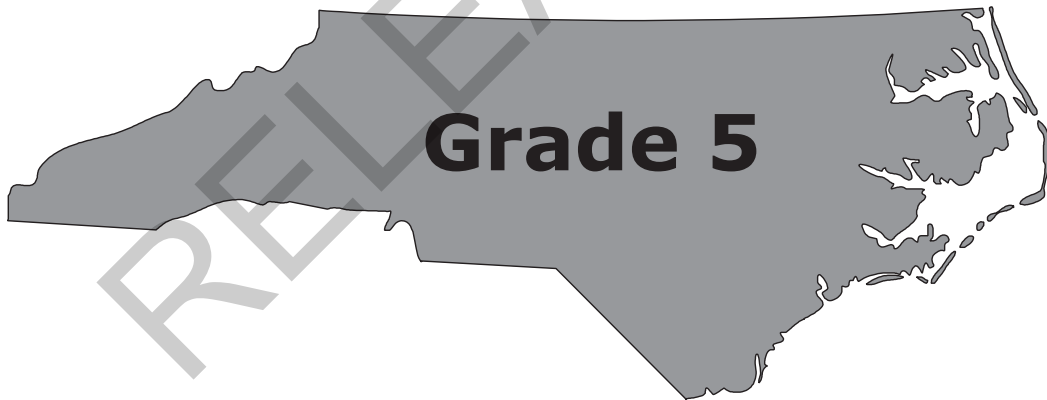


Released Form

**North Carolina
READY End-of-Grade
Assessment
Mathematics**

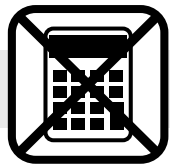


Student Booklet



Academic Services and Instructional Support
Division of Accountability Services





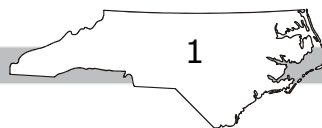
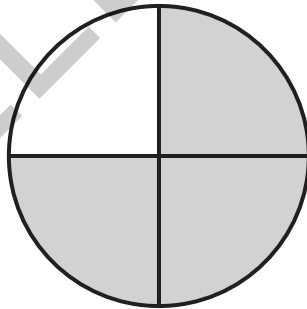
Sample Questions

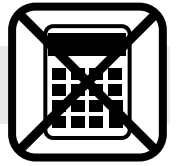
S1 Jeremy reads 3 books each week. How many books will Jeremy read in 5 weeks?

- A 8
- B 12
- C 15
- D 20

S2 What is $2.0 + 0.7$?

S3 What fraction of the circle is shaded?





1 A business printed 225 books on Friday. Each book had 350 pages. How many pages did the business print on Friday?

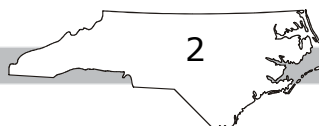
- A 78,750
- B 76,550
- C 1,700
- D 575

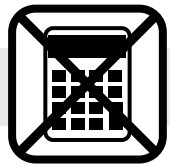
2 What is the value of this expression?

$$6\frac{7}{8} + 4\frac{3}{4} + 8\frac{1}{2}$$

- A $20\frac{1}{8}$
- B $19\frac{3}{8}$
- C $18\frac{11}{14}$
- D $18\frac{1}{2}$

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3 There were 5 pizzas at the pizza party for two families.

- Caroline's family ate $1\frac{3}{8}$ pizzas.
- Julia's family ate $1\frac{2}{6}$ pizzas.

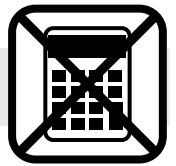
What is the **closest** estimate of how much pizza was left?

- A 1 pizza
- B 2 pizzas
- C 3 pizzas
- D 4 pizzas

4 Josh poured 38 gallons of water into 6 buckets. He poured the same amount into each bucket. How much water did Josh pour into each bucket?

