

## **Grade 5 Mathematics**

**2015 SAMPLE ITEMS**  
**Realigned to the 2025 Math Indicators**

**Introduction**

The South Carolina Department of Education provides districts and schools with tools to assist in delivering focused instruction aligned with the South Carolina College- and Career-Ready Standards (SC CCRS). This document contains a set of twenty SC READY test items that have been written to align with the 2015 South Carolina College- and Career-Ready Math Standards. These items were reviewed for content and bias prior to being field tested and approved for release to the public. Where possible, each item's alignment to the 2025 SC CCR Math Standards has been provided.

**Purpose**

This document is intended to be a resource for educators; it is not designed to be a practice test for students. The sample items are examples of college- and career-ready assessment items. These items were chosen to reflect the increased rigor of assessing the South Carolina College- and Career-Ready Standards which includes the Mathematical Process Standards. SC READY assesses content indicators in a variety of ways. This document does not include all item types or indicators.

**Item Information Format**

<b>Indicator Alignment</b>	SCCCR
<b>Indicator Description</b>	text from SCCCR
<b>Answer Key</b>	correct answer
<b>Depth of Knowledge</b>	cognitive demand
<b>Estimated Difficulty</b>	estimate based on student responses

**Links**

South Carolina College- and Career-Ready Standards  
<https://ed.sc.gov/instruction/standards-learning/mathematics/standards/>

1. A chemical's temperature is  $121.346^{\circ}$  Fahrenheit. Rounded to the nearest tenth in degrees Fahrenheit, which measure represents the temperature of the chemical?
  - A.  $121.0^{\circ}$
  - B.  $121.3^{\circ}$
  - C.  $121.4^{\circ}$
  - D.  $122.0^{\circ}$

SC READY MATH Sample Item

<b>Indicator Alignment</b>	2025 Indicator Alignment - 5.NR.1.3
<b>Indicator Description</b>	Round decimal numbers up to 999 with decimals to the thousandths place to the nearest hundredth, tenth, or whole number.
<b>1 Answer Key</b>	B
<b>Depth of Knowledge</b>	1
<b>Estimated Difficulty</b>	Medium Difficulty

2. Amanda has a rock that has a mass of 26.745 grams. What is the mass, in grams, of Amanda’s rock when rounded to the nearest hundredth?
- A. 26.70
  - B. 26.74
  - C. 26.75
  - D. 27.00

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.NR.1.3</b>
	<b>Indicator Description</b>	Round decimal numbers up to 999 with decimals to the thousandths place to the nearest hundredth, tenth, or whole number.
	<b>2 Answer Key</b>	<b>C</b>
	<b>Depth of Knowledge</b>	<b>1</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

3. An equation is shown.

$$3\frac{1}{5} - \frac{9}{20} = \square$$

Which mixed number makes the equation true?

- A.  $1\frac{1}{4}$
- B.  $2\frac{8}{15}$
- C.  $2\frac{3}{4}$
- D.  $3\frac{5}{20}$

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.PAFR.2.1</b>
	<b>Indicator Description</b>	Use a strategy to compute sums and differences of fractions and mixed numbers with unlike denominators and justify the sum or difference to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.
	<b>3 Answer Key</b>	<b>C</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>High Difficulty</b>

4. What is the value of  $1\frac{4}{5} + 3\frac{1}{3}$ ?

A.  $4\frac{2}{15}$

B.  $4\frac{5}{8}$

C.  $5\frac{2}{15}$

D.  $5\frac{5}{8}$

SC READY MATH Sample Item

**4**

**Indicator Alignment**

**2025 Indicator Alignment - 5.PAFR.2.1**

**Indicator Description**

Use a strategy to compute sums and differences of fractions and mixed numbers with unlike denominators and justify the sum or difference to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.

**Answer Key**

**C**

**Depth of Knowledge**

**1**

**Estimated Difficulty**

**High Difficulty**

5. Kara had 24 raffle tickets to sell. She sold  $\frac{1}{6}$  of her tickets on Monday and  $\frac{3}{4}$  of her tickets on Tuesday. What fraction of Kara’s total raffle tickets did she sell on Monday and Tuesday?
- A.  $\frac{11}{24}$
- B.  $\frac{11}{12}$
- C.  $\frac{2}{5}$
- D.  $\frac{1}{6}$

<b>5</b> SC READY MATH Sample Item	<b>Indicator Alignment</b>	2025 Indicator Alignment - 5.PAFR.2.1
	<b>Indicator Description</b>	Use a strategy to compute sums and differences of fractions and mixed numbers with unlike denominators and justify the sum or difference to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.
	<b>Answer Key</b>	B
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

6. Andrea runs a half marathon. She runs for  $1\frac{4}{5}$  hours and she walks for  $\frac{3}{4}$  hour.  
How many hours does it take Andrea to complete the half marathon?

