

South Carolina Alternate Assessments Performance Level Descriptors

Mathematics

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Standards Reference Number Abbreviations

Number Sense and Base Ten (NSBT)

Number Sense – Fractions (NSF)

Algebraic Thinking and Operations (ATO)

Geometry (G)

Measurement and Data Analysis (MDA)

The Number System (NS)

Ratios and Proportional Relationships (RP)

Expressions, Equations, and Inequalities (EE)

Geometry and Measurement (GM)

Data Analysis and Statistics (DS)

Fractions (F)

Arithmetic with Polynomials and Rational Expressions (AAPR)

Creating Equations (ACE)

Reasoning with Equations and Inequalities (AREI)

Structure and Expressions (ASE)

Interpreting Functions (FIF)

Quantities (NQ)

Real Number System (NRNS)

Interpreting Data (SPID)

Grade 3

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
3.NSBT.1 Round whole numbers up to 100 to the nearest 10.	Recognize a unit in the place value system (limited to ones and tens place values).	Understand the point when a number should be rounded up (limited to numbers from 1–10).	Round whole numbers from 0–30 to the nearest 10.	Round whole numbers from 0–100 to the nearest 10.
3.NSBT.2 Add and subtract single-digit numbers.	Recognize the addition, subtraction, and equal signs.	Identify the functions of addition, subtraction, and equal signs (limited to numbers 1–5).	Demonstrate the concept of addition and subtraction (limited to single digit numbers from 1–10).	Determine the unknown in an addition/subtraction equation.
3.NSBT.3 Multiply one-digit whole numbers by 10.	Recognize the numbers 1–10 as a set for the tens place.	Identify sets of numbers in tens using numbers 1–30.	Demonstrate the concept of counting by 10 by counting the sets of 10 and adding a zero to the end of number of sets (limited to the numbers 1–50).	Count by tens starting at a multiple of 10 (using a set of 10 objects, numbers, etc., e.g., count with dimes).
NSBT 3.4 Read numbers up to 999.	Identify numbers in word form (limit to numbers 1–50)	Identify numbers in word form (numbers ranging from 1–50)	Identify numbers in word form (numbers ranging from 1–100)	Read numbers up to 999.
3.NSBT.5 Compare and order numbers up to 999 using the symbols $>$, $=$, or $<$.	Recognize the $<$, $>$, and $=$ signs.	Arrange a set of numbers from least to greatest.	Compare 2 numbers up to 50 using symbols ($=$, $<$, $>$).	Compare 2 numbers up to 100 using symbols ($=$, $<$, $>$).
3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers.	Identify a fraction from a list of numbers (i.e., 3 choices, 2 whole numbers, and 1 fraction)	Identify parts of a fraction (denominator/numerator).	Identify a part of a whole using fraction models.	Match fractions to their models (i.e. denominators limited to 2, 3, 4, 6, 8, 10).

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
3.NSF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line.	Identify shapes divided into equal parts.	Identify fraction models that are divided into the same number of parts.	Recognize that two fractions are equal if they are the same using different numbers in the denominators (using pictures limiting the denominators to 2, 3, and 4).	Identify equal fractions that are the same size but have different fraction sizes using models and numbers to show fractions using the denominators 2, 3, 4, 6, 8, 10.
3.ATO.1 Use concrete objects, drawings and symbols to represent multiplication facts of two single-digit whole numbers (i.e., 0–5).	Identify the multiplication symbol.	Demonstrate the concept of multiplication by using the repeated addition strategy (limiting the numbers to 0–2).	Demonstrate the concept of multiplication using the multiplication sign using numbers (limiting numbers 0–3).	Multiply two single digit whole numbers using 0–5.
3.ATO.3 Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication (i.e., 0–5).	Recognize a group, an array, and a number line using models or pictures.	Match a basic multiplication expression with its model.	Apply the concept of multiplying using equal groups by solving a simple word problem limiting the numbers from 0–5.	Solve a real-world problem using basic multiplication with equal groups, arrays, and/or the number line.
3.ATO.4 Determine the unknown whole number in a multiplication equation relating three whole numbers when the unknown is a missing factor or product.	Identify the key terms, factor/product, in a multiplication equation.	Determine the unknown whole number in a multiplication equation by selecting the missing product from a set of whole numbers (limiting the numbers 0–5).	Determine the unknown whole number in a multiplication equation by selecting the missing factor from a set of whole numbers (one missing factor between the numbers 0–5).	Determine the unknown whole number in a multiplication equation by selecting the missing factor and product from a set of whole numbers (limiting the numbers 0–5).

