## Released Form

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

Grade 3

## Student Booklet



READY
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Sample Questions

S1 Which number is the smallest?
A 51
B 62
C $\quad 73$
D 84

S2 What is $3+4$ ?
A 5
B 6
C 7
D 8


1 Tammy has 6 vases of tulips. There are 9 tulips in each vase. What is the total number of tulips in the vases?

A 15
B 36
C 54
D 63

2 What number is the solution to the equation below?

$$
3=\Delta \div 9
$$

A 3
B 12
C 18
D 27

3 Sally ran 2 miles each day for 4 days. Then she ran 3 miles each day for the next 4 days. How many miles did Sally run altogether in the 8 days?

A 12
B 17
C 20
D 24

4 Kim and Sara sold bags of cookies.

- Each bag had 8 cookies.
- Kim sold 4 bags of cookies.
- Sara sold 5 bags of cookies.

What is the total number of cookies Kim and Sara sold?
A 72
B 60
C 52
D 17

5 Mary bought 9 boxes of pencils. There are 50 pencils in each box. What is the total number of pencils Mary bought?

A 59
B 450
C 590
D 4,500
$6 \quad$ At which point is $\frac{3}{4}$ located on the number line?


A $P$
B $\quad Q$
C $R$
D $S$

7 There are 8 children on the playground. One-fourth of the children are on the swings. In which fraction model does the shaded part represent the children who are on the swings?

A


B


C


D


8 The bus schedule below has some missing times. The same amount of time passes between each bus.

| Bus Times |
| :---: |
| $3: 05$ |
| $3: 20$ |
| $3: 35$ |
| $\boldsymbol{?}$ |
| $4: 05$ |
| $\boldsymbol{?}$ |
| $4: 35$ |

What are the missing times in the table?
A $3: 40$ and $4: 10$
B $3: 45$ and $4: 15$
C $3: 50$ and 4:20
D $3: 55$ and 4:25

9 What is the area of this figure?


A 6 square cm
B $\quad 9$ square cm
C 12 square cm
D 18 square cm

10 Which category describes the figure shown below?


A trapezoid
B rectangle
C hexagon
D rhombus

11 At the store, one package of 3 pencils costs $\$ 1$.


Anna spent $\$ 7$ on pencils. How many pencils did Anna buy?
A 7
B 10
C 11
D 21

12 Which value for $N$ makes the equation correct?

$$
N \div 7=9
$$

A 81
B 63
C 54
D 45

13 There are 24 boxes. Two of the boxes are empty. Each of the other boxes contains 2 erasers. How many erasers are there altogether?

A 22
B 24
C 44
D 48

14 What is the value of $n$ in the equation $267+n=613$ ?
A 346
B 354
C 446
D 454

15 What fraction of the figure is shaded?


A $\frac{1}{6}$
B $\quad \frac{3}{4}$
C $\quad \frac{1}{5}$
D $\frac{5}{6}$

16 Which fraction is equal to 1 ?
A $\frac{1}{4}$
B $\quad \frac{4}{1}$
C $\quad \frac{4}{3}$
D $\quad \frac{4}{4}$

17 Jenna shaded $\frac{4}{8}$ of the circle below.


What is another way to name the fraction of the figure that is shaded?
A $\frac{1}{2}$
B $\quad \frac{1}{3}$

C $\quad \frac{1}{4}$
D $\quad \frac{1}{8}$

18 A company used the amounts of liquid shown below.


What is the total amount of liquid the company used?
A 305 liters
B 340 liters
C 395 liters
D 450 liters

19 Mr. Sim's yard has 4 sides.

- The distance around the yard is 176 feet.
- Three sides of his yard measure 48 feet, 37 feet, and 56 feet.

How long is the fourth side?
A 141 feet
B 85 feet
C 35 feet
D 21 feet

20 What fraction of the area of the model below is shaded?


A $\frac{1}{3}$

B $\frac{1}{4}$

C $\frac{2}{4}$
D $\frac{2}{5}$

21 Gina has a total of 32 marbles.

- She has an equal number of pink, yellow, green, and white marbles.
- She will put the marbles into 2 cups.
- $\quad$ She will put an equal number of each color marble into each cup.

How many green marbles will be in each cup?
A 2
B 4
C 6
D 8

22 A print shop has an order for 902 signs. The shop has already printed 705 signs. How many more signs does the print shop need to print to complete the order?

A 107
B 197
C 203
D 207

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.