- A.  $1\frac{7}{9}$
- B.  $1\frac{11}{20}$
- C.  $2\frac{7}{9}$
- D.  $2\frac{11}{20}$

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.PAFR.2.1</b>
	<b>Indicator Description</b>	Use a strategy to compute sums and differences of fractions and mixed numbers with unlike denominators and justify the sum or difference to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.
	<b>Answer Key</b>	<b>D</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>High Difficulty</b>

7. Taj has 3 ounces of salt to make different recipes. He puts  $\frac{1}{4}$  ounce of the salt in each recipe. If Taj uses all of the salt, how many recipes can he make?
- A.  $\frac{1}{12}$
  - B.  $\frac{3}{4}$
  - C.  $3\frac{1}{4}$
  - D. 12

<b>SC READY MATH Sample Item</b>	<b>7</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.PAFR.2.3</b>
		<b>Indicator Description</b>	Interpret and represent division of a whole number dividend by a unit fraction divisor and a unit fraction dividend by a whole number divisor and apply to real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, and 12.
		<b>Answer Key</b>	<b>D</b>
		<b>Depth of Knowledge</b>	<b>2</b>
		<b>Estimated Difficulty</b>	<b>High Difficulty</b>

8. A teacher uses  $\frac{1}{5}$  of the students in a class to make 3 equal groups. What fraction of the students in the class is in each group the teacher made?
- A.  $\frac{1}{15}$
  - B.  $\frac{1}{8}$
  - C.  $\frac{3}{5}$
  - D.  $\frac{5}{3}$

SC READY MATH Sample Item

**8**

<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.PAFR.2.3</b>
<b>Indicator Description</b>	Interpret and represent division of a whole number dividend by a unit fraction divisor and a unit fraction dividend by a whole number divisor and apply to real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, and 12.
<b>Answer Key</b>	<b>A</b>
<b>Depth of Knowledge</b>	<b>2</b>
<b>Estimated Difficulty</b>	<b>High Difficulty</b>

9. Rachel wrote the two number patterns shown.

- Pattern X starts with the number 3 and follows the rule “Add 5.”
- Pattern Y starts with the number 9 and follows the rule “Add 5.”

Which statement is true about Rachel’s two number patterns?

- A. The number in Pattern X will always be 6 less than the corresponding number in Pattern Y.
- B. The number in Pattern X will always be 6 more than the corresponding number in Pattern Y.
- C. The number in Pattern X will always be 5 more than the corresponding number in Pattern Y.
- D. The number in Pattern X will always be 3 times more than the corresponding number in Pattern Y.

**SC READY MATH Sample Item**

<b>9</b>	<b>Indicator Alignment</b>	5.ATO.3 (Does Not Align to a 2025 5th Grade Indicator)
	<b>Indicator Description</b>	Investigate the relationship between two numerical patterns.
	<b>Answer Key</b>	A
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

10. Richard and Sebastian each make a number pattern. The table shows the first four numbers in Richard’s and Sebastian’s number patterns.

**Two Number Patterns**

<b>Term</b>	<b>Richard’s Pattern</b>	<b>Sebastian’s Pattern</b>
1	7	1
2	10	6
3	13	11
4	16	16

Which two sets of ordered pairs correctly show Richard’s and Sebastian’s number patterns?

- A. Richard’s number pattern: (1, 7) (2, 10) (3, 13) (4, 16)  
Sebastian’s number pattern: (1, 1) (2, 6) (3, 11) (4, 16)
- B. Richard’s number pattern: (7, 1) (10, 6) (13, 11) (16, 16)  
Sebastian’s number pattern: (1, 7) (6, 10) (11, 13) (16, 16)
- C. Richard’s number pattern: (7, 3) (10, 3) (13, 3) (16, 3)  
Sebastian’s number pattern: (1, 5) (6, 5) (11, 5) (16, 5)
- D. Richard’s number pattern: (1, 7) (2, 17) (3, 30) (4, 46)  
Sebastian’s number pattern: (1, 1) (2, 7) (3, 18) (4, 34)

SC READY MATH Sample Item

<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.3.1</b>
<b>Indicator Description</b>	Identify the origin, x-axis, and y-axis in the coordinate system. Write, plot, and label ordered pairs, including values in a function table, in the first quadrant of the coordinate plane
<b>10 Answer Key</b>	<b>A</b>
<b>Depth of Knowledge</b>	<b>2</b>
<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

11. Dominic plots a point on a coordinate grid.

- The  $x$ -coordinate is 6.
- The  $y$ -coordinate is less than the  $x$ -coordinate.

