E]

represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations.[5.3H]

add and subtract positive rational numbers fluently. [5.3K]

describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point (0, 0); the x-coordinate, the first number in an ordered pair, indicates movement parallel to the x-axis starting at the origin; and the y-coordinate, the second number, indicates movement parallel to the y-axis starting at the origin.[5.8A]

describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane.[5.8B]

graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table. [5.8C]

represent discrete paired data on a scatterplot.[5.9B]

solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot.[5.9C]