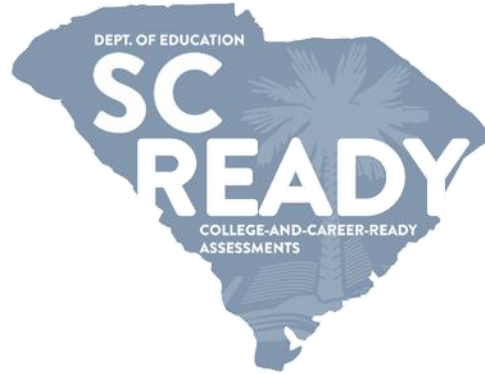




Mathematics

Grade 6

Performance Level Descriptors

Summer 2026

Columbia, SC

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Performance Levels and Performance Level Descriptors

For the South Carolina College- and Career-Ready Assessments (SC READY), educators have developed four performance levels to describe student mastery and command of the knowledge and skills outlined in the 2025 South Carolina College- and Career-Ready Standards (SC CCR). Most students have at least some knowledge of the information described in the content standards; however, performance levels succinctly describe the extent to which students have demonstrated mastery of the knowledge and skills expressed in the college- and career-ready standards. Performance levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four performance levels on SC READY are Does Not Meet Expectations, Approaches Expectations, Meets Expectations, and Exceeds Expectations.

The general meaning of each of the four levels is provided below:

- The student **does not meet** the expectations of the grade-level content standards.
- The student **approaches** expectations of the grade-level content standards.
- The student **meets** the expectations of the grade-level content standards.
- The student **exceeds** the expectations of the grade-level content standards.

More-detailed descriptions of the specific concepts and skills are provided for each indicator in the **Performance Level Descriptors (PLDs)**. PLDs are descriptions of the knowledge and skills expected at each of the four performance levels and were developed by committees of South Carolina educators in 2024. The PLDs are based on the approved 2025 state-adopted mathematics content standards.

PLDs show a progression of knowledge and skills that students are expected to have mastered across the performance levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within the student's performance level as well as all content and skills in any performance levels that precede the student's own, if any. For example, a student who Meets Expectations should also possess the knowledge and skills described at the Approaches Expectations and Does Not Meet Expectations performance levels.

Standard Expectations: Policies and Ranges

	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
Policy	The student Does Not Meet Expectations as defined by the grade-level content standards.	The student Approaches Expectations as defined by the grade-level content standards.	The student Meets Expectations as defined by the grade-level content standards.	The student Exceeds Expectations as defined by the grade-level content standards.
Range	The student needs substantial academic support to be on track for college and career readiness.	The student needs additional academic support to be on track for college and career readiness.	The student is prepared to be on track for college and career readiness.	The student is well prepared to be on track for college and career readiness.

Data, Probability, and Statistical Reasoning (DPSR)

6.DPSR.1

Analyze data sets to identify their statistical elements.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.DPSR.1.1: Identify the sample size for a numerical set of data in mathematical and real-world situations.	Recognize that sample size is smaller than the population size.	Identify the sample size for a numerical set of data in mathematical situations.	Identify the sample size for a numerical set of data in mathematical and real-world situations.	Use the sample size to analyze the conclusions one can make from the data.
6.DPSR.1.2: Create box plots to represent numerical data sets in mathematical and real-world situations.	Find the extremes, median, and quartiles of a numerical data set given a box plot.	Create box plots to represent an ordered numerical data set in mathematical situations.	Create box plots to represent numerical data sets in mathematical and real-world situations.	Identify and explain the error in a box plot that represents a set of numerical data.
6.DPSR.1.3: Use the shape of the graph to determine whether median or mode best describes the data set.	Recognize graphs as right-skewed, left-skewed, symmetric, uniform, or as having outliers.	Identify the locations of the mode and median on graphs that are right-skewed, left-skewed, symmetric, uniform, or contain outliers.	Use the shape of the graph to determine whether median or mode best describes the data set.	Determine whether the mode or median best describes the data set without being given the graph.
6.DPSR.1.4: Calculate and interpret the median, mode, range, interquartile range in mathematical and real-world situations.	Identify the median, mode, and range from an organized list of data.	Calculate the median, mode, range, and interquartile range in mathematical situations.	Calculate and interpret the median, mode, range, interquartile range in mathematical and real-world situations.	Explain the error in calculating or interpreting the median, mode, range or interquartile range in mathematical or real-world situations.