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
3.ATO.5 Apply the Commutative Property of Multiplication.	Identify multiplication problems.	Match a basic multiplication expression with its model.	Match equivalent multiplication expressions using models.	Demonstrate the understanding of the concept by filling in the missing factors in a commutative property equation (filling in one missing factor from both sides).
3.ATO.7 Demonstrate basic multiplication facts of products through 25.	Recognize basic multiplication sets (limited to the multiples of 0, 1 and 2).	Demonstrate the concept of multiplication by using pictures of group members being distributed a set number of items.	Demonstrate the concept of multiplication by matching pictures of multiplication to the correct multiplication equation (limit the factors to between 0 and 5).	Demonstrate basic multiplication facts of products through 25.
3.ATO.8 Solve one-step, real-world problems using addition and subtraction of whole numbers and having whole number answers.	Recognize one-step equations.	Demonstrate addition/subtraction problems using manipulatives.	Determine the unknown in an addition/subtraction equation.	Solve addition/subtraction word problems (limit the products to up to 10).
3.ATO.9 Identify a rule for an arithmetic pattern limited to multiples of 1, 2, 5, 10, and 25, up to a 100.	Count by 1, 2, and 5.	Count by 10s.	Identify a rule for an arithmetic pattern limited to multiples of 1, 2, 5, and 10.	Identify a rule for an arithmetic pattern limited to multiples of 1, 2, 5, 10, and 25, up to a 100.
3.G.1 Recognize rhombuses, rectangles, and squares as quadrilaterals.	Identify sides or angles of a quadrilateral.	Identify quadrilaterals.	Recognize rhombuses, rectangles, and squares as quadrilaterals.	Identify all attributes of quadrilaterals (i.e. 4 sides, 4 angles).
3.G.2 Partition two-dimensional shapes into two parts with equal areas.	Identify two-dimensional shapes	Recognize the equal parts of a two-dimensional shape.	Recognize one half on an area model.	Recognize when a shape is not equal to one half.
3.MDA.1 Use analog and digital clocks to record time to the nearest hour and a half using <i>a.m.</i> and <i>p.m.</i>	Identify a clock as a tool to measure time.	Match the time to an activity from a list.	Use analog and digital clocks to record time to the nearest hour and half hour using <i>a.m.</i> and <i>p.m.</i>	Demonstrate the concept of telling time to the half hour on both types of clocks.

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3.MDA.2 Measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (i.e., mL, L) to the nearest whole unit.	Identify three-dimensional shapes.	Identify shapes that can have volume.	Demonstrate the concept by choosing the appropriate volume unit for given substance to be measured (i.e. what is the best unit to measure for a box of cereal?)	Demonstrate the concept by choosing the appropriate volume unit for various given substance to be measured.
3.MDA.3 Interpret data from a picture graph and a bar graph.	Identify a bar graph.	Identify information from a bar graph.	Identify information from a picture graph.	Interpret data from a picture graph and a bar graph.
3.MDA.4 Measuring length to the nearest inch.	Identify a ruler.	Identify an inch on a ruler.	Recognize inches as a measure of length.	Measuring length to the nearest inch.

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Grade 4

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
4.NSBT.2 Recognize mathematical periods through 999,999.	Recognize the word form for numbers through 9.	Recognize word form for numbers through 99.	Recognize word form for numbers through 999.	Recognize word form for numbers through 999,999.
4.NSBT.3 Round whole numbers up to 1000 to the nearest 10 or 100.	Recognize a place value unit.	Identify when a number can be rounded up to the nearest unit.	Round whole numbers from 0–30 to the nearest 10.	Round whole numbers 0–100 to the nearest 10 or nearest 100.
4.NSBT.4 Add and subtract two-digit whole numbers.	Recognize the addition or subtraction symbols.	Add/subtract two-digit whole numbers within 20.	Add/subtract within 100 with a two-digit number and a multiple of 10.	Solve addition/subtraction word problems within 100.
4.NSBT.5 Demonstrate basic multiplication facts of products through 100.	Recognize multiplication factors and products.	Demonstrate the concept of multiplication.	Multiply two single-digit whole numbers using 0–5.	Multiply two whole numbers using 0–10.
4.NSBT.6 Divide up to a two-digit dividend by a one-digit divisor without remainders using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division (excluding long division).	Recognize the division sign.	Identify the components of a division problem (i.e. What is the dividend? What is the divisor? What is the quotient?).	Demonstrate the concept of division using manipulatives to divide into equal groups.	Solve a division word problem using a two-digit dividend by a one-digit divisor.
4.NSF.1 Using visual fraction models, recognize equivalent fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100).	Identify a fraction from a whole number.	Identify models that have been divided in half or equal parts (i.e. denominators limited to 2–10)	Using same-size models that have been divided differently to solve equivalent fraction problems (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, and 25).	Using same-size models that have been divided differently to solve equivalent fraction problems. (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100).

