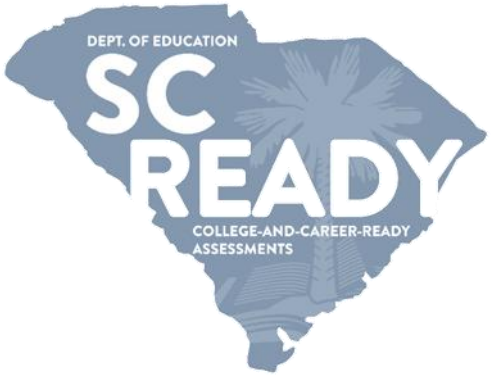


# Mathematics
# Grade 4
# Performance Level Descriptors

**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. |

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# Data, Probability, and Statistical Reasoning (DPSR)

## 4.DPSR.1

Create questions, collect and analyze data, and communicate interpretations through multiple representations.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.DPSR.1.1:** Collect and organize numerical and categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots. Use titles and labels. Scales to include whole numbers, halves, and fourths. | Organize numerical or categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots. Use titles or labels. Scales to include whole numbers or halves. | Organize numerical or categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots. Use titles or labels. Scales to include whole numbers and halves. | Collect and organize numerical and categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots. Use titles and labels. Scales to include whole numbers, halves, and fourths. | Interpret numerical and categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots when the scale is not provided. Use titles and labels. Scales to include whole numbers, halves, and fourths. |
| **4.DPSR.1.2:** Solve one-step, real-world situations using whole number and fractional data represented in tables, scaled picture graphs, scaled bar graphs, or dot plots. Limit to like denominators of 2, 3, 4, 5, 6, 8, and 10. | Solve one-step, real-world situations using whole number and fractional data represented in tables, scaled picture graphs, scaled bar graphs, or dot plots. Limit to like denominators of 2, 5, and 10. | Solve one-step, real-world situations using whole number and fractional data represented in tables, scaled picture graphs, scaled bar graphs, or dot plots. Limit to like denominators of 2, 3, 4, 5, and 10. | Solve one-step, real-world situations using whole number and fractional data represented in tables, scaled picture graphs, scaled bar graphs, or dot plots. Limit to like denominators of 2, 3, 4, 5, 6, 8, and 10. | Create a one-step real-world situation using the whole number and fractional data represented in tables, scaled picture graphs, scaled bar graphs, or dot plots. Limit to like denominators of 2, 3, 4, 5, 6, 8, and 10. |

## 4.DPSR.2

Represent the probability of simple events and determine possible outcomes.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.DPSR.2.1:** Determine the possible outcomes of a simple event and record the probability as certain, possible, or impossible. | Determine if an event is possible or impossible. | Recognize that certain, possible, and impossible are the words to identify a probability. | Determine the possible outcomes of a simple event and record the probability as certain, possible, or impossible. | Explain why an outcome is certain, possible, or impossible. |

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# Measurement, Geometry, and Spatial Reasoning (MGSR)

## 4.MGSR.1

Solve area and perimeter problems in real-world and mathematical situations.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.MGSR.1.1:** Apply perimeter formulas for rectangles to solve real-world situations including finding the perimeter, given the side lengths, and finding an unknown side length. | Identify the perimeter formula for rectangles. | Apply perimeter formulas for rectangles to solve real-world situations when side lengths are given. | Apply perimeter formulas for rectangles to solve real-world situations including finding the perimeter, given the side lengths, and finding an unknown side length. | Create a real-world situation involving perimeter of rectangles where a side length is missing. |
| **4.MGSR.1.2:** Apply area formulas for rectangles to solve real-world situations. Use square units to label area measurements. | Identify the area formula for rectangles. | Apply area formulas for rectangles to solve mathematical problems. | Apply area formulas for rectangles to solve real-world situations. Use square units to label area measurements. | Create a real-world situation involving area where a side is missing. Use square units to label area measurements. |