- A $6\frac{4}{6}$ gallons
- B $6\frac{1}{2}$ gallons
- C $6\frac{1}{3}$ gallons
- D $6\frac{1}{6}$ gallons





5 Two-thirds of the students in a class are wearing blue jeans. Two-sixths of the students who are wearing blue jeans are also wearing red shirts. What fraction of the students in the class are wearing blue jeans and red shirts?

A $\frac{2}{18}$

B $\frac{2}{9}$

C $\frac{6}{18}$

D $\frac{4}{9}$

6 James will draw a rectangle with an area of 25 square inches. Which set of measurements can James use?

A length = $5\frac{1}{2}$ inches, width = 5 inches

B length = $5\frac{3}{4}$ inches, width = $4\frac{3}{4}$ inches

C length = $12\frac{1}{2}$ inches, width = 2 inches

D length = $12\frac{1}{2}$ inches, width = $12\frac{1}{2}$ inches





7 Which problem could the expression below help solve?

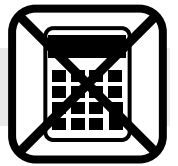
$$\frac{1}{2} \div 8$$

- A How much total feed will 2 chickens eat if each chicken is given $\frac{1}{8}$ pound of feed?
- B How much milk will each child get if 8 children share $\frac{1}{2}$ gallon of milk equally?
- C If each cake requires $\frac{1}{2}$ cup of milk, how much milk will be used to make 8 cakes?
- D Sixteen children are divided into 2 equal groups. If each child receives 8 pieces of candy, how many pieces of candy are required for each group of children?

8 Jim has $\frac{1}{2}$ pound of raisins. He put the raisins into 4 bags. He put the same amount into each bag. What amount of raisins did Jim put into each bag?

- A $\frac{1}{4}$ pound
- B $\frac{1}{6}$ pound
- C $\frac{1}{8}$ pound
- D $\frac{1}{10}$ pound

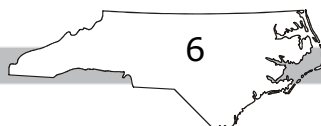


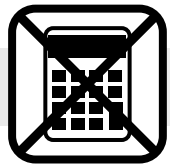


- 9 The total length of three boards is $\frac{7}{8}$ of a yard. The lengths of two of the boards are $\frac{1}{4}$ of a yard and $\frac{3}{16}$ of a yard. What is the length of the third board?
- A $\frac{9}{16}$ of a yard
- B $\frac{1}{2}$ of a yard
- C $\frac{7}{16}$ of a yard
- D $\frac{3}{8}$ of a yard
- 10 A baker made cookies before he opened his store in the morning.
- He sold $2\frac{3}{4}$ dozen of his cookies in the morning.
 - He sold $3\frac{1}{2}$ dozen of his cookies in the afternoon.
 - There were still $4\frac{1}{3}$ dozen of his cookies left when he closed the store.

How many cookies did the baker make before he opened the store?

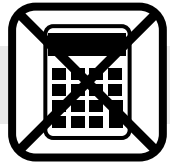
- A 10 dozen
- B $10\frac{5}{12}$ dozen
- C $10\frac{1}{2}$ dozen
- D $10\frac{7}{12}$ dozen





- 11 At a picnic, 12 people shared 4 large sandwiches equally. How much of a sandwich did each person get to eat?
- A $\frac{1}{2}$ of a sandwich
 - B $\frac{1}{3}$ of a sandwich
 - C $\frac{1}{4}$ of a sandwich
 - D $\frac{1}{6}$ of a sandwich
- 12 Each of 5 boys ate $\frac{2}{3}$ of a pizza. What is the total amount of pizza the boys ate?
- A $4\frac{1}{3}$ pizzas
 - B 4 pizzas
 - C $3\frac{1}{3}$ pizzas
 - D 3 pizzas





13 Mrs. Jones has half of a pie left from yesterday's dinner. Today, her four children will share this leftover pie equally. What fraction of a whole pie will each child get?

A $\frac{1}{8}$

B $\frac{1}{6}$

C $\frac{1}{4}$

D $\frac{1}{2}$

14 A dog's food bowl holds 2 cups of dog food. Pete uses a scoop that holds $\frac{1}{3}$ of a cup of dog food. How many scoops will it take for Pete to fill the dog bowl?