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
4.NSF.2 Compare two given fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) with common denominators using the symbols $>$, $=$, or $<$.	Recognize greater than and less than signs.	Demonstrate the concept of greater than and less than using models/groups of manipulatives to choose which ones has more, less or equal ($<$, $>$, $=$).	Compare two fractions with like denominators using a pictorial model ($=$, $<$, $>$).	Compare two fractions with like denominators ($=$, $<$, $>$).
4.NSF.3 Develop an understanding of addition and subtraction of fractions with a common denominator (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) based on unit fractions. a. Develop an understanding of mixed numbers.	Identify common denominators in fractions.	Identify numerators and denominators in fractions.	Using simple fractions with common denominators (limited between the numbers 2–9); add or subtract the numerators in the fraction.	Add/subtract fractions with common denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, 25, 100). Develop an understanding of mixed numbers.
4.NSF.5 Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 and use this technique to add two fractions with respective denominators of 10 and 100.	Recognize part of a whole using models.	Given a model, recognize tenths/hundredths using a model.	Identify when two fractions are equivalent with the denominators of 10 and 100.	Identify fractions with the denominators of 10 and 100 when comparing two fractions.
4.NSF.6 Write a fraction with a denominator of 10 or 100 using decimal notation.	Identify where a decimal point is on the place value chart. Identify the tenths and hundredths place on the value chart.	Demonstrate the function of a decimal point as it represents a fraction using a place value chart.	Write a fraction from a decimal notation with the denominator of 10.	Write a fraction with denominator of 10 or 100 as a decimal.
4.NSF.7 Compare decimal numbers to hundredths using visual models.	Recognize greater than, less than, and equal signs.	Demonstrate the function of a decimal point as it represents a fraction using a place value chart.	Using visual models, compare decimals to hundredths place.	Compare decimal numbers to hundredths place.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
4.ATO.2 Solve one-step, real-world problems using basic multiplication (0–10) or division (with no remainders).	Identify the components of a multiplication problem.	Demonstrate the concept of multiplication/division.	Determine the unknown in multiplication/division equation.	Solve one-step multiplication or division word problems.
4.ATO.4 Find all factor pairs for whole numbers 1–24.	Recognize what a factor pair is for a whole number.	Identify factors for whole numbers 1–5.	Identify factors for whole numbers 1–10.	Identify factors for whole numbers 1–24.
4.ATO.5 Given the rule for a pattern, determine the next term in the sequence/pattern.	Recognize patterns.	Identify symbolic, repeating, and pictorial patterns.	Given the rule, determine the next term in a picture pattern/sequence.	Given the rule, determine the next term in a number pattern/sequence.
4.G.1 Identify points, line segments, and angles in two-dimensional figures.	Recognize a point.	Identify a line or line segment.	Recognize different types of angles (acute, right, obtuse and straight).	Recognize angle, point, or line segment in a two-dimensional figure.
4.G.2 Identify parallel and perpendicular lines.	Identify lines.	Identify shapes with parallel lines.	Identify parallel and perpendicular lines.	Identify parallel and perpendicular lines in shapes.
4.MDA.1 Distinguish measurements within a single system of measurement—customary (i.e., in., ft., yd., min., hr.) or metric (i.e., cm, m, km, g, kg, mL, L) — as larger or smaller.	Compare two pieces of data with the same unit of measurement.	Distinguish between systems of measurement.	Determine if measurements within one system are larger or smaller (i.e. in., ft., min., hr., mL, L).	Compare the size of measurements within one system measure (i.e., in., ft., yd., min., hr.) or metric (i.e., cm, m, km, g, kg, mL, L).
4.MDA.3 Find the area and perimeter for rectangles when given the side lengths.	Recognize side lengths.	Recognize a rectangle.	Find area and perimeter by counting squares.	Find area and perimeter for rectangles when given the side lengths.
4.MDA.8 Determine the value of a collection of coins and bills greater than \$1.	Recognize money.	Identify a penny, a nickel, a dime, and a quarter.	Identify the value of a penny, a nickel, a dime, and a quarter.	Determine the value of a collection of coins and bills greater than \$1.

