



Grade 3 Mathematics

SAMPLE ITEMS

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 (SCCCRS). This document contains a set of twenty SC READY test items that have been written to align with the South Carolina College- and Career-Ready Standards. These items were reviewed for content and bias prior to being field tested and approved for release to the public.

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 standards in a variety of ways. This document does not include all item types or standards.

Item Information Format

Standard Alignment	SCCCR
Standard Description	text from SCCCR
Answer Key	correct answer
Depth of Knowledge	cognitive demand
Estimated Difficulty	estimate based on student responses

Links

South Carolina College- and Career-Ready Standards

<https://ed.sc.gov/instruction/standards-learning/mathematics/standards/>

Norman Webb's Depth-of-Knowledge for the Four Content Areas

<http://www.webbalign.org/Webbs-DOK-Levels-Summary.pdf>

1. What is 389 rounded to the nearest hundred?
 - A. 300
 - B. 380
 - C. 390
 - D. 400

SC READY MATH Sample Item

1	Standard Alignment	3.NSBT.1
	Standard Description	Use place value understanding to round whole numbers to the nearest 10 or 100.
	Answer Key	D
	Depth of Knowledge	1
	Estimated Difficulty	Low Difficulty

2. Ms. Kren is reading a book with 524 pages.

How many pages are in Ms. Kren's book rounded to the nearest ten?

- A. 500
- B. 510
- C. 520
- D. 530

SC READY MATH Sample Item

2	Standard Alignment	3.NSBT.1
	Standard Description	Use place value understanding to round whole numbers to the nearest 10 or 100.
	Answer Key	C
	Depth of Knowledge	1
	Estimated Difficulty	Low Difficulty

3. Jerry is putting a puzzle together. The number of pieces he has left, rounded to the nearest hundred, is 400 pieces.

Which could be the actual number of pieces Jerry has left?

- A. 319
- B. 350
- C. 450
- D. 499

SC READY MATH Sample Item	Standard Alignment	3.NSBT.1
	Standard Description	Use place value understanding to round whole numbers to the nearest 10 or 100.
	3 Answer Key	B
	Depth of Knowledge	3
	Estimated Difficulty	Low Difficulty

4. Kerry is comparing the two numbers shown.

707,919 ____ 716,405

Which symbol should Kerry use to correctly compare the two numbers?

- A. <
- B. >
- C. +
- D. =

SC READY MATH Sample Item

4	Standard Alignment	3.NSBT.5
	Standard Description	Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or <.
	Answer Key	A
	Depth of Knowledge	1
	Estimated Difficulty	Medium Difficulty

5. Amir is filling a garden with dirt using a bucket.

One bucket of dirt fills $\frac{1}{10}$ of the garden.

So far, he has filled $\frac{8}{10}$ of the garden with dirt.

How many buckets of dirt has Amir put into the garden so far?

- A. $\frac{1}{10}$
- B. $\frac{8}{10}$
- C. 1
- D. 8

SC READY MATH Sample Item

5

Standard Alignment 3.NSF.1b

Standard Description

Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. A fraction a/b is the quantity formed by a parts of size $1/b$.

Answer Key

D

Depth of Knowledge

2

Estimated Difficulty

High Difficulty

6. A small pizza is cut into equal-size pieces. Emily ate 5 of the pieces.

This was $\frac{5}{8}$ of the entire small pizza.

Which fraction represents the size of one piece of the small pizza?

- A. $\frac{1}{8}$
- B. $\frac{3}{8}$
- C. $\frac{5}{8}$
- D. $\frac{8}{8}$

SC READY MATH Sample Item	6	Standard Alignment	3.NSF.1b
		Standard Description	Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. A fraction a/b is the quantity formed by a parts of size $1/b$.
		Answer Key	A
		Depth of Knowledge	2
		Estimated Difficulty	Medium Difficulty

7. Which number is equal to $\frac{8}{8}$?

A. $\frac{1}{8}$

B. 1

C. 8

D. $\frac{8}{1}$

SC READY MATH Sample Item

7

Standard Alignment 3.NSF.2c

Standard Description

Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that whole numbers can be written as fractions (e.g., $4 = 4/1$ and $1 = 4/4$).

Answer Key

B

Depth of Knowledge

1

Estimated Difficulty

High Difficulty

8. Vic writes $\frac{16}{1}$ to show the number of miles he rode his bike.

How many miles did Vic ride his bike?

- A. 1
- B. 6
- C. 15
- D. 16

SC READY MATH Sample Item

8

Standard Alignment 3.NSF.2c

Standard Description

Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that whole numbers can be written as fractions (e.g., $4 = \frac{4}{1}$ and $1 = \frac{4}{4}$).

