### New York NYSTP 2021 Grade 4 Math

Exam Materials Pages 2 - 13

Answer Key Materials
Page 14

Name:



# New York State Testing Program

# Mathematics Test Session 1

Grade 4

**v202** 



#### TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before making your choice.
- You have been provided with mathematics tools (a ruler and a protractor) to use during the test. It is up to you to decide when each tool will be helpful. You should use mathematics tools whenever you think they will help you to answer the question.

- Tatum walks her dog  $\frac{2}{3}$  mile every day after school. How many miles does she walk
  - her dog in 5 days?
  - A  $\frac{7}{3}$
  - B  $\frac{10}{3}$
  - $C = \frac{2}{15}$
  - **D**  $\frac{10}{15}$
- The number of points Jaden scored in a game is less than 45, and is also a multiple of 7. How many points could Jaden have scored?
  - **A** 17
  - **B** 35
  - **C** 52
  - **D** 70
- Which comparison is true?
  - A  $\frac{2}{3} = \frac{8}{12}$
  - $\mathbf{B} \qquad \frac{4}{9} = \frac{8}{9}$
  - C  $\frac{3}{4} > \frac{9}{10}$
  - D  $\frac{2}{4} > \frac{2}{3}$

- There are three different sections to sit in at a baseball park. The number of people who can sit in each section is described below.
  - red section seats 200 people
  - blue section seats 20 fewer people than the red section
  - green section seats 2 times as many people as the blue section

What is the total number of people who can sit in the baseball park?

- **A** 260
- **B** 380
- **C** 640
- **D** 740
- Which figure is an example of a line segment?
  - Α •

C ← →



D •

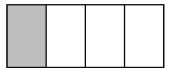
- lzzy's family has orange trees in their yard. They picked 126 oranges. They kept 10 oranges for themselves and shared the rest evenly among 4 other families. Which equation can be used to determine n, the number of oranges each of the other families received?
  - **A**  $(126 4) \div 10 = n$
  - **B**  $(126 10) \div 4 = n$
  - **C**  $(126 + 10) \div 4 = n$
  - **D**  $(126+4) \div 10 = n$
- 7 Which fraction model has a shaded area equivalent to  $\frac{3}{12}$ ?
  - Α



C



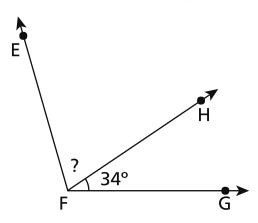
В



D



The measure of angle EFG shown below is 106 degrees.



What is the measure, in degrees, of angle EFH?

**A** 34

8

- **B** 56
- **C** 72
- **D** 140

**9** Which list of fractions is in order from least to greatest value?

- **A**  $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}$
- **B**  $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$
- $C = \frac{1}{4}, \frac{3}{4}, \frac{1}{2}$
- **D**  $\frac{1}{2}, \frac{3}{4}, \frac{1}{4}$

- Betsy has  $4\frac{1}{3}$  cups of lemonade in a pitcher. She pours  $1\frac{2}{3}$  cups into a glass. How much lemonade remains in the pitcher?
  - A  $2\frac{2}{3}$  cups
  - **B**  $3\frac{1}{3}$  cups
  - C  $5\frac{3}{3}$  cups
  - **D**  $5\frac{3}{6}$  cups
- What is the value of the expression below?

$$2,816 \times 7$$

- **A** 14,572
- **B** 14,672
- **C** 19,612
- **D** 19,712
- What is the quotient for the expression  $2,314 \div 4$ ?
  - **A** 508
  - **B** 508 r2
  - **C** 578
  - **D** 578 r2

- A teacher buys the folders listed below.
  - 5 boxes of red folders with 36 folders in each box
  - 6 boxes of blue folders with 32 folders in each box

Which number is **closest** to the total number of red and blue folders that the teacher buys?

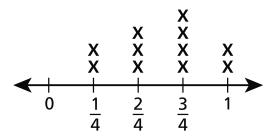
**A** 275

13

- **B** 380
- **C** 440
- **D** 550
- What number is 9 times as much as 400?
  - **A** 391
  - **B** 409
  - **C** 3,600
  - **D** 3,609
- Which two numbers both round to 1,500 when rounded to the nearest hundred?
  - **A** 1,399 and 1,599
  - **B** 1,449 and 1,549
  - **C** 1,457 and 1,547
  - **D** 1,489 and 1,589

- Mr. Fuller wants to put fencing around his rectangular-shaped yard. The width of the yard is 55 feet and the length is 75 feet. How many feet of fencing does Mr. Fuller need?
  - **A** 130
  - **B** 260
  - **C** 3,905
  - **D** 4,125
- Some students in Ms. Baker's class recorded their heights for four months. The line plot below shows how much each student grew by the end of the four months.

