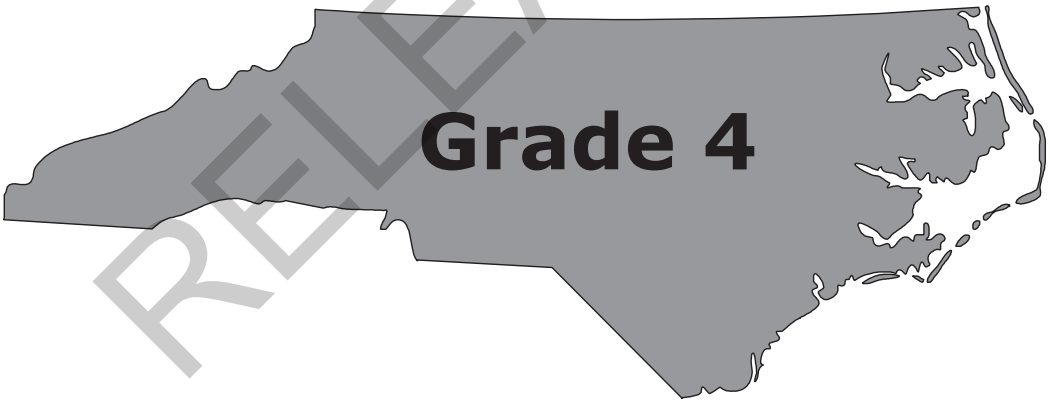
Released Form

North Carolina READY End-of-Grade Assessment Mathematics



RELEASED

Student Booklet

Academic Services and Instructional Support
Division of Accountability Services

Copyright © 2013 by the North Carolina Department of Public Instruction. All rights reserved.

Sample Questions

S1 Which number is the smallest?

A 51

B 62

C 73

D 84

S2 What is 3 + 4?

A 5

B 6

C 7

D 8

RELEASED

1 Mrs. Harper ordered 3 different colors of markers.

- She ordered 25 of each color marker.
- She also ordered some pencils.
- She ordered 3 times as many pencils as markers.

How many pencils did Mrs. Harper order?

A 675

B 225

C 75

D 25

2 Patrick is buying cheese for a party.

- He needs to buy 50 ounces of cheese.
- Cheese is sold only in 8- and 12-ounce packages.

Which choice shows the ***least*** amount of cheese Patrick can buy to have enough for the party?

A three 12-ounce packages and two 8-ounce packages

B five 12-ounce packages

C two 12-ounce packages and three 8-ounce packages

D seven 8-ounce packages

RELEASED

3 A stadium can hold 20,000 people when it is full. The table below shows the number of people that attended concerts at the stadium over a 3-day period.

Day	Number of People
Friday	17,563
Saturday	18,126
Sunday	16,618

If the stadium had been full for each of the concerts, how many more people would have attended the concerts over the same 3-day period?

A 7,693

B 7,692

C 7,593

D 7,592

4 A store sold 336 DVD players last year.

- The store sold 8 different brands of DVD players.
- The store sold the same number of each brand of DVD player.

How many of each brand of DVD player did the store sell?

A 40

B 42

C 44

D 48

RELEASED

5 The math team went to the aquarium to do research. Each team member paid $12 for the trip. There were 25 team members on the trip. What was the total amount the team members paid?

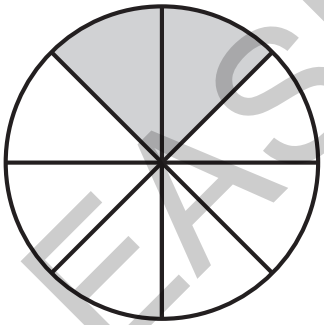
A $290

B $291

C $300

D $390

6 What fraction of the circle is shaded?



A $\frac{1}{4}$

B $\frac{2}{6}$

C $\frac{2}{4}$

D $\frac{6}{8}$

RELEASED

7 Daniel has a set of red, green, and blue marbles.

- The red marbles make up exactly $\frac{1}{2}$ of the set.
- The set has 2 blue marbles.
- The number of green marbles is twice the number of blue marbles.

How many marbles are in Daniel's set?