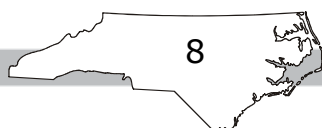
A 6

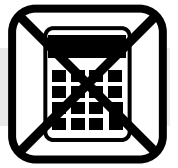
B 5

C 4

D 3

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15 Sheila had 1 gallon of milk. She used $\frac{1}{4}$ of a gallon of milk to make ice cream. She used $\frac{1}{6}$ of a gallon to bake cakes. How much milk is left?

A $\frac{5}{12}$ of a gallon

B $\frac{7}{12}$ of a gallon

C $\frac{8}{12}$ of a gallon

D $\frac{8}{10}$ of a gallon

16 What is the value of the product $\frac{2}{3} \times \frac{9}{5}$?

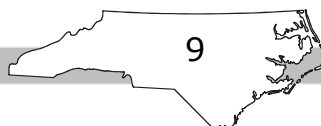
A $\frac{10}{27}$

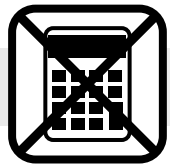
B $1\frac{1}{5}$

C $1\frac{3}{8}$

D $3\frac{3}{5}$

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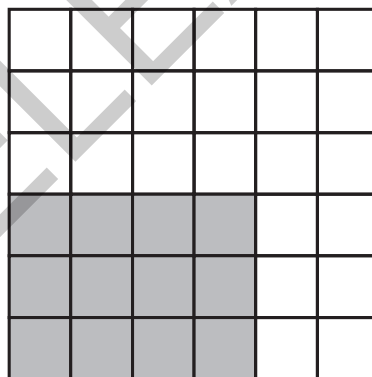
Questions 17 through 22 require you to write your answers in the boxes provided on your answer sheet. Write only one number or symbol in each box and fill in the circle in each column that matches what you have printed. Fill in only one circle in each column.

- 17 The fifth grade has 152 students. Each student has 18 pencils. How many pencils do the students have altogether?
- 18 How many 16-ounce bottles would be needed to hold the same total amount of water as 56 bottles that each holds 20 ounces?
- 19 What is the value of $4.25 \div 17 \times 122$?

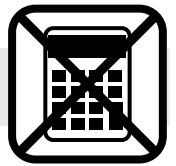
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- 20 A right rectangular prism measures 8 feet tall, 3 feet wide, and 5 feet long. What is the volume of the prism in cubic feet?
- 21 Janie bought $3\frac{1}{2}$ pounds of apples at the store. She used $2\frac{3}{5}$ pounds of apples to make a pie. How many pounds of apples does she have left?
- 22 The picture below shows a large square with side lengths equal to 1 yd. The square is divided into smaller squares that are all of equal size. Some of the smaller squares are shaded, forming a shaded rectangular region.



What is the area (in square feet) of the shaded rectangular region?



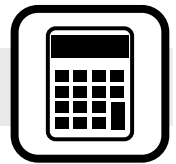
This is the end of the calculator inactive test questions.

Directions:

- 1. Look back over your answers for the calculator inactive questions. You will not be able to go back and work on these questions once you are given a calculator.**
- 2. Raise your hand to let your teacher know you are ready to begin the calculator active test questions.**
- 3. Do not begin work on the calculator active test questions until your teacher has given you a calculator.**