6.DPSR.2

Calculate and interpret probability.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.DPSR.2.1: Given the probability of a random event, expressed as a number from 0 to 1, state the likelihood of the event occurring.	Recognize the terms <i>certain</i> , <i>impossible</i> , <i>likely</i> , <i>equally likely</i> , <i>unlikely</i> as terms to describe likelihood.	Given the probability of a random event, expressed as a number from 0 to 1, recognize if the event is likely or unlikely to happen.	Given the probability of a random event, expressed as a number from 0 to 1, state the likelihood of the event occurring.	Use the given probability of an event and the likelihood to make and justify a choice in a mathematical or real-world problem.
6.DPSR.2.2: Find the probability of simple events in mathematical and real-world situations. Limit denominators to 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Recognize the possible outcomes and favorable outcomes for real-world and mathematical situations with the number of possible outcomes limited to 10 or less.	Identify the favorable outcomes for real-world and mathematical situations with the number of possible outcomes limited to 10 or less.	Find the probability of simple events in mathematical and real-world situations. Limit denominators to 2, 4, 5, 8, 10, 20, 25, 50, and 100.	Find the probability of simple events in mathematical and real-world situations to make decisions in the situations. Limit denominators to 2, 4, 5, 8, 10, 20, 25, 50, and 100.
6.DPSR.2.3: Given the probability of an event, identify and calculate the complement of that event.	Recognize every event has a complement.	Given the probability of an event, identify the complement of that event.	Given the probability of an event, identify and calculate the complement of that event.	Explain how finding the complement of an event may be used to find the probability of an event.

Measurement, Geometry, and Spatial Reasoning (MGSR)

6.MGSR.1

Determine the measurements of geometric figures.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.MGSR.1.1: Find the area of a triangle, square, rectangle, parallelogram, and trapezoid.	Recognize the area formula of a triangle, square, rectangle, parallelogram, and trapezoid.	Find the area of a triangle, square, and rectangle.	Find the area of a triangle, square, rectangle, parallelogram, and trapezoid.	Explain how to find the formula for a trapezoid or parallelogram using understanding of triangles and rectangles.
6.MGSR.1.2: Create nets to represent three-dimensional shapes.	Recognize a net is a two-dimensional representation of a three-dimensional shape.	Identify the three-dimensional shape created by a given net.	Create nets to represent three-dimensional shapes.	Use nets to solve real-world problems.
6.MGSR.1.3: Calculate the surface area of right rectangular prisms, right triangular prisms, right rectangular pyramids, and right triangular pyramids using two-dimensional nets.	Recognize that the surface area of rectangular prisms is found from finding the area of rectangles.	Calculate the surface area of rectangular prisms using two-dimensional nets.	Calculate the surface area of rectangular prisms, right triangular prisms, rectangular pyramids, and right triangular pyramids using two-dimensional nets.	Explain errors in calculations of surface area of rectangular prisms, right triangular prisms, rectangular pyramids, and right triangular pyramids using two-dimensional nets.
6.MGSR.1.4: Find the area of composite figures by decomposing them into triangles and rectangles to solve mathematical and real-world situations.	Recognize how a composite figure could be decomposed into triangles and rectangles.	Identify the areas of the triangles and/or rectangles that create the composite figure in a mathematical situation.	Find the area of composite figures by decomposing them into triangles and rectangles to solve mathematical and real-world situations.	Justify a composition or decomposition of figures to solve a mathematical and real-world situation.
6.MGSR.1.5: Calculate the volume of a right rectangular prism using the formula ($V = Bh$) in mathematical and real-world situations.	Identify the area of the base, and the height of a rectangular prism in mathematical and real-world situations.	Calculate the volume of a right rectangular prism using the formula ($V = Bh$) in mathematical situations when provided a labeled visual.	Calculate the volume of a right rectangular prism using the formula ($V = Bh$) in mathematical and real-world situations.	Solve for a missing length on the rectangular prism when provided with the volume.

6.MGSR.2

Determine angle and/or side relationships.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.MGSR.2.1: Determine if two angles are complementary or supplementary.	Find the sum of two angle measures.	Recognize that complementary and supplementary angles combine to form a right angle or a straight angle.	Determine if two angles are complementary or supplementary.	Determine if two angles are complementary or supplementary to solve mathematical and real-world problems.
6.MGSR.2.2: Determine the measure of angles using a protractor.	Identify the measure of a 45, 90, 135, or 180 angle when placed on a protractor.	Given an angle placed on a protractor, identify the measure of the angle.	Determine the measure of angles using a protractor.	Explain the error in how an angle was measured using a protractor.