23 Which expression is equal to $12 \times 5$ ?
A $2+(10 \times 5)$
B $\quad(6+5) \times(6+5)$
C $\quad(6 \times 5)+(6 \times 5)$
D $(10+5) \times(2+5)$

24 Mrs. Parrish has 3 sisters.

- $\quad$ She mailed 2 cards to each of her sisters in October.
- $\quad$ She mailed 4 cards to each of her sisters in November.
- The expression $(2 \times 3)+(4 \times 3)$ could be used to find the total number of cards Mrs. Parrish mailed to her sisters.

Which expression shows another way to find the total number of cards Mrs. Parrish mailed to her sisters?

A $\quad 2 \times 3+7$
B $\quad(2+3) \times 4$
C $\quad 3 \times 2+4$
D $3 \times(2+4)$

25 Which rule can be used to create the following list of numbers?

$$
101,114,127,140,153,166,179
$$

A Add 13.
B Add 14.
C Add 78 .
D Add 79 .

26 John counted 4 dollar bills and 384 pennies. To the nearest dollar, how much money did John count?

A $\$ 4$
B $\quad \$ 5$
C $\quad \$ 7$
D $\$ 8$

27 Jim is planting flowers in the garden shown below. He has already planted flowers in the sections that are shaded.


What fraction of Jim's garden still needs flowers to be planted?
A $\frac{1}{4}$
B $\quad \frac{1}{3}$
C $\quad \frac{2}{3}$
D $\frac{3}{4}$

28 The number line below is divided into equal parts.


What is the distance from $R$ to $T$ on the number line?
A $\frac{1}{4}$
B $\quad \frac{1}{3}$
C $\quad \frac{2}{4}$
D $\frac{3}{4}$

29 Third-graders chose their favorite type of book. Which graph shows that 6 more students chose science than chose history?


30 Kyle found the area of the shaded part of the figure by counting the total number of shaded tiles.


What other way could he have found the area?
A by multiplying 6 and 4
B by multiplying 4 and 4
C by adding 6 and 4
D by adding 4 and 4

31 A rectangular room has a perimeter of 36 feet. One side is 10 feet long.


How long is side $S$ ?
A 6 feet
B 8 feet
C 16 feet
D 26 feet

32 Four polygons are shown below.


Which statement is true?
A All four polygons are rhombuses.
B All four polygons are squares.
C All four polygons are rectangles.
D All four polygons are quadrilaterals.

33 Pam's grandparents pay Pam to help them each week.

- They pay her $\$ 12$ each week to mow their yard.
- They pay her $\$ 2$ each week to wash their dog.

Which expression shows how much Pam's grandparents will pay her in 7 weeks?
A $(12+7)+(12 \times 2)$
B $(2 \times 7)+(12 \times 2)$
C $\quad(12 \times 7)+(2 \times 7)$
D $(12+7) \times(2+7)$

34 Which expression can be used to find the value of $n$ in the table below?

| Input | Output |
| :---: | :---: |
| 3 | 9 |
| 4 | 12 |
| 5 | 15 |
| 6 | $n$ |
| 7 | 21 |

A $6 \times 3$
B $6+3$
C $6+6$
D $\quad 6 \times 6$

35 What rule is used to make the pattern below?

$$
72,64,56,48,40, \ldots
$$

A Add 8 each time.
B Subtract 8 each time.
C Multiply by 8 each time.
D Divide by 8 each time.

36 One-fourth of a garden is planted with potatoes. One-half of the garden is planted with corn. Another one-fourth of the garden is planted with carrots. Which choice shows how the garden could be planted?

A

| Potatoes |  |
| :---: | :---: |
| Carrots |  |

B

| Potatoes |  |
| :---: | :---: |
| Corn |  |

C


D


What is the distance from 0 to point $G$ on the number line below?


A $\frac{1}{2}$

B $\quad \frac{1}{3}$
C $\frac{2}{3}$
D $\frac{2}{2}$

38 The graph below shows the number of each type of pie sold at the bakery last month.


How many fewer chocolate pies were sold than apple pies?
A 40
B 45
C 50
D 55

39 Matthew measured the heights of 11 friends. The results are shown in the table below.

| Height | Boys |
| :---: | :---: |
| 48 in. | Josh |
| $48 \frac{1}{2} \mathrm{in}$. | Adam, Kyle |
| 50 in. | Steven, Alan, Tom |
| $51 \frac{3}{4} \mathrm{in}$. | Andrew |
| $52 \mathrm{in}$. | Mike, Robert, Jeff, Kevin |

Which line plot correctly displays Matthew's data?
A


B


C


D


The figure below shows the measurements of a playground.