A 4

B 6

C 8

D 12

8 Ben had 2 boxes of blocks.

- Each box had 100 blocks.
- He built a tower with $\frac{1}{5}$ of the blocks out of each of the boxes.

How many blocks did Ben use to build the tower?

A 50

B 40

C 30

D 20

RELEASED

9 Kim had 120 cards in a box. She gave $\frac{6}{10}$ of the cards to Maddy. How many cards did Kim have left in the box?

A 12

B 20

C 48

D 60

10 Tom has twice as many marbles as Luke. Together they have 39 marbles. How many marbles does Tom have?

A 26

B 25

C 14

D 13

11 There were 28 white ducks swimming in a pond.

- Twice as many brown ducks flew in and landed in the pond.
- Then half of the white ducks flew away.

How many ducks remained in the pond?

A 14

B 28

C 56

D 70

RELEASED

12 The planet Mercury measures 4,879 kilometers from one side to the other. Earth measures 12,756 kilometers from one side to the other. What is the difference between the two measures?

A 7,877 kilometers

B 8,137 kilometers

C 12,123 kilometers

D 17,635 kilometers

13 There were 4,536 people at the carnival. Each person bought 8 tickets. How many tickets were bought at the carnival?

A 562

B 567

C 32,046

D 36,288

14 There are 638 students at a museum. All the students will tour the museum in groups of up to 6 students. What is the smallest number of tour groups that can be used?

A 16

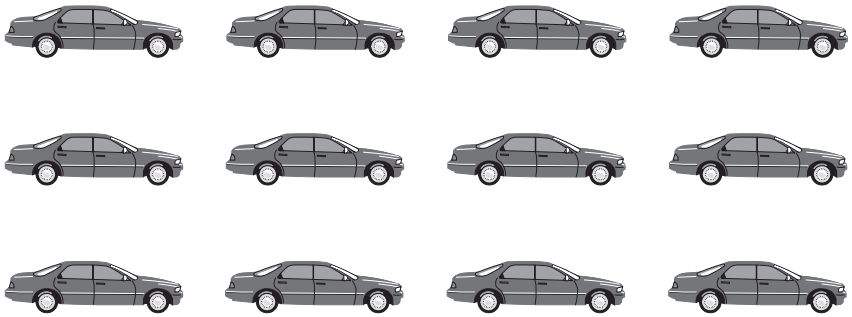
B 17

C 106

D 107

RELEASED

15 Lisa had a set of 12 toy cars.



Then she gave her sister 3 cars. What fraction of Lisa's set did Lisa give to her sister?

A $\frac{3}{4}$

B $\frac{1}{4}$

C $\frac{2}{3}$

D $\frac{1}{3}$

16 Julie used $12\frac{3}{4}$ gallons of water on her garden on Monday. She used $15\frac{1}{4}$ gallons of water on Tuesday. What is the total amount of water Julie used to water her garden on Monday and Tuesday?

A 27 gallons

B $27\frac{1}{2}$ gallons

C 28 gallons

D $28\frac{1}{4}$ gallons

RELEASED

17 At the supermarket, Jalen bought three kinds of meat. He purchased $\frac{1}{4}$ pound of roast beef, $\frac{3}{4}$ pound of ham, and $\frac{3}{4}$ pound of turkey. Which choice describes the total weight of the meats?

A less than 1 pound

B between 1 and $1\frac{1}{2}$ pounds

C between $1\frac{1}{2}$ and 2 pounds

D more than 2 pounds

18 What is the value of N in the equation below?

$$4 \times \frac{3}{4} = N$$

A $\frac{12}{16}$

B $\frac{7}{4}$

C 3

D 4

RELEASED

19 Vicky poured $\frac{50}{100}$ liter of water into a bowl. Susan poured $\frac{3}{10}$ liter of water into the same bowl. What was the total amount of water the girls poured into the bowl?

A $\frac{8}{10}$ liter

B $\frac{8}{100}$ liter

C $\frac{53}{10}$ liters

D $\frac{53}{100}$ liter

20 Mark and Leonard went bird-watching.

- Leonard saw 4 times as many red birds as Mark.
- Leonard saw 28 red birds.

Which equation could be used to find how many red birds Mark saw (n)?