Which ordered pair could be Dominic’s point on the coordinate grid?

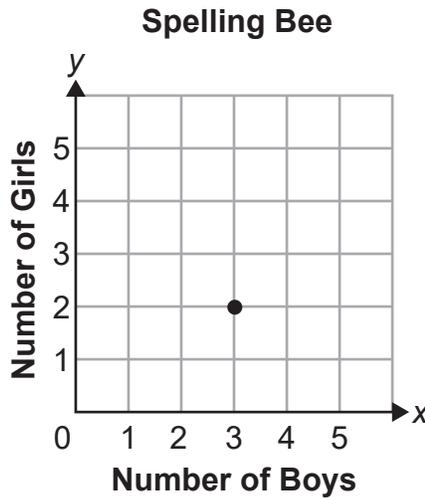
- A. (5, 6)
- B. (6, 5)
- C. (6, 7)
- D. (7, 6)

<b>SC READY MATH Sample Item</b>	<b>11</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.3.1</b>
		<b>Indicator Description</b>	Identify the origin, $x$ -axis, and $y$ -axis in the coordinate system. Write, plot, and label ordered pairs, including values in a function table, in the first quadrant of the coordinate plane.
		<b>Answer Key</b>	<b>B</b>
		<b>Depth of Knowledge</b>	<b>2</b>
		<b>Estimated Difficulty</b>	<b>Low Difficulty</b>

12. Which statement explains how to begin to plot the point at (5, 9) on a coordinate plane?
- A. Start at the origin and move 5 units up.
  - B. Start at the origin and move 5 units to the right.
  - C. Start at the origin and move 9 units to the right.
  - D. Start at the origin and move 9 units to the left.

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.3.2</b>
	<b>Indicator Description</b>	Represent mathematical and real-world situations by graphing, labeling, and interpreting points in the first quadrant of the coordinate plane.
	<b>12 Answer Key</b>	<b>B</b>
	<b>Depth of Knowledge</b>	<b>3</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

13. The point on the coordinate plane represents the students from Mika’s school competing in the spelling bee.



What does the ordered pair (3, 2) represent?

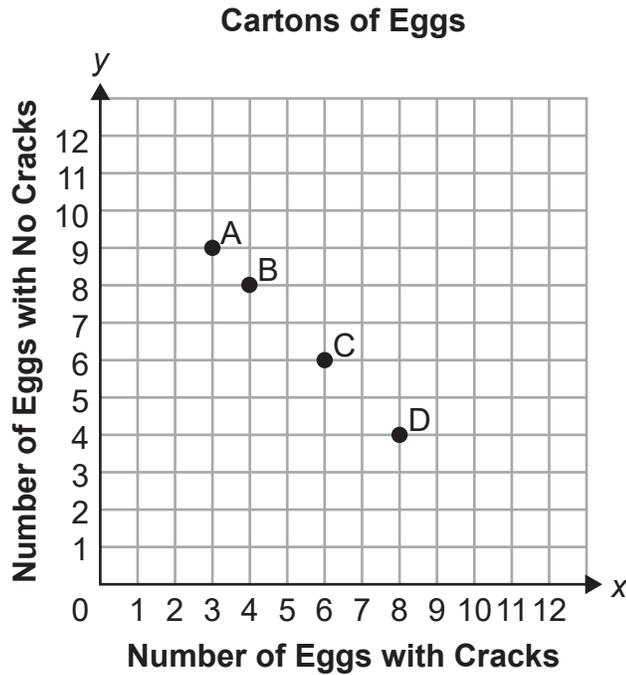
- A. There are 2 boys and 3 girls competing in the spelling bee.
- B. There are 5 boys and 2 girls competing in the spelling bee.
- C. There are a total of 5 students competing in the spelling bee and 3 of the students are girls.
- D. There are a total of 5 students competing in the spelling bee and 3 of the students are boys.