6.MGSR.3

Graph on the coordinate plane.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.MGSR.3.1: Plot ordered pairs in all four quadrants and identify points on a graph by writing ordered pairs.	Identify the four quadrants.	Identify points in all four quadrants by writing ordered pairs.	Plot ordered pairs in all four quadrants and identify points on a graph by writing ordered pairs.	Solve real-world problems involving identifying and plotting points.
6.MGSR.3.2: Graph a polygon on a coordinate plane given the coordinates of the vertices.	Recognize that polygons can be created on a coordinate plane by connecting plotted points.	Identify a polygon on a coordinate plane given the coordinates of the vertices.	Graph a polygon on a coordinate plane given the coordinates of the vertices.	Explain the error when graphing a polygon on a coordinate plane given the coordinates of the vertices.

Numerical Reasoning (NR)

6.NR.1

Translate among multiple representations of rational numbers.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.NR.1.1: Convert positive rational numbers into equivalent forms among terminating decimals, fractions (including mixed numbers), and percentages. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Recognize equivalent forms among decimals and percents.	Identify equivalent forms among terminating decimals and percentages	Convert positive rational numbers into equivalent forms among terminating decimals, fractions (including mixed numbers), and percentages. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Convert positive rational numbers into equivalent forms among terminating decimals, fractions (including mixed numbers), and percentages to justify an answer in a mathematical or real-world situation. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.

6.NR.2

Utilize rational numbers in mathematical and real-world situations.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.NR.2.1: Compare two positive rational numbers and write statements using the symbols for <i>is equal to</i> ($=$), <i>is not equal to</i> ($\neq$), <i>is less than</i> ($<$), and/or <i>is greater than</i> ($>$) in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Identify the smaller number between two positive rational numbers in mathematical situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Compare two positive rational numbers in mathematical situations using words. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Compare two positive rational numbers and write statements using the symbols for <i>is equal to</i> ($=$), <i>is not equal to</i> ($\neq$), <i>is less than</i> ($<$), and/or <i>is greater than</i> ($>$) in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Compare two positive rational numbers and write statements using the symbols for <i>is equal to</i> ($=$), <i>is not equal to</i> ($\neq$), <i>is less than</i> ($<$), and/or <i>is greater than</i> ($>$) in mathematical and real-world situations to make and/or justify decisions. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.
6.NR.2.2: Sort a set of positive rational numbers in ascending and/or descending order in mathematical and real-world situations. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Sort a set of positive rational numbers in ascending order in mathematical situations when all are in the same form, i.e. all fractions or all decimals. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Sort a set of positive rational numbers in descending order in mathematical situations when all are in the same form, i.e. all fractions or all decimals. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Sort a set of positive rational numbers in ascending and/or descending order in mathematical and real-world situations. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Explain the error in a sorted list of positive rational numbers in ascending and/or descending order in mathematical and real-world situations. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.
6.NR.2.3: Represent quantities with integers in real-world situations and explain the meaning of zero.	Identify situations where negative numbers exist in the real world.	Recognize that zero is a number that can represent a value and does not always mean "none."	Represent quantities with integers in real-world situations and explain the meaning of zero.	Create a real-world situation that represents quantities with integers or explains the meaning of zero.
6.NR.2.4: Identify and compare the opposite value and absolute value of positive and negative rational numbers.	Identify where negative numbers and zero are on a number line.	Compute the absolute value of a number.	Identify and compare the opposite value and absolute value of positive and negative rational numbers.	Justify the solutions to problems involving opposite value and absolute value of positive and negative rational numbers.

Patterns, Algebra, and Functional Reasoning (PAFR)

6.PAFR.1

Use tables, graphs, verbal descriptions, or equations to represent a function.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.PAFR.1.1: Use tables, graphs, verbal descriptions, and equations to represent the relationship between independent and dependent variables of functions.	Identify the independent and dependent variables in tables, graphs, verbal descriptions and equations.	Identify the relationship between independent and dependent variables of functions in a verbal description and equation.	Use tables, graphs, verbal descriptions, and equations to represent the relationship between independent and dependent variables of functions.	Explain the error in representing the relationship between the independent and dependent variables of functions using tables, graphs, verbal descriptions, and equations.
6.PAFR.1.2: Identify the independent and dependent variable of a function in mathematical and real-world situations.	Recognize the independent and dependent variable of a function in a mathematical situation.	Identify the independent and dependent variable of a function in a mathematical situation.	Identify the independent and dependent variable of a function in mathematical and real-world situations.	Explain the meaning of the independent and dependent variable of a function.