Grade 5

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
5.NSBT.2 Use whole number exponents to explain patterns in the number of zeroes of the product when multiplying a number by powers of 10.	Identify or continue a pattern.	Multiply a product of 10 by 10.	Identify the product, given the number 10, with an exponent.	Identify the power of 10, given the product.
5.NSBT.3 Read and write decimals in standard form. Compare two decimal numbers to the hundredths using the symbols $>$, $=$, or $<$.	Recognize larger, smaller, and equal.	Identify and define a decimal.	Compare two decimals to the hundredths ($=$, $<$, $>$).	Compare two decimals to the hundredths ($=$, $<$, $>$). Read and write monetary values.
5.NSBT.4 Round decimals to the nearest whole number.	Identify a unit.	Identify a decimal	Round a decimal to the nearest whole number (limit to decimals over 0.50).	Round a decimal to the nearest whole number.
5.NSBT.5 Multiply a multi-digit whole number by a one-digit whole number using strategies to include a standard algorithm.	Identify and represent repeated addition with an equation.	Solve repeated addition problems.	Demonstrate the concept of multiplication related to repeated addition.	Multiply by 1, 2, 3, 4, and/or 5.
5.NSBT.6 Divide up to a four-digit dividend by a one-digit divisor, using strategies based on place value, the properties of operations, and the relationship between multiplication and division.	Identify equal groups.	Understand that equal group can be represented by division.	Apply the relationship between multiplication and division.	Divide by 1, 2, 3, 4, and/or 5.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
5.NSBT.7 Add and subtract decimal numbers to hundredths using concrete area models and drawings.	Identifies whole and part.	Identify a whole number when presented in monetary form. Identify a decimal when presented in monetary form.	Add and subtract monetary amounts, including in whole numbers (with the \$.00 included). Student may use a model or drawing.	Add and subtract multi-digit decimal numbers without regrouping. Add and subtract monetary amounts including dollars and cents. Student may use a model or drawing.
5.NSF.1 Add and subtract fractions with unlike denominators using a variety of models, including an area model and number line.	Partition any shape into equal parts.	Create a model of a fraction (partition and shade).	Add or subtract fractions with like denominators using models (limit to halves, thirds, fourths, sixths, and eighths).	Add or subtract fractions with unlike denominators (limit to halves, thirds, fourths, sixths, and use visual models).
5.NSF.4 Multiply a whole number by a fraction.	Add two of the same fraction (limit to halves, thirds, fourths).	Understand the relationship between adding and multiplying the fraction.	Multiply a whole number by a fraction (limit to compatible numbers that result in a whole number product).	Multiply a whole number by a fraction.
5.ATO.1 Evaluate two-step numerical expressions involving grouping symbols (i.e., parentheses, brackets, braces).	Identify grouping symbols in an expression (parentheses, brackets, braces).	Evaluate a one-step expression that contains grouping symbols.	Evaluate a two-step numerical expression involving grouping symbols (limit to addition and subtraction)	Evaluate two-step numerical expressions involving grouping symbols (i.e., parentheses, brackets, braces; limit to addition and subtraction).
5.ATO.2 Translate verbal phrases into simple numerical expressions.	Identify the symbol that correlates with sum, product, take away, divide.	Given a verbal phrase, identify the operation.	Translate verbal phrases into simple numerical expressions (limit one-step addition or subtraction)	Translate verbal phrases into simple numerical expressions.
5.G.1 Define a coordinate system.	Recognize point on a number line (limit to numbers greater than 0).	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
5.G.1 a. The x- and y-axes are perpendicular number lines that intersect at 0 (the origin)	Recognize point on a number line (limit to numbers greater than 0).	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.
5.G.1 b. Any point on the coordinate plane can be represented by its coordinates.	Recognize a point on a number line (limit to numbers greater than 0).	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.
5.G.1 c. The first number in an ordered pair is the x-coordinate and represents the horizontal distance from the origin.	Recognize a point on a number line (limit to numbers greater than 0).	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.
5.G.1 d. The second number in an ordered pair is the y-coordinate and represents the vertical distance from the origin.	Recognize a point on a number line (limit to numbers greater than 0).	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.
5.G.2 Plot points in the first quadrant.	Recognize a point.	Recognize intersecting lines/line segments.	Recognize perpendicular lines/line segments.	Plot a point on a map given the x and y variables.
5.MDA.1 Convert measurements within a single system of measurement—customary (i.e., in., ft., yd., min., hr.) or metric (i.e., cm, m, km, mL, L)—from a larger to a smaller unit.	Recognize measurable attributes.	Make direct comparison of two lengths. Make direct comparison of two masses.	Use an appropriate tool for measuring length using inches; use an appropriate tool for measuring length using feet; use an appropriate tool for measuring mass in pounds; use an appropriate tool for measuring mass in ounces.	Convert measurements within a single system of measurement.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
5.MDA.4 Differentiate among perimeter, area, and volume, and identify which application is appropriate for a given situation.	Recognize measurable attributes.	Calculate perimeter by adding all the side lengths. Calculate the area by counting the square units.	Solve word problems involving perimeter of polygons.	Solve word problems by using perimeter, area, or volume.

