

## **Grade 4 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 number is shown with a digit underlined.

193,554

How many times greater is the value of the 5 that is underlined than the value of the 5 that is not underlined?

- A. 2
- B. 10
- C. 100
- D. 500

**SC READY MATH Sample Item**

<b>1</b>	<b>Indicator Alignment</b>	4.NSBT.1 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Understand that, in a multi-digit whole number, a digit represents ten times what the same digit represents in the place to its right.
	<b>Answer Key</b>	<b>B</b>
	<b>Depth of Knowledge</b>	<b>1</b>
	<b>Estimated Difficulty</b>	<b>High Difficulty</b>

2. Caroline writes down the number of minutes since she was born. She notices the digit 6 shows up twice. The value of one 6 is 10 times the value of the other 6. Which could be the number of minutes since Caroline was born?
- A. 3,966,840
  - B. 4,600,060
  - C. 4,762,651
  - D. 5,106,846

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	4.NSBT.1 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Understand that, in a multi-digit whole number, a digit represents ten times what the same digit represents in the place to its right.
	<b>2 Answer Key</b>	A
	<b>Depth of Knowledge</b>	1
	<b>Estimated Difficulty</b>	High Difficulty

3. Which number sentence correctly compares  $\frac{11}{12}$  and  $\frac{3}{4}$ ?

A.  $\frac{11}{12} + \frac{3}{4}$

B.  $\frac{11}{12} = \frac{3}{4}$

C.  $\frac{11}{12} < \frac{3}{4}$

D.  $\frac{11}{12} > \frac{3}{4}$

<b>3</b> SC READY MATH Sample Item	<b>Indicator Alignment</b>	2025 Indicator Alignment - 4.NR.2.6
	<b>Indicator Description</b>	Compare fractions and mixed numbers with like and unlike denominators applying benchmark fractions such as 0, $\frac{1}{2}$ , 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.
	<b>Answer Key</b>	D
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

4. What is a correct comparison for  $\frac{5}{6}$  and  $\frac{5}{8}$ ?
- A.  $\frac{20}{6} < \frac{15}{8}$
  - B.  $\frac{20}{6} = \frac{15}{8}$
  - C.  $\frac{20}{24} < \frac{15}{24}$
  - D.  $\frac{20}{24} > \frac{15}{24}$

<b>SC READY MATH Sample Item</b>	<b>4</b>	<b>Indicator Alignment</b>	4.NSF.2 (Does Not Align to a 2025 4th Grade Indicator)
		<b>Indicator Description</b>	Compare two given fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$ and represent the comparison using the symbols $>$ , $=$ , or $<$ .
		<b>Answer Key</b>	D
		<b>Depth of Knowledge</b>	2
		<b>Estimated Difficulty</b>	Medium Difficulty

5. Kelvin cuts a loaf of bread into 12 equal pieces. He eats  $\frac{5}{12}$  of the loaf of bread. How many pieces of bread does Kelvin eat?

- A. 5
- B. 7
- C. 12
- D. 17

<b>5</b> SC READY MATH Sample Item	<b>Indicator Alignment</b>	4.NSF.4 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Apply and extend an understanding of multiplication by multiplying a whole number and a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100).
	<b>Answer Key</b>	A
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

6. What is the value of  $\frac{3}{10} \times 5$ ?

A.  $\frac{3}{50}$

B.  $\frac{15}{50}$

C.  $\frac{8}{10}$

D.  $\frac{15}{10}$

SC READY MATH Sample Item

**6**

<b>Indicator Alignment</b>	4.NSF.4 (Does Not Align to a 2025 4th Grade Indicator)
<b>Indicator Description</b>	Apply and extend an understanding of multiplication by multiplying a whole number and a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100).
<b>Answer Key</b>	D
<b>Depth of Knowledge</b>	1
<b>Estimated Difficulty</b>	Medium Difficulty

7. The shown list of numbers is ordered from least to greatest. The list is missing a number.

42.7 , \_\_\_\_\_ , 42.83

Which number could be the missing number from the list?