6.PAFR.2

Write, simplify, and evaluate algebraic expressions; write and solve algebraic equations and inequalities.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.PAFR.2.1: Identify parts of an algebraic expression using the mathematical terms <i>sum</i> , <i>difference</i> , <i>term</i> , <i>variable</i> , <i>product</i> , <i>factor</i> , <i>quotient</i> , <i>coefficient</i> , and <i>constant</i> .	Recognize the mathematical terms: <i>term</i> , <i>variable</i> , <i>coefficient</i> , and <i>constant</i> as describing an algebraic expression.	Identify parts of an algebraic expression using the mathematical terms: <i>sum</i> , <i>difference</i> , <i>product</i> , <i>quotient</i> .	Identify parts of an algebraic expression using the mathematical terms <i>sum</i> , <i>difference</i> , <i>term</i> , <i>variable</i> , <i>product</i> , <i>factor</i> , <i>quotient</i> , <i>coefficient</i> , and <i>constant</i> .	Identify parts of an algebraic expression using the mathematical terms: <i>sum</i> , <i>difference</i> , <i>term</i> , <i>variable</i> , <i>product</i> , <i>factor</i> , <i>quotient</i> , <i>coefficient</i> , and <i>constant</i> and interpret them in terms of a real-world context.
6.PAFR.2.2: Write and evaluate numerical expressions containing powers. Limit to positive whole number bases and positive whole number exponents.	Evaluate a single number to a power. Limit to positive whole number bases and positive whole number exponents.	Write and evaluate numerical expressions without powers.	Write and evaluate numerical expressions containing powers. Limit to positive whole number bases and positive whole number exponents.	Explain the error in evaluating numerical expressions containing powers. Limit to positive whole number bases and positive whole number exponents.
6.PAFR.2.3: Evaluate numerical expressions with positive whole number bases and positive whole number exponents using the Order of Operations.	Recognize the first step in evaluating a numerical expression with positive whole number bases and positive whole number exponents using the Order of Operations.	Identify a step in evaluating a numerical expression with positive whole number bases and positive whole number exponents using the Order of Operations.	Evaluate numerical expressions with positive whole number bases and positive whole number exponents using the Order of Operations.	Explain the error in evaluating a numerical expression with positive whole number bases and positive whole number exponents using the Order of Operations.
6.PAFR.2.4: Write and evaluate expressions using variables to represent quantities in mathematical and real-world situations.	Evaluate simple expressions with variables in mathematical situations.	Recognize expressions with variables that represent quantities in mathematical situations	Write and evaluate expressions using variables to represent quantities in mathematical and real-world situations.	Write and evaluate expressions using variables to represent quantities in real-world situations and interpret the parts in terms of real-world situations.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.PAFR.2.5: Write and solve one-step equations and inequalities with one variable involving positive rational numbers in mathematical and real-world situations.	Identify a one-step equation with one variable involving positive rational numbers in mathematical situations.	Identify a one-step equation or inequality with one variable involving positive rational numbers in mathematical and real-world situations.	Write and solve one-step equations and inequalities with one variable involving positive rational numbers in mathematical and real-world situations.	Analyze one-step equations and inequalities with one variable involving positive rational numbers to explain connections between the pieces and the problem represented to include the solution once found.
6.PAFR.2.6: Interpret the concept of a ratio as the relationship between two quantities, including part-to-part and part-to-whole.	Identify a ratio between two quantities.	Find a ratio between two quantities, including part-to-part and part-to-whole.	Interpret the concept of a ratio as the relationship between two quantities, including part-to-part and part-to-whole.	Explain the relationship between the two quantities of a ratio.
6.PAFR.2.7: Explain the relationship between ratios and rates, including unit rates.	Recognize a unit rate.	Identify the relationship between two quantities as a ratio or a rate.	Explain the relationship between ratios and rates, including unit rates.	Interpret a unit rate for real-world situations.
6.PAFR.2.8: Solve ratio and rate problems in real-world situations.	Determine whether representing a real-world situation by a ratio or rate makes sense.	Identify the parts of a ratio or rate problem in real-world situations.	Solve ratio and rate problems in real-world situations.	Analyze the solution to ratio and rate problems in terms of the real-world situations modeled.
6.PAFR.2.9: Use one-step dimensional analysis to convert units within the metric or customary systems.	Identify the conversion factor needed to convert units within the metric or customary systems.	Use one-step dimensional analysis to convert within the customary systems.	Use one-step dimensional analysis to convert units within the metric or customary systems.	Explain the error in one-step dimensional analysis to convert units within the metric or customary systems.