SC READY MATH Sample Item

**13**

<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.3.2</b>
<b>Indicator Description</b>	Represent mathematical and real-world situations by graphing, labeling, and interpreting points in the first quadrant of the coordinate plane.
<b>Answer Key</b>	<b>D</b>
<b>Depth of Knowledge</b>	<b>2</b>
<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

14. The coordinate grid shows four points that represent egg cartons at a grocery store.



Which point represents the egg carton with the highest number of eggs with cracks?

- A. point A
- B. point B
- C. point C
- D. point D

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.3.2</b>
	<b>Indicator Description</b>	Represent mathematical and real-world situations by graphing, labeling, and interpreting points in the first quadrant of the coordinate plane.
	<b>14 Answer Key</b>	<b>D</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

15. A parallelogram has 4 sides and each pair of opposite sides are parallel. A rhombus is a parallelogram in which all the sides are equal in length. Which statement must be true?
- A. All parallelograms are also rhombuses.
  - B. Some rhombuses are not parallelograms.
  - C. Each pair of opposite sides of a rhombus are parallel.
  - D. All the sides of a parallelogram are equal in length.

<b>SC READY MATH Sample Item</b>	<b>15</b>	<b>Indicator Alignment</b>	5.G.3 (Does Not Align to a 2025 5th Grade Indicator)
		<b>Indicator Description</b>	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
		<b>Answer Key</b>	C
		<b>Depth of Knowledge</b>	3
		<b>Estimated Difficulty</b>	High Difficulty

16. A polygon is a regular polygon if
- all the sides are the same length, and
  - all the angles are the same measure.

Which polygon is a regular polygon?

- A. a rhombus without right angles
- B. a triangle with all sides the same length
- C. a trapezoid with one set of parallel sides
- D. a rectangle with two different side lengths

<b>SC READY MATH Sample Item</b>	<b>16</b>	<b>Indicator Alignment</b>	5.G.3 (Does Not Align to a 2025 5th Grade Indicator)
		<b>Indicator Description</b>	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
		<b>Answer Key</b>	B
		<b>Depth of Knowledge</b>	2
		<b>Estimated Difficulty</b>	Medium Difficulty

17. Ramona throws a baseball as far as she can a number of times. All of Ramona’s attempts are between 114 and 120 feet. Which possible distance, in **yards**, can Ramona throw a baseball?
- A. 10
  - B. 39
  - C. 117
  - D. 228

<b>SC READY MATH Sample Item</b>	<b>17</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.2.1</b>
		<b>Indicator Description</b>	Given the unit equivalencies, convert within a single system of measurement from larger units to smaller units and smaller units to larger units for length, weight, liquid volume, and time. Use these conversions in solving real-world situations. Limit units to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, gallons, seconds, minutes, hours, milli-, centi-, kilo-, and base units (grams, liters, meters)
		<b>Answer Key</b>	<b>B</b>
		<b>Depth of Knowledge</b>	<b>2</b>
		<b>Estimated Difficulty</b>	<b>High Difficulty</b>

18. Karissa’s puppy weighs 6 pounds. How many **ounces** does Karissa’s puppy weigh?
- A. 10
  - B. 16
  - C. 22
  - D. 96

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 5.MGSR.2.1</b>
	<b>Indicator Description</b>	Given the unit equivalencies, convert within a single system of measurement from larger units to smaller units and smaller units to larger units for length, weight, liquid volume, and time. Use these conversions in solving real-world situations. Limit units to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, gallons, seconds, minutes, hours, milli-, centi-, kilo-, and base units (grams, liters, meters)
	<b>Answer Key</b>	<b>D</b>
	<b>Depth of Knowledge</b>	<b>1</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

19. A school builds a fence around all of the sides of a playground. Which measurement represents the amount of fence around the playground?
- A. area
  - B. perimeter
  - C. mass
  - D. volume

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	5.MDA.4 (Does Not Align to a 2025 5th Grade Indicator)
	<b>Indicator Description</b>	Differentiate among perimeter, area and volume and identify which application is appropriate for a given situation.
	<b>19 Answer Key</b>	<b>B</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>Low Difficulty</b>

20. Sabrina fills her fish tank with water. Which type of measurement can be used to describe the amount of water in the fish tank?
- A. volume
  - B. mass
  - C. perimeter
  - D. area

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	5.MDA.4 (Does Not Align to a 2025 5th Grade Indicator)
	<b>Indicator Description</b>	Differentiate among perimeter, area and volume and identify which application is appropriate for a given situation.
	<b>20 Answer Key</b>	<b>A</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>