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## 4.MGSR.2

Estimate and measure using units of length, liquid volume, weight, currency, and intervals of time.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.MGSR.2.1:** Calculate the value of a collection of coins and bills in real-world situations to determine whether there is enough money to make a purchase. Justify based on comparison of money amounts. | Determine the value of a collection of coins and bills greater than $5. | Calculate the value of a collection of coins and bills in real-world situations. | Calculate the value of a collection of coins and bills in real-world situations to determine whether there is enough money to make a purchase. Justify based on comparison of money amounts. | Explain the error when calculating the value of a collection of coins and bills in real-world situations to determine whether there is enough money to make a purchase. Justify based on comparison of money amounts. |
| **4.MGSR.2.2:** Solve real-world situations involving addition and subtraction of time intervals within 60 minutes to find elapsed time, start time, or end time. | Solve real-world situations involving addition of time intervals within 60 minutes to find the end time. Limit within the same hour. | Solve real-world situations involving addition or subtraction of time intervals within 60 minutes to find elapsed time, start time, or end time. Limit within the same hour. | Solve real-world situations involving addition and subtraction of time intervals within 60 minutes to find elapsed time, start time, or end time. | Explain whether events can happen in a given timeframe providing justification involving addition or subtraction of time. |
| **4.MGSR.2.3:** Measure length to the nearest quarter inch. | Identify 0, 1/4, 1/2, 3/4, and 1 inch on a ruler as the benchmarks between 0 and 1 inch as being the nearest quarter inch. | Measure an object as being a specified length (0–1 inch) to the nearest quarter inch. | Measure length to the nearest quarter inch. | Measure length to the nearest quarter inch to solve real-world situations. |
| **4.MGSR.2.4:** Measure weight in customary units and metric units to the nearest whole unit. Limit to ounces, pounds, grams, and kilograms. | Identify real-world situations when weight measured in ounces, pounds, grams, and kilograms are appropriate units of measurement. | Measure weight in customary units or metric units to the nearest whole unit. Limit to ounces and pounds or grams and kilograms. | Measure weight in customary units and metric units to the nearest whole unit. Limit to ounces, pounds, grams, and kilograms. | Compare the weights of various objects. Limit to ounces, pounds, grams, and kilograms. |

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| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.MGSR.2.5:** Convert customary units of length, weight, and liquid volume from a larger unit to a smaller unit, given direct comparisons of the two measurements and/or the unit equivalencies within a single system of measurement. Limit to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, and gallons when given unit equivalences. | Recognize which units are larger and which units are smaller in a single comparison. Limit to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, and gallons. | Convert customary units of length, weight, or liquid volume from a larger unit to a smaller unit, given direct comparisons of the two measurements and/or the unit equivalencies within a single system of measurement. Limit to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, and gallons when given unit equivalencies. | Convert customary units of length, weight, and liquid volume from a larger unit to a smaller unit, given direct comparisons of the two measurements and/or the unit equivalencies within a single system of measurement. Limit to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, and gallons when given unit equivalencies. | Explain the need for converting customary units of length, weight, and liquid volume using a real-world situation. Limit to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, and gallons when given unit equivalencies. |

## 4.MGSR.3

Extend geometric reasoning to attributes of polygons and/or polyhedrons.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.MGSR.3.1:** Classify triangles according to side length (*isosceles, equilateral, scalene*) and angle measure (*acute, obtuse, right, equiangular*). | Recognize isosceles, equilateral, and scalene as labels for triangles related to the length of the sides. | Identify a triangle as isosceles, equilateral, and scalene or each angle measure in a triangle as acute, obtuse, or right. | Classify triangles according to side length (*isosceles, equilateral, scalene*) and angle measure (*acute, obtuse, right, equiangular*). | Explain the connection between side length classifications and angle measure classifications. |
| **4.MGSR.3.2:** Classify quadrilaterals in a hierarchy based on their shared attributes. | Recognize the differences of quadrilaterals based on their attributes. | Identify the similarities and differences of quadrilaterals based on their attributes. | Classify quadrilaterals in a hierarchy based on their shared attributes. | Draw a quadrilateral based off attributes tied to the hierarchy of quadrilaterals. |

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# Numerical Reasoning (NR)