Answer Key

D

Depth of Knowledge

1

Estimated Difficulty

Medium Difficulty

9. Mr. Sakatos buys 6 boxes of fruit bars. Each box has 4 fruit bars in it.
Which equation could Mr. Sakatos use to show the total number of fruit bars, t , he buys?

A . $6 - 4 = t$

B . $6 + 4 = t$

C . $6 \div 4 = t$

D . $6 \times 4 = t$

SC READY MATH Sample Item	9	Standard Alignment	3.ATO.3
		Standard Description	Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.
		Answer Key	D
		Depth of Knowledge	2
		Estimated Difficulty	Low Difficulty

10. A package of cookies has a total of 30 cookies.

- The package has 3 rows of cookies.
- Each row has the same number of cookies.
- To find c , the number of cookies in each row, Luis writes $3 \times c = 30$.

What is another equation Luis could use to find the number of cookies in each row?

- A. $3 + c = 30$
- B. $30 - c = 3$
- C. $3 \times 30 = c$
- D. $30 \div 3 = c$

SC READY MATH Sample Item	10	Standard Alignment	3.ATO.3
		Standard Description	Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.
		Answer Key	D
		Depth of Knowledge	2
		Estimated Difficulty	Medium Difficulty

11. Tatum opens 6 packages of pens. Each package has 4 pens. Then, he puts all the pens into 3 cups equally.

How many pens does Tatum put into each cup?

- A. 7
- B. 8
- C. 21
- D. 24

SC READY MATH Sample Item	11	Standard Alignment	3.ATO.8
		Standard Description	Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.
		Answer Key	B
		Depth of Knowledge	2
		Estimated Difficulty	Medium Difficulty

12. Kara has 3 shelves to put 18 books on.

- She puts an equal number of books on each shelf.
- Then, Kara buys 5 new books.
- She puts the 5 new books on the first shelf.

How many books does Kara have on the first shelf?

- A. 1
- B. 11
- C. 20
- D. 30

SC READY MATH Sample Item	12	Standard Alignment	3.ATO.8
		Standard Description	Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.
		Answer Key	B
		Depth of Knowledge	3
		Estimated Difficulty	Medium Difficulty

13. Which sentence about all quadrilaterals is true?

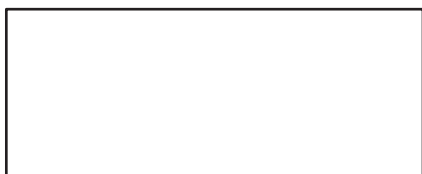
- A. They have four sides.
- B. They have right angles.
- C. They have pairs of matching sides.
- D. They have sides that are the same length.

SC READY MATH Sample Item	13	Standard Alignment	3.G.1
		Standard Description	Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
		Answer Key	A
		Depth of Knowledge	3
		Estimated Difficulty	Low Difficulty

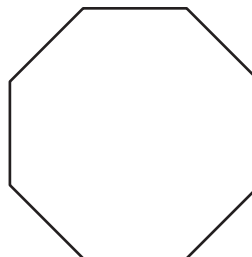
14. Kevin draws a quadrilateral that is **not** a rectangle.

Which shape could be Kevin's quadrilateral?

A.



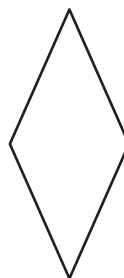
B.



C.



D.



SC READY MATH Sample Item

14

Standard Alignment

3.G.1

Standard Description

Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Answer Key

D

Depth of Knowledge

3

Estimated Difficulty

High Difficulty

15. Ricky draws a shape.

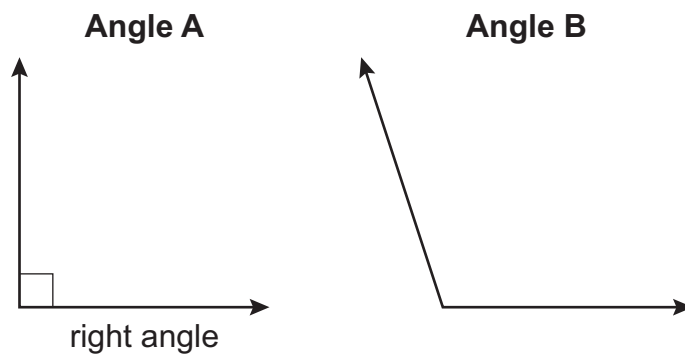
- The shape has four sides.
- The shape has exactly two right angles.
- Each side of the shape is a different length.

Which word **best** describes Ricky's shape?

- A. square
- B. rhombus
- C. rectangle
- D. quadrilateral

SC READY MATH Sample Item	15	Standard Alignment	3.G.1
		Standard Description	Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
		Answer Key	D
		Depth of Knowledge	3
		Estimated Difficulty	High Difficulty

16. Angle A and angle B are shown.



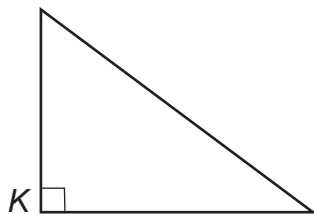
Which word describes angle B?