RELEASED



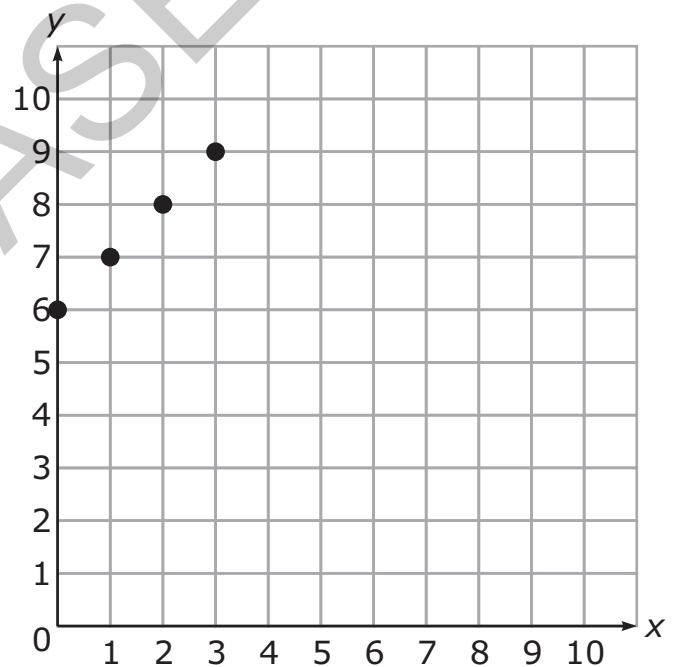
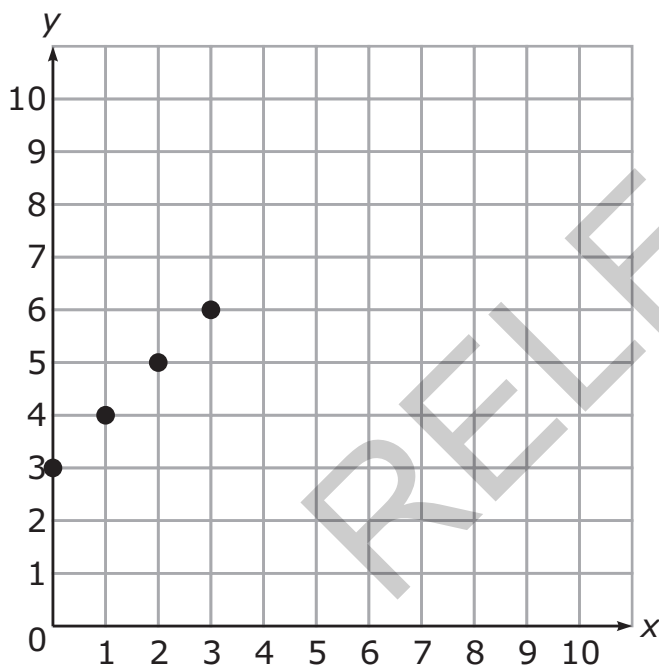


- 23 Which pair of parentheses can be removed without changing the value of this expression?

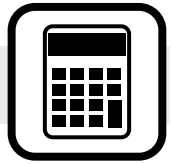
$$(1 + 2) \times (6 - 3) + (5 \times 8) \div (9 - 4)$$

- A parentheses around $1 + 2$
- B parentheses around $6 - 3$
- C parentheses around 5×8
- D parentheses around $9 - 4$

- 24 What are the rules for the two graphs below?



- A first graph: $y = 3 + x$; second graph: $y = 6 + x$
- B first graph: $y = 3 + x$; second graph: $y = 3 + x$
- C first graph: $y = 6 + x$; second graph: $y = 9 + x$
- D first graph: $y = 6 + x$; second graph: $y = 4 + x$



25 Which of these numbers has the ***greatest*** value?

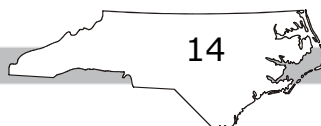
- A three tenths
- B five hundredths
- C fifty hundredths
- D one hundred thirty-six thousandths

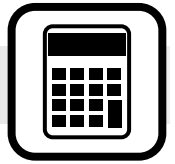
26 A farmer is packing grapefruit into boxes.

- He packs the same number of grapefruit into each box.
- He has packed a total of 264 grapefruit into 22 boxes.
- He still has 180 grapefruit that must be packed.

How many more boxes must the farmer pack?

- A 12
- B 15
- C 18
- D 21

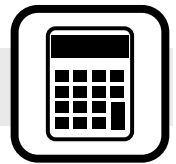




- 27 Scott had \$12.58.
- He purchased two apples for \$1.13 each and one bottle of juice for \$1.76.
 - There was no sales tax.