6.PAFR.3

Apply mathematical patterns, properties, and algorithms to the set of rational numbers to find sums, differences, products, and quotients and to write equivalent expressions.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.PAFR.3.1: Represent the solutions of inequalities on a number line and explain that the solution set may contain an infinite number of solutions. Limited to the symbols for <i>is less than</i> ($<$) and <i>is greater than</i> ($>$).	Recognize that an open circle is always used when graphing inequalities with <i>less than</i> or <i>greater than</i> symbols.	Identify the solutions of inequalities on a number line. Limited to the symbols for <i>is less than</i> ($<$) and <i>is greater than</i> ($>$).	Represent the solutions of inequalities on a number line and explain that the solution set may contain an infinite number of solutions. Limited to the symbols for <i>is less than</i> ($<$) and <i>is greater than</i> ($>$).	Explain how to represent the solutions of inequalities on a number line. Limited to the symbols for <i>is less than</i> ($<$) and <i>is greater than</i> ($>$).
6.PAFR.3.2: Identify the multiplicative inverse of a number and multiply multiplicative inverses to find their product is equal to 1.	Recognize the multiplicative inverse of a number.	Recognize that the product of a number and its multiplicative inverse is 1.	Identify the multiplicative inverse of a number and multiply multiplicative inverses to find their product is equal to 1.	Analyze or create a mathematical or real-world situation that could be solved using the multiplicative inverse.
6.PAFR.3.3: Identify the additive inverse of a number and add additive inverses to find their sum is equal to zero.	Recognize the additive inverses of a number.	Recognize that the sum of a number and its additive inverse is zero.	Identify the additive inverse of a number and add additive inverses to find their sum is equal to zero.	Analyze or create a mathematical or real-world situation that could be solved using the additive inverse.
6.PAFR.3.4: Apply the properties of operations to create equivalent algebraic expressions and justify the properties used. Limit properties to the <i>Identity, Inverse, Commutative, Associative, and Distributive Properties</i> .	Identify the properties of operations as <i>Identity, Inverse, Commutative, Associative, and Distributive Properties</i> .	Recognize the properties of operations in use as <i>Identity, Inverse, Commutative, Associative, and Distributive Properties</i> .	Apply the properties of operations to create equivalent algebraic expressions and justify the properties used. Limit properties to the <i>Identity, Inverse, Commutative, Associative, and Distributive Properties</i> .	Explain how to create equivalent algebraic expressions using the properties of operations. Limit properties to the <i>Identity, Inverse, Commutative, Associative, and Distributive Properties</i> .
6.PAFR.3.5: Add, subtract, multiply, and divide integers in mathematical and real-world situations.	Add and subtract integers in mathematical situations.	Add, subtract, multiply, and divide integers in mathematical situations.	Add, subtract, multiply, and divide integers in mathematical and real-world situations.	Explain the error in adding, subtracting, multiplying, and dividing integers in mathematical and real-world situations.

Indicator	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
6.PAFR.3.6: Add, subtract, multiply, and divide positive fractions, including mixed numbers in mathematical and real-world situations.	Add and subtract positive fractions, including mixed numbers in mathematical situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Add, subtract, multiply, and divide positive fractions, including mixed numbers in mathematical situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Add, subtract, multiply, and divide positive fractions, including mixed numbers in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	Explain the error in adding, subtracting, multiplying, and dividing positive fractions, including mixed numbers in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.
6.PAFR.3.7: Add, subtract, multiply, and divide multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical and real-world situations.	Add and subtract multi-digit positive decimals, up to the thousandths place to solve problems in mathematical situations.	Add, subtract, multiply, and divide multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical situations.	Add, subtract, multiply, and divide multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical and real-world situations.	Explain the error in adding, subtracting, multiplying, and dividing multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical and real-world situations.