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Grade 6

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
6.NS.2 Fluently divide multi-digit whole numbers limited to four-digit dividends and two-digit divisors using a standard algorithmic approach.	Demonstrate the concept of division.	Apply the relationship between multiplication and division.	Divide by 1, 2, 3, 4, and/or 5.	Divide by numbers up to and including 10.
6.NS.3 Fluently add and subtract multi-digit decimal numbers to the hundredths place using a standard algorithmic approach.	Identifies whole and part.	Identify a whole number when presented in monetary form. Identify a decimal when presented in monetary form.	Add and subtract monetary amounts including in whole numbers (with the \$.00 included); student may use a model or drawing.	Add and subtract multi-digit decimal numbers without regrouping. Add and subtract monetary amounts including the dollar and cents; student may use a model or drawing.
6.NS.4 Find common factors and multiples using two whole numbers up to 50 for factors, and less than or equal to 10 for multiples.	Identify fact families of a number using multiplication.	Find the factors of a number (limit to fact families under 50).	Given the factors of two numbers, identify the common factors (for two whole numbers up to 50 and multiples of 5 or 10).	Find common factors for whole numbers up to 50 and less than or equal to 10 for multiples.
6.NS.5 Understand that the positive and negative representations of a number are opposites in direction and value. Use integers to represent quantities in real-world situations.	Given a real-world context, identify the value of the situation (limit to positive numbers under 15).	Given a real-world context, identify the value of the situation (limit to positive numbers under 100).	Given a real-world context, identify whether the value in the situation is positive, negative, or zero.	Given a real-world context, identify the value of the situation which may include negative numbers.
6.NS.6 Plot integers on number lines and ordered pairs on the coordinate plane.	Identify a number on a vertical or horizontal number line.	Plot a number on a vertical or horizontal number line.	Identify an ordered pair on a coordinate plane.	Plot an ordered pair on a coordinate plane.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
6.NS.7 a. Interpret statements using equal to (=) and not equal to (\neq).	Identify if two statements are equal (=) and not equal (\neq).	Given two points on a number line, identify a statement using less than (<), greater than (>), and equal to (=), to describe their locations on the number line.	Given a real-world or mathematical situation, identify a statement of equality or inequality that describes it.	Identify the absolute value of a number as the distance from zero on a number line.
6.NS.7 b. Interpret statements using less than (<), greater than (>), and equal to (=) as relative locations on the number line.	Identify if two statements are equal (=) and not equal (\neq).	Given two points on a number line, identify a statement using less than (<), greater than (>), and equal to (=) to describe their locations on the number line.	Given a real-world or mathematical situation, identify a statement of equality or inequality that describes it.	Identify the absolute value of a number as the distance from zero on a number line.
6.NS.7 c. Use concepts of equality and inequality to write and explain real-world and mathematical situations.	Identify if two statements are equal (=) and not equal (\neq).	Given two points on a number line, identify a statement using less than (<), greater than (>), and equal to (=) to describe their locations on the number line.	Given a real world or mathematical situation, identify a statement of equality or inequality that describes it.	Identify the absolute value of a number as the distance from zero on a number line.
6.NS.7 d. Understand that absolute value represents a number's distance from zero on the number line and use the absolute value of an integer number to represent real-world situations.	Identify if two statements are equal (=) and not equal (\neq).	Given two points on a number line, identify a statement using less than (<), greater than (>), and equal to (=) to describe their locations on the number line.	Given a real world or mathematical situation, identify a statement of equality or inequality that describes it.	Identify the absolute value of a number as the distance from zero on a number line.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
6.NS.9 Explore and translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Fractions should be limited to those with denominators of 2, 3, 4, 5, 8, 10, and 100.	Identify a whole number.	Identify the definition of a rational number.	Identify multiple representations of a rational number.	Translate multiple representations of rational numbers (fractions, decimal numbers, and percentages). Fractions should be limited to those with denominators of 2, 3, 4, 5, 8, 10, and 100.
6.RP.1 Understand the concept of a ratio as the relationship between two quantities, including part to part and part to whole.	Identify a ratio.	Identify a ratio that matches a context.	Understand the concept of a ratio as the relationship between two quantities (limit to part to whole).	Understand the concept of a ratio as the relationship between two quantities, including part to part and part to whole.
6.EE.1 Write numerical expressions involving whole numbers using the Order of Operations.	Given an equation, identify the symbols for the four functions (+, -, x, divide).	Given an equation, identify the first step for order of operations.	Given an equation, identify the order of operations.	Write numerical expressions involving whole numbers using the Order of Operations.
6.EE.2 Identify parts of algebraic expressions using mathematical terminology, including term, coefficient, constant, and variable.	Distinguish between a number and a letter.	Identify an algebraic expression.	Identify the parts of an expression using mathematical terminology (limit to term and variable).	Identify parts of algebraic expressions using mathematical terminology, including term, coefficient, constant, and variable.
6.EE.7 Identify linear equations for real-world situations.	Recognize that an unknown value can be represented by a variable.	Identify the relationship between two variables.	Identify a situation where the variables create an increasing linear equation (e.g. The more hours you work, the higher your paycheck; the further away your destination, the longer the bus ride).	Identify linear equations related to wages, finances, time, and distance.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
6.GM.1 Find the area of right triangles and rectangles.	Identify a triangle.	Identify a triangle that has a right angle.	Find the area of a rectangle given the side lengths and tiles.	Find the area of right triangles and rectangles when given side lengths.
6.DS.1 Find the mean, median, mode, and range.	Find the largest/smallest number in a data set.	Put a data set in order from least to greatest.	Determine the middle point of a collection of objects.	Identify the median and/or range of a data set.