How much money did Scott have after his purchases?

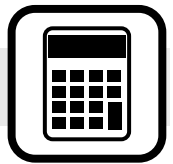
- A \$6.80
- B \$8.56
- C \$9.69
- D \$11.45
- 28 Six friends are sharing a pizza. The pizza is cut into eight equal slices. How many slices of pizza will each friend get if they share the pizza equally?
- A $1\frac{1}{6}$
- B $1\frac{1}{4}$
- C $1\frac{1}{3}$
- D $1\frac{1}{2}$



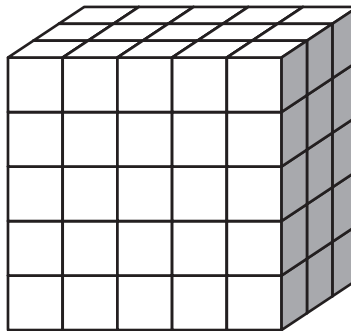
- 29 Patrick ate $\frac{3}{5}$ of a small pizza on Friday night. For lunch on Saturday, he ate $\frac{1}{2}$ of the leftover pizza. How much pizza did he eat for lunch on Saturday?
- A $\frac{7}{10}$ of the small pizza
- B $\frac{2}{5}$ of the small pizza
- C $\frac{3}{10}$ of the small pizza
- D $\frac{1}{5}$ of the small pizza
- 30 Jennifer needs to buy nuts.
- She has enough money to buy 20 ounces of nuts.
 - She puts $1\frac{1}{2}$ pounds of nuts into a bag.

How many ounces of nuts does Jennifer need to remove to have 20 ounces remaining in the bag?

- A 4 ounces
- B 8 ounces
- C 10 ounces
- D 16 ounces

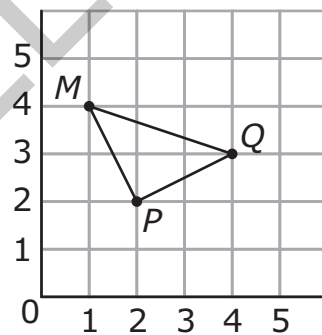


- 31 Each smaller cube in this right rectangular prism has a volume of 1 cubic unit.



What is the volume of the prism?

- A 15 cubic units
 - B 25 cubic units
 - C 75 cubic units
 - D 100 cubic units
- 32 Which point is inside triangle MPQ ?



- A (2, 3)
- B (3, 2)
- C (3, 4)
- D (4, 3)



- 33 Jay mows lawns and washes cars to earn money.
- He earns \$8 for each lawn he mows.
 - He earns \$5 for each car he washes.
 - On Friday, he mowed 3 lawns and washed 3 cars.
 - On Saturday, he spent \$15 of the money he earned.

Which expression shows the amount of money Jay had left?

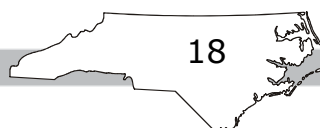
- A $(3 \times 8 + 5) - 15$
 B $3 \times (8 + 5) - 15$
 C $(3 + 8 + 5) - 15$
 D $(8 + 5) - 15 \times 3$

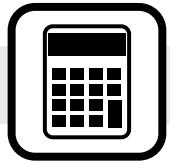
- 34 What is another way to write 2.64×10^2 ?

- A $26\frac{4}{100}$
 B $26\frac{4}{10}$
 C 264
 D 2,640

- 35 What is 0.1675 rounded to the nearest hundredth?

- A 0.17
 B 0.168
 C 0.167
 D 0.16





36 At a store, bananas cost \$0.68 per pound. How much will 4.5 pounds of bananas cost?

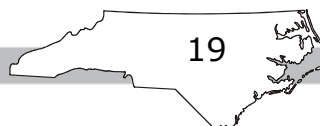
- A \$2.72
- B \$3.06
- C \$3.60
- D \$3.82

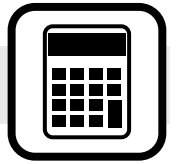
37 Mrs. Lewis will put a fence around her rectangular garden.