- A. 42.0
- B. 42.09
- C. 42.79
- D. 42.85

**SC READY MATH Sample Item**

<b>7</b>	<b>Indicator Alignment</b>	4.NSF.7 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Compare and order decimal numbers to hundredths, and justify using concrete and visual models.
	<b>Answer Key</b>	C
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Low Difficulty

8. Sanup compares 45.29 and 45.08 using the chart shown.

tens	ones	.	tenths	hundredths
4	5	.	2	9
4	5	.	0	8

Sanup uses the chart to show 45.29 is greater than 45.08. Which statement **best** explains why 45.29 is greater than 45.08?

- A. The value of the 2 in the first number is greater than the value of the 0 in the second number.
- B. The value of the 9 in the first number is greater than the value of the 8 in the second number.
- C. The sum of the digits 9 and the 2 in the first number is greater than the sum of the digits 8 and the 0 in the second number.
- D. The first number has four digits greater than 0 and the second number has three digits greater than 0.

SC READY MATH Sample Item

**Indicator Alignment**      2025 Indicator Alignment - 4.NR.2.2

**Indicator Description**      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 (>).

**8**      **Answer Key**      A

**Depth of Knowledge**      3

**Estimated Difficulty**      High Difficulty

9. Drew starts a book that has 474 pages. He finishes the book in 6 days. He reads 48 pages on each of the first 2 days. He reads 125 pages on each of the next 2 days. He reads  $p$  pages on each of the last 2 days. Which equation can be used to find  $p$ , the number of pages Drew reads on each of the last 2 days?

- A.  $48 + 125 + p = 474$
- B.  $(48 \times 2) + (125 \times 2) + p = 474$
- C.  $(48 \times 2) + (125 \times 2) + (p \times 2) = 474$
- D.  $(48 \times 2) + (125 \times 2) + (p \times 2) = (474 \times 2)$

<b>SC READY MATH Sample Item</b>	<b>9</b>	<b>Indicator Alignment</b>	4.ATO.3 (Does Not Align to a 2025 4th Grade Indicator)
		<b>Indicator Description</b>	Solve multi-step, real-world problems using the four operations. Represent the problem using an equation with a variable as the unknown quantity.
		<b>Answer Key</b>	C
		<b>Depth of Knowledge</b>	3
		<b>Estimated Difficulty</b>	High Difficulty

**10.** Mr. Edwards has 12 pink erasers. He buys 8 boxes of white erasers. Each box of white erasers has 10 erasers in it. He puts all his erasers together. Then, he separates them into 4 equal piles.

How many erasers are in each pile?

- A. 20
- B. 23
- C. 26
- D. 32

<b>SC READY MATH Sample Item</b>	<b>10</b>	<b>Indicator Alignment</b>	4.ATO.3 (Does Not Align to a 2025 4th Grade Indicator)
		<b>Indicator Description</b>	Solve multi-step, real-world problems using the four operations. Represent the problem using an equation with a variable as the unknown quantity.
		<b>Answer Key</b>	B
		<b>Depth of Knowledge</b>	2
		<b>Estimated Difficulty</b>	High Difficulty

11. There are 48 people on a bus.

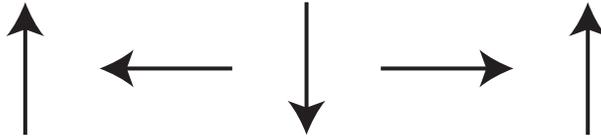
- At the library, 24 people exit the bus.
- Then, 3 people enter the bus at the library.
- Next, 3 people in each of the first 2 rows exit the bus at the community center.
- No people enter the bus at the community center.

How many people are on the bus after the stop at the community center?

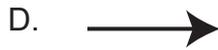
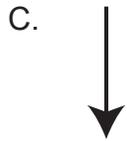
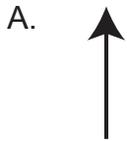
- A. 9
- B. 21
- C. 22
- D. 33

<b>SC READY MATH Sample Item</b>	<b>11</b>	<b>Indicator Alignment</b>	4.ATO.3 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Solve multi-step, real-world problems using the four operations. Represent the problem using an equation with a variable as the unknown quantity.	
	<b>Answer Key</b>	B	
	<b>Depth of Knowledge</b>	2	
	<b>Estimated Difficulty</b>	Medium Difficulty	

12. A pattern starts with the five shapes shown.



As the pattern continues, which shape will be the eighth shape in the pattern?