## 4.NR.1

Represent and compare numbers using relationships within the base ten number system.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.NR.1.1:** Read and write whole numbers through the millions period (0 to 999,999,999) in word, standard, and equations in expanded form. | Read or write a whole number through the millions period (0 to 999,999,999) in one of the following: word, standard, and equations in expanded form. | Read or write a whole number through the millions period (0 to 999,999,999) in at least two of the following: word, standard, and equations in expanded form. | Read and write whole numbers through the millions period (0 to 999,999,999) in word, standard, and equations in expanded form. | Identify the error when reading or writing whole numbers through the millions period (0 to 999,999,999) in word, standards, and equations in expanded form. |
| **4.NR.1.2:** Estimate sums, differences, products, and quotients of multi-digit whole numbers, using rounding and place value to determine the reasonableness of real-world problem solutions. Write an equation for the estimate. | Estimate sums or differences of multi-digit whole numbers, using rounding and place value. | Determine the reasonableness of real-world problem solutions when estimating sums, differences, products, or quotients of multi-digit whole numbers by using rounding and place value. | Estimate sums, differences, products, and quotients of multi-digit whole numbers, using rounding and place value to determine the reasonableness of real-world problem solutions. Write an equation for the estimate. | Justify the reasonableness of estimated sums, differences, products, and quotients of multi-digit whole numbers, using rounding and place value in real-world problems. Write an equation for the estimate. |
| **4.NR.1.3:** Order whole numbers within 999,999 (no more than 3) in ascending or descending order and record the comparison(s) using symbols for *is less than* (<) and/or *is greater than* (>). | Recognize which place value(s) is needed to compare whole numbers (no more than 3) within 99,999. | Order whole numbers within 99,999 (no more than 3) in ascending or descending order and record the comparison(s) using symbols for *is less than* (<) and/or *is greater than* (>). | Order whole numbers within 999,999 (no more than 3) in ascending or descending order and record the comparison(s) using symbols for *is less than* (<) and/or *is greater than* (>). | Order whole numbers within 999,999 (no more than 3) when the numbers are in different forms using symbols for *is less than* (<) and/or *is greater than* (>). |

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## 4.NR.2

Represent and compare fractions in multiple ways using part-whole relationships.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.NR.2.1:** Represent fractions with denominators of 10 and 100 in words, models, and decimal notations. | Represent fractions with a denominator of 10 or 100 as a model. | Represent fractions with a denominator of 10 or 100 in decimal notation. | Represent fractions with denominators of 10 and 100 in words, models, and decimal notations. | Describe how the decimal notation for fractions with denominators of 10 and 100 relate to one another. |
| **4.NR.2.2:** Compare decimal numbers to the hundredths using the benchmarks 0, 0.5, and 1.0, concrete, area, and linear models. Use the symbols for *is equal to* (=), *is less than* (<), and/or *is greater than* (>). | Represent decimal numbers using concrete area or linear models. | Represent decimal numbers using concrete area and linear models. | Compare decimal numbers to the hundredths using the benchmarks 0, 0.5, and 1.0, concrete area, and linear models. Use the symbols for *is equal to* (=), *is less than* (<), and/or *is greater than* (>). | Explain the location of a decimal number to the fractions 0, 1/2, and 1 on a number line. Use the symbols for *is equal to* (=), *is less than* (<), and/or *is greater than* (>). |
| **4.NR.2.3:** Generate equivalent fractions, including fractions greater than 1, using multiple representations. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Recognize if two models represent equivalent fractions. | Identify if two models represent equivalent fractions. Limit fractions to denominators 2, 3, 4, 5, 6, 8, and 10. | Generate equivalent fractions, including fractions greater than 1, using multiple representations. Limit fractions to denominators 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Identify the error in the work of generating equivalent fractions greater than 1. Limit fractions to denominators 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. |
| **4.NR.2.4:** Represent the composition and decomposition of fractions with the same denominator, including mixed numbers and fractions greater than 1, using multiple representations. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Identify the composition or decomposition of fractions with the same denominator for fractions less than 1, using multiple representations. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10. | Identify the composition or decomposition of fractions with the same denominator for fractions greater than 1, using multiple representations. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10. | Represent the composition and decomposition of fractions with the same denominator, including mixed numbers and fractions greater than 1, using multiple representations. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Identify the error in the representation of the composition or decomposition of fractions with the same denominator, including mixed numbers and fractions greater than 1. |