- The length of the garden is $9\frac{5}{6}$ yards.
- The width of the garden is $5\frac{1}{4}$ yards.

How many yards of fencing does Mrs. Lewis need?

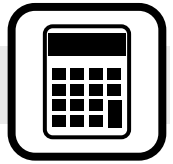
- A $14\frac{6}{10}$
- B $29\frac{1}{12}$
- C $29\frac{1}{5}$
- D $30\frac{1}{6}$



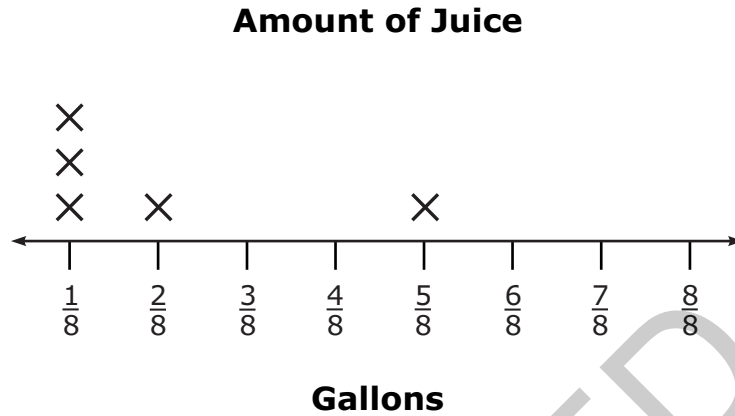


- 38 A rectangle has a length of $4\frac{1}{2}$ inches and a width of $2\frac{3}{4}$ inches. What is the area of the rectangle, in square inches?
- A $12\frac{3}{8}$
- B $12\frac{1}{4}$
- C $6\frac{2}{3}$
- D $6\frac{3}{8}$
- 39 Jasmine feeds her cat $\frac{1}{4}$ cup of food each day. There are 6 cups of cat food in the bag. How many days will the bag of cat food last?
- A 4
- B 6
- C 10
- D 24

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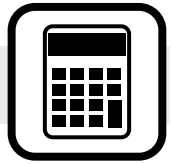
- 40 The line plot below shows how much orange juice (in gallons) is in five different one-gallon jugs.



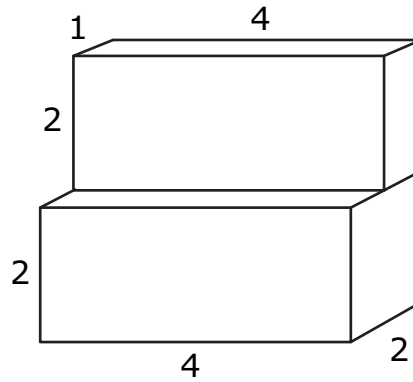
The juice will be poured from jug to jug so that all five jugs contain the same amount of juice. How much juice will there be in each jug?

- A $\frac{1}{8}$ gallon
- B $\frac{1}{4}$ gallon
- C $\frac{3}{8}$ gallon
- D $\frac{1}{2}$ gallon

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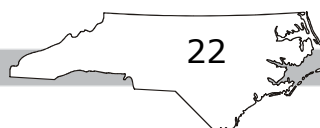


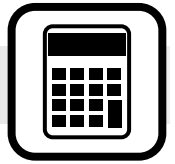
41 A solid geometric figure is shown below.



What is the volume (in cubic units) of the solid figure?