A $4 \times 28 = n$

B $28 - 4 = n$

C $4 + 28 = n$

D $28 \div 4 = n$

RELEASED

21 Which fraction is equivalent to $\frac{75}{100}$?

A $\frac{3}{4}$

B $\frac{3}{6}$

C $\frac{1}{3}$

D $\frac{1}{4}$

22 Marcie and Alexis went running. The distance Alexis ran was farther than the distance Marcie ran. Marcie ran $\frac{5}{8}$ of a mile. Which could be the distance Alexis ran?

A $\frac{2}{3}$ mile

B $\frac{10}{16}$ mile

C $\frac{1}{2}$ mile

D $\frac{3}{8}$ mile

RELEASED

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

STOP

23 Which number is a multiple of 6?

A 65

B 70

C 79

D 96

24 One number has 4 thousands, 12 hundreds, and 0 tens. Another number has 4 thousands, 6 hundreds, and 5 tens. Which choice correctly compares the two numbers?

A 4,120 < 4,650

B 4,200 < 4,650

C 5,200 > 4,065

D 5,200 > 4,650

25 During the first year, a bakery sold 37,580 bags of cookies. During the second year, the bakery sold 5,000 more bags than were sold the first year. What is the total number of bags of cookies sold during the first two years, rounded to the nearest 1,000?

A 43,000

B 44,000

C 80,000

D 82,000

RELEASED

26 Which choice is equal to 2.5?

A $\frac{2}{5}$

B $2\frac{1}{5}$

C $2\frac{4}{10}$

D $\frac{5}{2}$

27 Sue has 10 gallons of water. How many quarts of water does she have?

A 10

B 20

C 30

D 40

28 The lengths and widths of four rectangles are shown below. Which rectangle has a perimeter of 20 ft?

A length = 10 ft, width = 10 ft

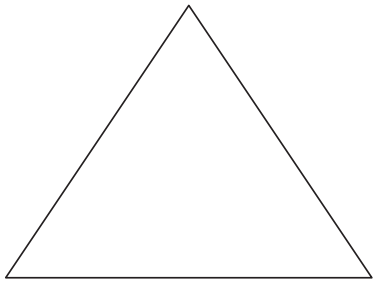
B length = 9 ft, width = 1 ft

C length = 7 ft, width = 2 ft

D length = 5 ft, width = 2 ft

RELEASED

29 The sum of the measures of the three angles in a triangle is 180°.



What is the measure of one angle in an equilateral triangle?