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| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.NR.2.5:** Explain and demonstrate how a mixed number is equivalent to a fraction greater than 1 and how a fraction greater than 1 is equivalent to a mixed number. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Represent mixed numbers using models. Limit fractions to denominators of 2, 3, 4, 5, 6, 8 and 10. | Demonstrate how a mixed number is equivalent to a fraction greater than 1 and how a fraction greater than 1 is equivalent to a mixed number. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10. | Explain and demonstrate how a mixed number is equivalent to a fraction greater than 1 and how a fraction greater than 1 is equivalent to a mixed number. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Explain the error in equivalency between specific mixed numbers and fractions greater than 1. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. |
| **4.NR.2.6:** Compare fractions and mixed numbers with like and unlike denominators applying benchmark fractions such as 0, 1/2, and 1 using the symbols for *is equal to* (=), *is less than* (<), or *is greater than* (>). Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Compare fractions less than 1 with like and unlike denominators. Limit fractions to denominators of 2, 3, 4, 5, 6, 8 and 10. | Determine the closest whole number value of a fraction or mixed number in order to compare fractions and mixed numbers with like and unlike denominators. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10. | Compare fractions and mixed numbers with like and unlike denominators applying benchmark fractions such as 0, 1/2, and 1 using the symbols for *is equal to* (=), *is less than* (<), or *is greater than* (>). Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. | Explain the error when comparing fractions and mixed numbers with like and unlike denominators applying benchmark fractions such as 0, 1/2, and 1. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100. |

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# Patterns, Algebra, and Functional Reasoning (PAFR)

## 4.PAFR.1

Use multiple representations to reason and solve problems involving operational properties of whole numbers and decimals.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.PAFR.1.1:** Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference. | Use a strategy to compute sums or differences up to 50,000. | Use a strategy to compute sums and differences up to 100,000. | Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference. | Identify the error of a sum or difference of numbers up to 100,000. |
| **4.PAFR.1.2:** Compute the product of a one-digit whole number times a multiple of 10 (from 10 to 90) and 100 (from 100 to 900) based on place value and properties of operations. | Compute the product of a one-digit whole number times a multiple of 10 (from 10 to 90). | Compute the product of a one-digit whole number times a multiple of 10 (from 10 to 90) or 100 (from 100 to 900) based on place value and properties of operations. | Compute the product of a one-digit whole number times a multiple of 10 (from 10 to 90) and 100 (from 100 to 900) based on place value and properties of operations. | Explain how to find the product of a one-digit whole number times a multiple of 10 (from 10 to 90) and 100 (from 100 to 900) based on place value and properties of operations. |
| **4.PAFR.1.3:** Decompose numbers by the value of each digit to multiply whole numbers up to four digits by a one-digit number and two 2-digit whole numbers. | Recognize the decomposition of numbers by the value of each digit to multiply whole numbers up to three digits by a one-digit number or two 2-digit whole numbers. | Decompose numbers by the value of each digit to multiply whole numbers up to three digits by a one-digit number or two 2-digit whole numbers. | Decompose numbers by the value of each digit to multiply whole numbers up to four digits by a one-digit number and two 2-digit whole numbers. | Explain how to decompose numbers by the value of each digit to multiply whole numbers. |
| **4.PAFR.1.4:** Use a strategy to divide up to a four-digit dividend by a one-digit divisor, with and without remainders. Justify the calculation. | Use a strategy to divide up to a three-digit dividend by a one-digit divisor, without remainders. | Use a strategy to divide up to a three-digit dividend by a one-digit divisor, with and without remainders. | Use a strategy to divide up to a four-digit dividend by a one-digit divisor, with and without remainders. Justify the calculation. | Explain the error in solving a division problem involving dividing a four-digit dividend by a one-digit divisor, with and without remainders. |