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Grade 7

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
7.NS.1 Extend prior knowledge of operations with positive rational numbers to add and to subtract all rational numbers and represent the sum or difference on a number line.	Identify a whole number or a fraction.	Convert a whole number into a fraction.	Extend prior knowledge of operations with positive rational numbers to add and subtract all rational numbers.	Extend prior knowledge of operations with positive rational numbers to add and subtract all rational numbers and represent the sum or difference on a number line.
7.NS.2 Extend prior knowledge of operations with positive rational numbers to multiply and divide all rational numbers.	Identify a whole number or a fraction.	Convert a whole number into a fraction.	Extend prior knowledge of operations with positive rational numbers to multiply and divide all rational numbers.	Extend prior knowledge of operations with positive rational numbers to multiply and divide all rational numbers and represent the result on a number line.
7.NS.3 Apply the concepts of all four operations with positive rational numbers to solve one-step, real-world and mathematical problems.	Apply the concepts of the operations of addition and subtraction with positive rational numbers to solve one-step, real-world and mathematical problems.	Apply the concepts of the operations of multiplication and division with positive rational numbers to solve one-step, real-world and mathematical problems.	Apply the concepts of all four operations with positive rational numbers to solve one-step, real-world and mathematical problems.	Apply the concepts of all four operations with positive rational numbers to solve two-step, real-world and mathematical problems.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
7.NS.4 Understand and apply the concepts of comparing and ordering rational numbers on a number line. Interpret statements using less than ($<$), greater than ($>$), less than or equal to (\leq), greater than or equal to (\geq), and equal to ($=$) as relative locations on the number line.	Understand and apply the concepts of comparing and ordering whole numbers on a number line.	Understand and apply the concepts of comparing and ordering whole numbers on a number line. Interpret statements using less than ($<$), greater than ($>$), and equal to ($=$) as relative locations on the number line.	Understand and apply the concepts of comparing and ordering rational numbers on a number line. Interpret statements using less than ($<$), greater than ($>$), and equal to ($=$) as relative locations on the number line.	Understand and apply the concepts of comparing and ordering rational numbers on a number line. Interpret statements using less than ($<$), greater than ($>$), less than or equal to (\leq), greater than or equal to (\geq), and equal to ($=$) as relative locations on the number line.
7.NS.5 Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers). Exclude the conversion of repeating decimal numbers to fractions.	Identify same and different fractions or decimal numbers from pictorial representations.	Identify equivalent fractions and decimal numbers up to 100. Exclude the conversion of repeating decimal numbers to fractions.	Extend prior knowledge to translate among fractions and decimal numbers up to 100. Exclude the conversion of repeating decimal numbers to fractions.	Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers). Exclude the conversion of repeating decimal numbers to fractions.
7.RP.2 Identify proportional relationships given multiple representations, including tables, graphs, and real-world situations. a. Determine when two quantities are in a proportional relationship. e. Identify the graph of a proportional relationship in a real-world situation.	Identify equivalent relationships in real-world situations.	Identify proportional relationships in real-world situations.	Identify proportional relationships given multiple representations, including tables, graphs, and real-world situations. a. Determine when two quantities are in a proportional relationship.	Identify proportional relationships given multiple representations, including tables, graphs, and real-world situations. a. Determine when two quantities are in a proportional relationship. e. Identify the graph of a proportional relationship in a real-world situation.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
7.RP.3 Solve real-world and mathematical problems involving ratios and percentages.	Understand part and whole relationships.	Solve real-world problems involving percentages.	Solve real-world problems involving ratios and percentages.	Solve real-world and mathematical problems involving ratios and percentages.
7.EE.1 Apply mathematical properties (e.g., commutative, associative) to simplify linear algebraic expressions with whole number coefficients.	Apply mathematical commutative property of addition.	Apply mathematical commutative property of addition and multiplication.	Apply mathematical commutative property to simplify linear algebraic expressions with whole number coefficients.	Apply mathematical properties (e.g., commutative, associative) to simplify linear algebraic expressions with whole number coefficients.
7.EE.3 Extend previous understanding of Order of Operations to solve multi-step real-world and mathematical problems involving whole numbers. Exclude exponents and fraction bars as a grouping symbol.	Identify a mathematical operation by its symbol.	Know the order of operations in a mathematical expression.	Extend previous understanding of Order of Operations to solve two-step real-world problems involving whole numbers. Exclude exponents and fraction bars as a grouping symbol.	Extend previous understanding of Order of Operations to solve multi-step real-world and mathematical problems involving whole numbers. Exclude exponents and fraction bars as a grouping symbol.
7.GM.6 Understand that the concept of area applies to two-dimensional figures. Understand that the concepts of volume applies to three-dimensional figures.	Understand the difference between two dimensional and three dimensional figures.	Understand the concept of area. Understand the concept of volume.	Understand that the concept of area applies to two-dimensional figures. Understand that the concepts of volume applies to three-dimensional figures.	Understand that the concept of area applies to two-dimensional figures. Understand that the concepts of volume applies to three-dimensional figures. Understand which formula to use to calculate either area or volume.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
7.DS.1 Understand that a sample is a subset of a population. Distinguish between populations and samples. Distinguish between random and nonrandom samples.	Distinguish between a whole and a part.	Determine if it is a population or a sample.	Understand that a sample is a subset of a population. Identify populations and samples. Identify random and nonrandom samples.	Understand that a sample is a subset of a population. Distinguish between populations and samples. Distinguish between random and nonrandom samples.
7.DS.2 Draw inferences about a population by collecting random samples.	Determine if it is a random sample.	Identify a statement about a given random sample.	Draw inferences about a population when given random samples.	Draw inferences about a population by collecting random samples.
7.DS.4 Use the numerical measures of center (mean, median, mode, and range).	Determine the middle point of a collection of objects.	Identify the median of a data set.	Use the numerical measures of center (mean and median).	Use the numerical measures of center (mean, median, mode, and range).
7.DS.5 Understand that probability measures likelihood of a chance event occurring.	Recognize the outcome of an event.	Identify if an event is possible or impossible.	Understand that probability measures likelihood of a chance event occurring.	Determine the probability of simple events.