SC READY MATH Sample Item

<b>Indicator Alignment</b>	4.ATO.5 (Does Not Align to a 2025 4th Grade Indicator)
<b>Indicator Description</b>	Generate a number or shape pattern that follows a given rule and determine a term that appears later in the sequence.
<b>12 Answer Key</b>	D
<b>Depth of Knowledge</b>	2
<b>Estimated Difficulty</b>	High Difficulty

13. William is watching his favorite TV show online.

- The first week, he watches 3 episodes.
- Each week after that, he watches 2 episodes per week.

Which sequence shows the total number of episodes he has watched at the end of each week?

- A. 3, 6, 9, 12, 15, 18, 21
- B. 3, 5, 7, 9, 11, 13, 15
- C. 3, 6, 12, 24, 48, 96, 192
- D. 3, 5, 8, 13, 21, 34, 45

SC READY MATH Sample Item

<b>13</b>	<b>Indicator Alignment</b>	2025 Indicator Alignment - 4.PAFR.3.2
	<b>Indicator Description</b>	Describe and extend a numerical pattern that follows a rule using function tables and real-world situations.
	<b>Answer Key</b>	B
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

14. The figure shows the word wire in capital letters.

**WIRE**

Which capital letter of the word wire has more than one line of symmetry?

- A. W
- B. I
- C. R
- D. E

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	4.G.4 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
	<b>Answer Key</b>	B
	<b>Depth of Knowledge</b>	2
	<b>Estimated Difficulty</b>	Medium Difficulty

15. A cat weighs 3 kilograms. How many **grams** does the cat weigh?
- A. 103
  - B. 300
  - C. 1,003
  - D. 3,000

SC READY MATH Sample Item

**15**

<b>Indicator Alignment</b>	4.MDA.1 (Does Not Align to a 2025 4th Grade Indicator)
<b>Indicator Description</b>	Convert measurements within a single system of measurement, customary (i.e., in., ft., yd., oz., lb., sec., min., hr.) or metric (i.e., cm, m, km, g, kg, mL, L) from a larger to a smaller unit.
<b>Answer Key</b>	D
<b>Depth of Knowledge</b>	1
<b>Estimated Difficulty</b>	Medium Difficulty

16. Kent buys a bag of potatoes. He knows the weight of the bag in pounds. How can Kent find the weight of the bag of potatoes in **ounces**?
- A. multiply the weight of the bag in pounds by 16
  - B. divide the weight of the bag in pounds by 16
  - C. add 16 to the weight of the bag in pounds
  - D. subtract 16 from the weight of the bag in pounds

<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	<b>2025 Indicator Alignment - 4.MGSR.2.5</b>
	<b>Indicator Description</b>	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..
	<b>Answer Key</b>	<b>A</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>Medium Difficulty</b>

17. Rachel drove from her house to the beach. It took her 3 hours and 14 minutes. Then, she drove from the beach to her friend’s house. That took her 1 hour and 37 minutes. How much time did Rachel spend driving altogether?
- A. 4 hours and 23 minutes
  - B. 4 hours and 51 minutes
  - C. 5 hours and 1 minute
  - D. 5 hours and 13 minutes