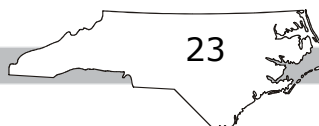
- A 12
 - B 15
 - C 24
 - D 30
- 42 Which choice is a polygon that could have exactly two sides with the same length?
- A rhombus
 - B scalene triangle
 - C regular octagon
 - D isosceles triangle

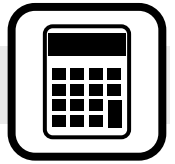




- 43 A full punch bowl holds 4 gallons of punch. If each glass holds 4 ounces of punch, how many glasses can be filled from a full punch bowl?
- A 16 glasses
 - B 32 glasses
 - C 64 glasses
 - D 128 glasses
- 44 Mrs. Renning drove her car 3,718 miles last summer. Her car uses 1 gallon of gas for every 26 miles driven. How many gallons of gas did Jay use last summer?
- A 133
 - B 139
 - C 142
 - D 143

RELEASED



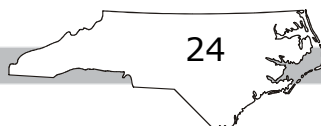


Directions:

This is the end of the mathematics test.

- 1. Put all of your papers inside your test book and close your test book.**
- 2. Place your calculator on top of the test book.**
- 3. Stay quietly in your seat until your teacher tells you that testing is finished.**

RELEASED



GRADE 5 MATH—RELEASED FORM

Grade 5 Math RELEASED Form 2012–2013 Answer Key

Item Number	Type	Key	Domain
S1	MC	C	
S2	GR	2.7	
S3	GR	$\frac{3}{4}$ or .75	

Calculator Inactive



Item Number	Type	Key	Domain
1	MC	A	NBT — Number and Operations in Base Ten
2	MC	A	NF — Number and Operations—Fractions
3	MC	B	NF — Number and Operations—Fractions
4	MC	C	NF — Number and Operations—Fractions
5	MC	B	NF — Number and Operations—Fractions
6	MC	C	NF — Number and Operations—Fractions
7	MC	B	NF — Number and Operations—Fractions
8	MC	C	NF — Number and Operations—Fractions
9	MC	C	NF — Number and Operations—Fractions
10	MC	D	NF — Number and Operations—Fractions
11	MC	B	NF — Number and Operations—Fractions
12	MC	C	NF — Number and Operations—Fractions
13	MC	A	NF — Number and Operations—Fractions
14	MC	A	NF — Number and Operations—Fractions
15	MC	B	NF — Number and Operations—Fractions
16	MC	B	NF — Number and Operations—Fractions

GRADE 5 MATH—RELEASED FORM

Item Number	Type	Key	Domain
17	GR	2736	NBT — Number and Operations in Base Ten
18	GR	70	NBT — Number and Operations in Base Ten
19	GR	30.5	NBT — Number and Operations in Base Ten
20	GR	120	MD — Measurement and Data
21	GR	.9	NF — Number and Operations—Fractions
22	GR	3	NF — Number and Operations—Fractions

Calculator Active



Item Number	Type	Key	Domain
23	MC	C	OA — Operations and Algebraic Thinking
24	MC	A	OA — Operations and Algebraic Thinking
25	MC	C	NBT — Number and Operations in Base Ten
26	MC	B	NBT — Number and Operations in Base Ten
27	MC	B	NBT — Number and Operations in Base Ten
28	MC	C	NF — Number and Operations—Fractions
29	MC	D	NF — Number and Operations—Fractions
30	MC	A	MD — Measurement and Data
31	MC	C	MD — Measurement and Data
32	MC	A	G — Geometry
33	MC	B	OA — Operations and Algebraic Thinking
34	MC	C	NBT — Number and Operations in Base Ten
35	MC	A	NBT — Number and Operations in Base Ten
36	MC	B	NBT — Number and Operations in Base Ten
37	MC	D	NF — Number and Operations—Fractions
38	MC	A	NF — Number and Operations—Fractions
39	MC	D	NF — Number and Operations—Fractions

GRADE 5 MATH—RELEASED FORM

Item Number	Type	Key	Domain
40	MC	B	MD — Measurement and Data
41	MC	C	MD — Measurement and Data
42	MC	D	G — Geometry
43	MC	D	MD — Measurement and Data
44	MC	D	NBT — Number and Operations in Base Ten

Item Types:

MC = multiple choice

GR = gridded response

Links to instructions for the gridded-response items can be found on the [main accountability page](#).

RELEASED