Grade 8

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
8.NS.1 Recognize the differences between rational and irrational numbers. Understand that all real numbers have a decimal expansion.	Identify whole numbers and fractions.	Identify rational numbers.	Recognize the differences between rational and irrational numbers.	Recognize the differences between rational and irrational numbers. Understand that all real numbers have a decimal expansion.
8.NS.2 Estimate the value of irrational and rational numbers by plotting them on a number line.	Plot whole numbers and fractions on a number line.	Plot rational numbers on a number line.	Plot irrational and rational numbers on a number line.	Estimate the value of irrational and rational numbers by plotting them on a number line.
8.NS.3 Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Exclude the conversion of repeating decimal numbers to fractions.	Identify fractions.	Translate fractions with the denominators 2, 4, 6, 8, and 10 into decimals.	Translate among multiple representations of rational numbers (fractions and decimal numbers). Exclude the conversion of repeating decimal numbers to fractions.	Translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Exclude the conversion of repeating decimal numbers to fractions.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
8.F.1 Understand that a function assigns to each input exactly one output. Determine if a relation is a function using multiple representations, including tables, graphs and equations. Graph a function from a table of x and y values. Extend the knowledge of the coordinate plane to use the set of ordered pairs of that function.	Identify a point.	Graph a point when given an ordered pair of numbers.	Graph a function from a table of x and y values.	Generate ordered pairs from two distinct numerical patterns. Extend a symbolic pattern by applying the rule.
8.F.2 Compare two functions, including tables, graphs, and equations, in order to draw conclusions.	Identify the slope or intercepts of a function in graph form.	Identify the slope and intercepts of a function given in equation form.	Compare the slopes of two functions given in equation form (slope intercept form).	Compare two functions, including tables, graphs and equations in order to draw conclusions.
8.F.4 Understand that the slope is the constant rate of change and the y-intercept is the point where $x = 0$. Interpret the meaning of the slope and the y-intercept of a linear function in the context of the situation.	Identify a line on a graph.	Understand that slope is related to the direction of the line.	Understand that the slope is the constant rate of change, and the y-intercept is the point where $x = 0$.	Understand that the slope is the constant rate of change, and the y-intercept is the point where $x = 0$. Interpret the meaning of the slope and the y-intercept of a linear function in the context of the situation
8.EE.1 Understand exponents to simplify numerical expressions that include integer exponents.	Identify repeated multiplication ($4 \times 4 \times 4$) as the exponent notation (4^3).	Expand exponents into repeated multiplication.	Understand exponents to simplify numerical expressions.	Understand exponents to simplify numerical expressions that include integer exponents.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
8.EE.2 Investigate concepts of square roots.	Understand multiplication as repeated addition.	Understand multiplication facts of whole numbers with products up to 100.	Understand how to square a number.	Understand that the square root is the inverse of squaring a number.
8.EE.5 Compare two different proportional relationships using tables and graphs.	Identify a table or graph.	Compare two relationships using tables and graphs	Compare two different proportional relationships using tables and graphs.	Compare two different proportional relationships given multiple representations, including tables, graphs, equations, diagrams, and verbal descriptions.
8.GM.1 Investigate the properties of rigid transformations (rotations, reflections, translations) using a variety of tools to recognize congruence.	Recognize when two-dimensional shapes are the same.	Recognize congruent figures.	Investigate the properties of rigid transformations (rotations, reflections, translations).	Investigate the properties of rigid transformations (rotations, reflections, translations) using a variety of tools to recognize congruence.
8.DS.1 Recognize patterns observed on a scatter plot, including clustering, outliers, and association (positive, negative, or no correlation).	Identify a point.	Graph points when given an ordered pair of numbers.	Recognize patterns observed on a scatter plot, including clustering and outliers.	Recognize patterns observed on a scatter plot, including clustering, outliers, and association (positive, negative, or no correlation).