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## 4.PAFR.2

Use multiple representations to reason and solve problems involving operational properties of fractions.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.PAFR.2.1:** Use a strategy to accurately compute sums and differences of fractions with like denominators and justify the reasonableness of the answer. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. | Use a strategy to compute sums or differences of fractions with like denominators. Limit denominators to 2, 3, 4, 5, 6, 8, and 10. | Use a strategy to compute sums and differences of fractions with like denominators. Limit denominators to 2, 3, 4, 5, 6, 8, and 10. | Use a strategy to accurately compute sums and differences of fractions with like denominators and justify the reasonableness of the answer. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. | Explain the error in work in computing the sum or difference of fractions with like denominators. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. |
| **4.PAFR.2.2:** Use fraction and decimal equivalencies to add and subtract tenths and hundredths, to include mixed numbers and fractions greater than 1. | Use fraction and decimal equivalencies to add or subtract tenths, to include mixed numbers and fractions greater than 1. | Use fraction and decimal equivalencies to add or subtract tenths and hundredths, to include mixed numbers and fractions greater than 1. | Use fraction and decimal equivalencies to add and subtract tenths and hundredths, to include mixed numbers and fractions greater than 1. | Explain the error in adding and subtracting fraction and decimal equivalencies to tenths and hundredths, to include mixed numbers and fractions greater than 1. |
| **4.PAFR.2.3:** Represent and compute the product of a whole number times a unit fraction. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. | Represent the product of a whole number times a unit fraction. Limit denominators to 2, 3, 4, 5, 6, 8, and 10. | Compute the product of a whole number times a unit fraction. Limit denominators to 2, 3, 4, 5, 6, 8, and 10. | Represent and compute the product of a whole number times a unit fraction. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. | Explain the error when finding the product of a whole number times a unit fraction. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 25, and 100. |
| **4.PAFR.2.4:** Interpret a fraction as an equal sharing division situation, where a quantity (the numerator) is divided into equal parts (the denominator) to include real-world situations. | Recognize a fraction as an equal sharing division situation. | Identify a fraction as an equal sharing division situation, where a quantity (the numerator) is divided into equal parts (the denominator). | Interpret a fraction as an equal sharing division situation, where a quantity (the numerator) is divided into equal parts (the denominator) to include real-world situations. | Explain the connection between a fraction as an equal sharing division situation and a division expression. |

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## 4.PAFR.3

Use reasoning to represent and solve algebraic and numerical situations.

| Indicator | Does Not Meet Expectations | Approaches Expectations | Meets Expectations | Exceeds Expectations |
|---|---|---|---|---|
| **4.PAFR.3.1:** Find all factor pairs for a whole number in the range 1–50. Determine whether the whole number is prime or composite. | Determine whether a whole number is prime or composite. | Recognize some factor pairs for a whole number in the range 1–50. | Find all factor pairs for a whole number in the range 1–50. Determine whether the whole number is prime or composite. | Explain the connection between factor pairs for a whole number and whether a number is prime or composite. |
| **4.PAFR.3.2:** Describe and extend a numerical pattern that follows a rule using function tables and real-world situations. | Identify the next term in a numerical pattern in a function table. | Extend a numerical pattern that follows a rule using function tables. | Describe and extend a numerical pattern that follows a rule using function tables and real-world situations. | Explain the error when extending a numerical pattern in a function table or real-world situation. |
| **4.PAFR.3.3:** Solve real-world situations involving multiplicative comparison situations and write equations to represent the problem using a variable for the unknown. | Recognize real-world situations involving multiplicative comparison situations. | Write an equation to represent real-world situations involving multiplicative comparison. | Solve real-world situations involving multiplicative comparison situations and write equations to represent the problem using a variable for the unknown. | Explain the meaning of the equation written to represent the problem using a variable for the unknown. |
| **4.PAFR.3.4:** Solve two-step, real-world situations using the four operations involving whole number answers. Represent the problem using an equation with a variable as the unknown in any position. | Identify the operation(s) needed to solve a two-step, real-world situation involving whole number answers. | Recognize the equation with a variable as the unknown in any position of a two-step, real-world situation using the four operations involving whole number answers. | Solve two-step, real-world situations using the four operations involving whole number answers. Represent the problem using an equation with a variable as the unknown in any position. | Explain the error in solving a two-step, real-world situation using the four operations involving number answers. Represent the problem using an equation with a variable as the unknown in any position. |