- A. acute
- B. obtuse
- C. closed
- D. right

SC READY MATH Sample Item

16	Standard Alignment	3.G.3
	Standard Description	Use a right angle as a benchmark to identify and sketch acute and obtuse angles.
	Answer Key	B
	Depth of Knowledge	1
	Estimated Difficulty	Low Difficulty

17. Kylie draws a shape.



A right angle is labeled K .

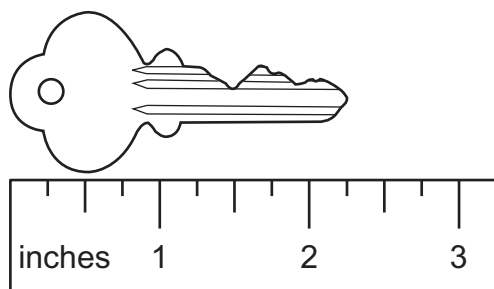
What word describes the other angles in Kylie's shape?

- A. acute
- B. open
- C. obtuse
- D. right

SC READY MATH Sample Item

17	Standard Alignment	3.G.3
	Standard Description	Use a right angle as a benchmark to identify and sketch acute and obtuse angles.
	Answer Key	A
	Depth of Knowledge	2
	Estimated Difficulty	High Difficulty

18. A key is shown with a ruler.



What is the length, to the nearest $\frac{1}{4}$ inch, of the key?

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

SC READY MATH Sample Item

18

Standard Alignment 3.MDA.4

Standard Description

Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.

Answer Key

C

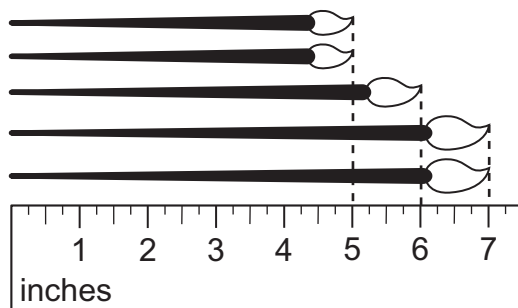
Depth of Knowledge

1

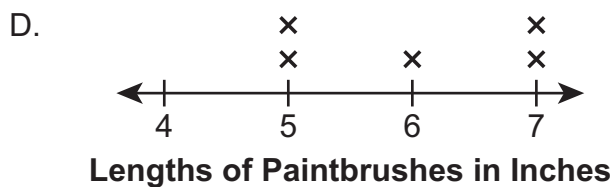
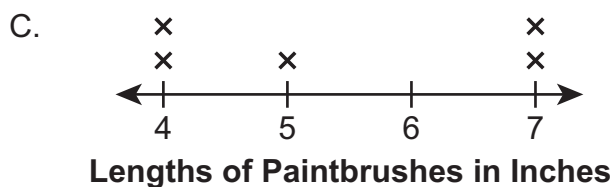
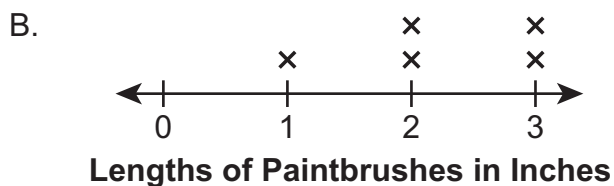
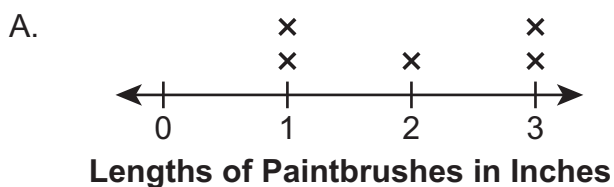
Estimated Difficulty

Medium Difficulty

19. Five paintbrushes are shown with a ruler.



Which line plot correctly shows the lengths of the paintbrushes?



Item Information on following page

SC READY MATH Sample Item

19

Standard Alignment 3.MDA.4

Standard Description

Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.

Answer Key

D

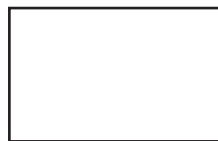
Depth of Knowledge

3

Estimated Difficulty

Low Difficulty

20. Ms. Jenkins sews along the perimeter of a rug. The rug is shown with the measurement of its length labeled.



8 feet

The perimeter of the rug is 26 feet.

What is the width, in feet, of the rug?

- A. 5
- B. 9
- C. 18
- D. 40

SC READY MATH Sample Item

20

Standard Alignment 3.MDA.6

Standard Description

Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Answer Key

A

Depth of Knowledge

3

Estimated Difficulty

High Difficulty