Grade 11

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
A1.AAPR.1 Add and subtract polynomials (limit to linear).	Add two like terms (limited to constants).	Add and subtract like terms (limited to constants).	Add and subtract like terms that may include a variable.	Add and subtract like terms with simple expressions.
A1.ACE.1 Solve linear equations with one variable.	Given a linear equation, identify parts of the equation (variable, constant, and coefficient).	Solve an equation written with the variable isolated on the left side.	Solve a linear equation with one variable with one step (addition, subtraction).	Solve linear equation with one variable.
A1.AREI.1 Understand that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.	Determine if two expressions are equal (2x3, 3x2, commutative property, associative property).	Identify the possible first step in solving an equation.	Identify the possible next step in solving an equation.	Understand that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.
A1.AREI.6 Solve systems of linear equations graphically focusing on pairs of linear equations in two variables.	Identify a set of lines that intersect.	Identify the point at which a given set of lines intersect.	Given the graph of one equation and a simple equation, identify the graph that models the solution.	Solve systems of linear equations, graphically focusing on pairs of linear equations in two variables.
A1.AREI.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.	Identify a point in the first quadrant.	Identify an equation in the first quadrant.	Identify the graph of an equation in two variables that models the set of all its solutions plotted in the coordinate plane (limit to the first quadrant).	Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.
A1.AREI.12 Graph the solutions to a simple inequality with one variable on a number line.	Identify a point on the number line.	Identify an inequality on the number line (limit to greater than and less than, limit to positive number line starting at zero).	Identify an inequality on the number line (where the solution is a positive number but the number line may include negative numbers).	Identify a simple inequality with one variable on a number line (include greater than or equal to).

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
A1.ASE.1 Determine the meanings of coefficients, variables, terms, and expressions based on their real-world contexts.	Given an expression, identify a part (variable, term).	Identify the meaning of the unknown in a real-world context.	Given a real-world context and a variable, determine what the variable represents.	Determine the meanings of coefficients, variables, terms, and expressions based on their real-world contexts.
A1.FIF.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.	Given a set of table values, identify the set of x-values.	Given a table of values, identify a possible missing x-value (so that an x-value does not repeat).	Identify if a relation given in table form is a function.	Identify the domain and range of a given function.
A1.FIF.4 Recognize features of a linear function in graphical form (e.g., slope, intercepts; if the function is increasing, decreasing, constant, positive, or negative).	Given a key feature (increasing, decreasing, or constant), identify the graph.	Given an intercept of the graph, identify the graph.	Given a description of a function, identify the graph (positive slope, negative slope, constant, given y-intercept, limit to first quadrant).	Given the slope and intercept of a function, identify its graph.
A1.FIF.7 Graph linear functions using their key features.	Identify whether a given graph is increasing, decreasing, or constant.	Given a graph of a linear function, identify the x-intercept.	Given a graph of a linear function in the first quadrant, identify features of the graph (positive slope, negative slope, constant, intercepts).	Given a graph of a linear function, identify the slope and intercepts.
A1.NQ.1 Choose the appropriate labels, units, and scales when constructing graphs.	Given data and a context, identify an appropriate title for a graph of the data.	Given context, identify a graph with correct labels.	Given a data set, identify the appropriate units for a graph of the data.	Given a data set, identify an appropriate scale for a graph of the data.
A1.NRNS.1 Evaluate square roots of perfect squares.	Understand multiplication facts of whole numbers with products up to 100.	Understand how to square a number.	Understand that the square root is the inverse of squaring a number.	Evaluate square roots of perfect squares.

Prioritized Standard	Level 1: Foundational	Level 2: Emerging	Level 3: Meets Standard	Level 4: Exceeds Standard
A1.SPID.6 Identify the general form of a given data set as linear or non-linear.	Identify a graph that is a straight line.	Identify a data set that can be modeled as a straight line.	Identify a data set that is linear.	Identify the general form of a given data set as linear or non-linear.

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