How can the area of the playground be calculated?
A $\quad(10 \times 6)+(4 \times 5)$
B $\quad(10 \times 10)-(5 \times 5)$
C $\quad(6 \times 10)+(5 \times 10)$
D $(6 \times 10)+(10 \times 4)$

41 The polygon below is made of three triangles. The length of each side of each triangle is 4 cm .


What is the perimeter of the polygon?
A $\quad 16 \mathrm{~cm}$
B $\quad 20 \mathrm{~cm}$
C $\quad 24 \mathrm{~cm}$
D $\quad 36 \mathrm{~cm}$

42 Kim will cover part of her kitchen floor with the rug shown in the picture below.


Kitchen Floor


Rug

Which choice shows the greatest amount of the kitchen floor Kim can cover with the rug?

A $\frac{2}{8}$
B $\quad \frac{6}{8}$
C $\frac{1}{6}$
D $\frac{2}{6}$

43 Which figure is $\frac{1}{3}$ shaded?
A


B


C


D


44 Which fraction could replace the $R$ on the number line shown below?


A $\frac{2}{3}$
B $\frac{4}{5}$
C $\quad \frac{5}{8}$
D $\quad \frac{6}{8}$

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.


## Grade 3 Math-Released Form

# Grade 3 Math <br> RELEASED Form <br> 2012-2013 <br> Answer Key 

| Item Number | Type | Key | Domain |
| :---: | :---: | :---: | :--- |
| S 1 | MC | A |  |
| S 2 | MC | C |  |

Calculator Inactive

| Item Number | Type | Key | Domain |
| :---: | :---: | :---: | :--- |
| 1 | MC | C | OA - Operations and Algebraic Thinking |
| 2 | MC | D | OA - Operations and Algebraic Thinking |
| 3 | MC | C | OA - Operations and Algebraic Thinking |
| 4 | MC | A | OA - Operations and Algebraic Thinking |
| 5 | MC | B | NBT - Number and Operations in Base Ten |
| 6 | MC | C | NF - Number and Operations-Fractions |
| 7 | MC | B | NF - Number and Operations-Fractions |
| 8 | MC | C | MD - Measurement and Data |
| 9 | MC | B | MD - Measurement and Data |
| 10 | MC | A | G - Geometry |
| 11 | MC | D | OA - Operations and Algebraic Thinking |
| 12 | MC | B | OA - Operations and Algebraic Thinking |
| 13 | MC | C | OA - Operations and Algebraic Thinking |
| 14 | MC | A | NBT - Number and Operations in Base Ten |
| 15 | MC | D | NF - Number and Operations-Fractions |
| 16 | MC | D | NF - Number and Operations—Fractions |
| 17 | MC | A | NF - Number and Operations-Fractions |

## Grade 3 Math-Released Form

| Item Number | Type | Key | Domain |
| :---: | :---: | :---: | :--- |
| 18 | MC | C | MD - Measurement and Data |
| 19 | MC | C | MD - Measurement and Data |
| 20 | MC | A | G - Geometry |
| 21 | MC | B | OA - Operations and Algebraic Thinking |
| 22 | MC | B | NBT - Number and Operations in Base Ten |

Calculator Active

| Item Number | Type | Key | Domain |
| :---: | :---: | :---: | :--- |
| 23 | MC | C | OA - Operations and Algebraic Thinking |
| 24 | MC | D | OA - Operations and Algebraic Thinking |
| 25 | MC | A | OA - Operations and Algebraic Thinking |
| 26 | MC | D | NBT - Number and Operations in Base Ten |
| 27 | MC | A | NF - Number and Operations-Fractions |
| 28 | MC | C | NF - Number and Operations-Fractions |
| 29 | MC | D | MD - Measurement and Data |
| 30 | MC | A | MD - Measurement and Data |
| 31 | MC | B | MD - Measurement and Data |
| 32 | MC | D | G - Geometry |
| 33 | MC | C | OA - Operations and Algebraic Thinking |
| 34 | MC | A | OA - Operations and Algebraic Thinking |
| 35 | MC | B | OA - Operations and Algebraic Thinking |
| 36 | MC | A | NF - Number and Operations-Fractions |
| 37 | MC | C | NF - Number and Operations-Fractions |
| 38 | MC | B | MD - Measurement and Data |
| 39 | MC | D | MD - Measurement and Data |
| 40 | MC | A | MD - Measurement and Data |
| 2 |  |  |  |

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Grade 3 Math-Released Form
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| Item Number | Type | Key | Domain |
| :---: | :---: | :---: | :--- |
| 41 | MC | B | MD - Measurement and Data |
| 42 | MC | D | G - Geometry |
| 43 | MC | B | G - Geometry |
| 44 | MC | C | NF - Number and Operations-Fractions |

## Item Types:

MC = multiple choice