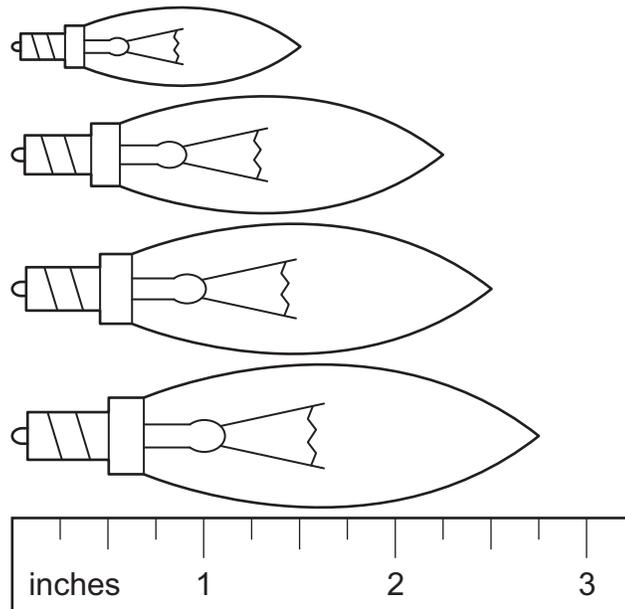
<b>SC READY MATH Sample Item</b>	<b>Indicator Alignment</b>	4.MDA.2 (Does Not Align to a 2025 4th Grade Indicator)
	<b>Indicator Description</b>	Solve real-world problems involving distance/length, intervals of time within 12 hours, liquid volume, mass, and money using the four operations.
	<b>Answer Key</b>	<b>B</b>
	<b>Depth of Knowledge</b>	<b>2</b>
	<b>Estimated Difficulty</b>	<b>Low Difficulty</b>

18. Kathleen saves money to buy a shirt that costs \$10.25. She saves \$3.00 each week for 4 weeks. After the 4th week, Kathleen buys the shirt. How much money does Kathleen have left after she buys the shirt?

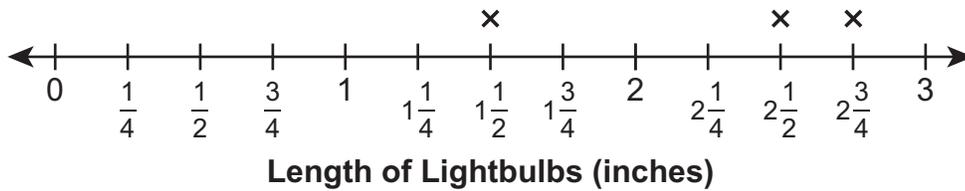
- A. \$1.75
- B. \$2.25
- C. \$2.75
- D. \$3.25

<b>SC READY MATH Sample Item</b>	<b>18</b>	<b>Indicator Alignment</b>	4.MDA.2 (Does Not Align to a 2025 4th Grade Indicator)
		<b>Indicator Description</b>	Solve real-world problems involving distance/length, intervals of time within 12 hours, liquid volume, mass, and money using the four operations.
		<b>Answer Key</b>	A
		<b>Depth of Knowledge</b>	2
		<b>Estimated Difficulty</b>	High Difficulty

19. Jacob correctly measures the lengths, in inches, of 4 lightbulbs as shown.



The line plot shows the length of 3 lightbulbs.



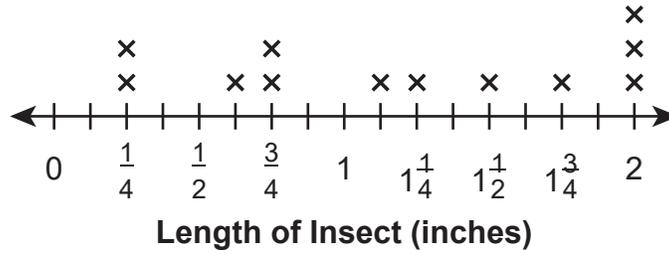
What is the length, in inches, of the lightbulb **not** represented on the line plot?

- A.  $1\frac{1}{2}$
- B.  $2\frac{1}{4}$
- C.  $2\frac{1}{2}$
- D.  $2\frac{3}{4}$

Item information on following page



20. The line plot shows the lengths, in inches, of different insects.



How many different insects are represented in the line plot?

- A. 7
- B. 8
- C. 10
- D. 12

SC READY MATH Sample Item

**20**

**Indicator Alignment**

**2025 Indicator Alignment - 4.DPSR.1.1**

**Indicator Description**

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.

**Answer Key**

**D**

**Depth of Knowledge**

**2**

**Estimated Difficulty**

**Medium Difficulty**