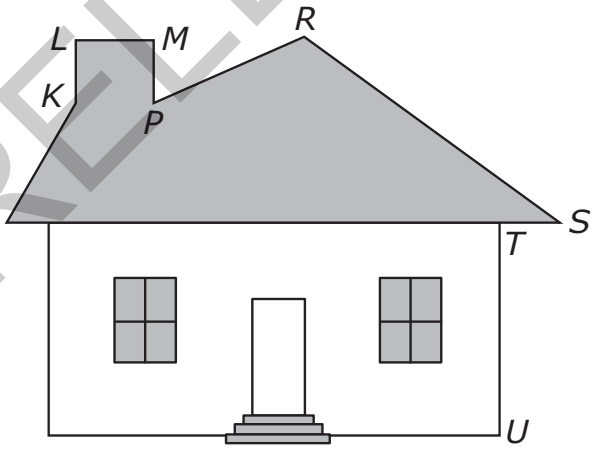
A 30°

B 60°

C 90°

D 120°

30 Which angle in the drawing below is an obtuse angle?



A $\angle KLM$

B $\angle MPR$

C $\angle PRS$

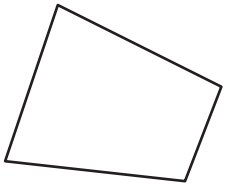
D $\angle STU$

RELEASED

31 Which figure is a parallelogram?

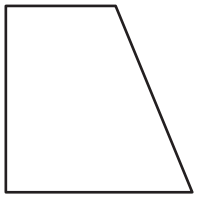
A

B



C

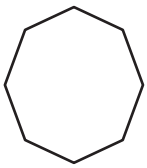
D



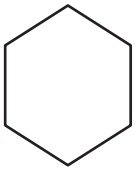
RELEASED

32 Which shape has a line of symmetry that creates two trapezoids?

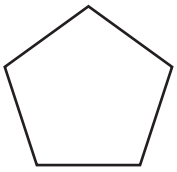
A



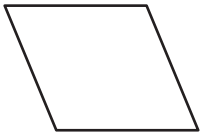
B



C



D



RELEASED

33 What are the next three numbers in this pattern?

6,000 6,003 6,009 6,018 6,030 6,045 _____ _____ _____

A 6,060 6,075 6,090

B 6,060 6,078 6,099

C 6,063 6,081 6,099

D 6,063 6,084 6,108

34 Which choice has a total of 4,520?

A 45 hundreds and 52 tens

B 45 hundreds and 20 tens

C 40 hundreds and 62 tens

D 38 hundreds and 72 tens

35 A school is collecting books for a book sale.

- The goal is to collect 800 books.
- On Monday, students brought 20 boxes of 18 books each.
- On Tuesday, students brought 10 boxes of 13 books each.

Which is ***closest*** to the number of books the school still needs to collect to meet its goal?

A 200

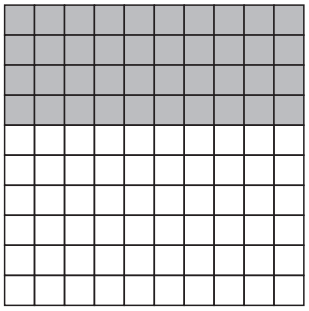
B 300

C 400

D 700

RELEASED

36 Which decimal is less than the fraction shaded in the grid below?



A 0.46

B 0.50

C 0.36

D 0.40

37 Addie got to the park at 7:45. While she was there, she walked her dog for 35 minutes and played for 15 minutes. At what time did Addie leave the park?

A 8:00

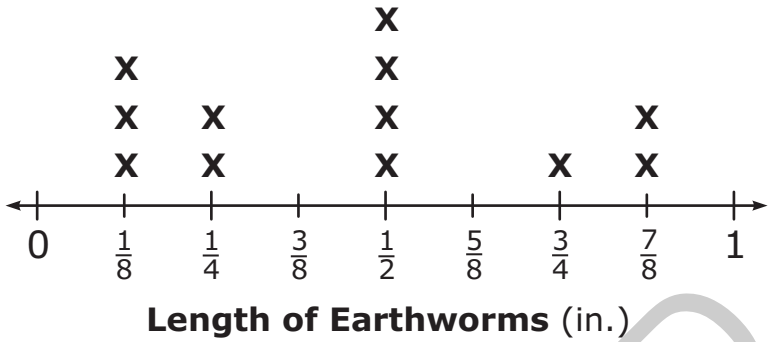
B 8:20

C 8:30

D 8:35

RELEASED

38 Using the figure below, what is the difference in the length between the longest earthworm and shortest earthworm?



A $\frac{1}{4}$ in.

B $\frac{1}{2}$ in.

C $\frac{6}{8}$ in.

D 1 in.

39 A security camera rotates 30° every 10 seconds. How long does it take the camera to rotate 360°?

A 1 minute

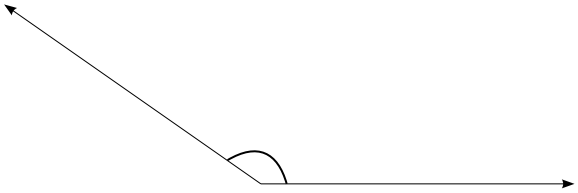
B 2 minutes

C 5 minutes

D 12 minutes

RELEASED

40 What kind of angle is shown below?



A a right angle

B an acute angle

C an obtuse angle

D a straight angle

41 Which statement is ***always*** true for a square, but ***not always*** true for a rhombus?

A Two angles are obtuse.

B All sides are equal.

C Two or more angles are right angles.

D More than two sides are parallel.

42 The sides of a rectangle measure 2 inches and 4 inches. How many lines of symmetry does the rectangle have?

A 2

B 3

C 4

D 8

RELEASED

43 Sabrina rounded the size of a park to the nearest thousand acres. Her estimate was 276,000 acres. What number could be the exact number of acres?

A 276,543

B 276,479

C 275,424

D 275,289

44 A hallway is 9 yards long. How many inches long is the hallway?

A 324 inches

B 216 inches

C 108 inches

D 90 inches

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

STOP