#### **STUDENT GROWTH**



Length (inches)

What is the difference in growth, in inches, between the students who grew the most and the students who grew the least?

- $\mathbf{A} \qquad \frac{1}{4}$
- $\mathbf{B} \qquad \frac{2}{4}$
- **c**  $\frac{3}{4}$
- **D** 1

- The value of the digit 9 in the number 29,461 is 10 times the value of the digit 9 in which number?
  - **A** 46,195
  - **B** 53,982
  - **C** 89,354
  - **D** 93,610
- The number pattern below follows a rule.

- Which number pattern follows the same rule?
- **A** 4, 8, 12, 16, . . .
- **B** 1, 4, 16, 64, . . .
- **C** 3, 7, 11, 15, . . .
- **D** 6, 12, 24, 48, . . .

20

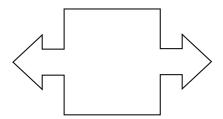
The three models below are each shaded to represent a different fraction.



What is the sum of the fractions represented by the shaded parts of the models?

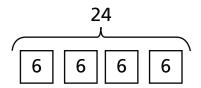
- **A**  $\frac{10}{18}$
- **B**  $\frac{8}{10}$
- **c**  $\frac{10}{8}$
- **D**  $\frac{10}{6}$
- 21

What is the greatest number of lines of symmetry that can be drawn on the figure shown below?



- **A** 0
- **B** 1
- **C** 2
- **D** 4

- What is the measure, in degrees, of an angle that is equivalent to  $\frac{1}{360}$  of a circle?
  - **A** 1
  - **B** 90
  - **C** 180
  - **D** 360
- Which comparison statement describes the model below?



- A 6 is 24 times as many as 4
- **B** 24 is 4 times as many as 6
- C 4 times as many as 24 is 6
- D 6 times as many as 6 is 24

#### THE STATE EDUCATION DEPARTMENT

## THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234 2021 Mathematics Tests Map to the Standards Grade 4 Released Questions

Question	Туре	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	В	1	CCSS.Math.Content.4.NF.B.4c	Number and Operations - Fractions	Number and Operations - Fractions	
2	Multiple Choice	В	1	CCSS.Math.Content.4.OA.B.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
3	Multiple Choice	Α	1	CCSS.Math.Content.4.NF.A.2	Number and Operations - Fractions	Number and Operations - Fractions	
4	Multiple Choice	D	1	CCSS.Math.Content.4.OA.A.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
5	Multiple Choice	Α	1	CCSS.Math.Content.4.G.A.1	Geometry		
6	Multiple Choice	В	1	CCSS.Math.Content.4.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
7	Multiple Choice	В	1	CCSS.Math.Content.4.NF.A.1	Number and Operations - Fractions	Number and Operations - Fractions	
8	Multiple Choice	С	1	CCSS.Math.Content.4.MD.C.7	Measurement and Data		
9	Multiple Choice	В	1	CCSS.Math.Content.4.NF.A.2	Number and Operations - Fractions	Number and Operations - Fractions	
10	Multiple Choice	Α	1	CCSS.Math.Content.4.NF.B.3c	Number and Operations - Fractions	Number and Operations - Fractions	
11	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.5	Number and Operations in Base Ten	Number and Operations in Base Ten	
12	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.6	Number and Operations in Base Ten	Number and Operations in Base Ten	
13	Multiple Choice	В	1	CCSS.Math.Content.4.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
14	Multiple Choice	С	1	CCSS.Math.Content.4.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
15	Multiple Choice	С	1	CCSS.Math.Content.4.NBT.A.3	Number and Operations in Base Ten	Number and Operations in Base Ten	
16	Multiple Choice	В	1	CCSS.Math.Content.4.MD.A.3	Measurement and Data		
17	Multiple Choice	С	1	CCSS.Math.Content.4.MD.B.4	Measurement and Data		
18	Multiple Choice	В	1	CCSS.Math.Content.4.NBT.A.1	Number and Operations in Base Ten	Number and Operations in Base Ten	
19	Multiple Choice	В	1	CCSS.Math.Content.4.OA.C.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
20	Multiple Choice	D	1	CCSS.Math.Content.4.NF.B.3a	Number and Operations - Fractions	Number and Operations - Fractions	
21	Multiple Choice	С	1	CCSS.Math.Content.4.G.A.3	Geometry		
22	Multiple Choice	Α	1	CCSS.Math.Content.4.MD.C.5a	Measurement and Data		
23	Multiple Choice	В	1	CCSS.Math.Content.4.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking	

This item map is intended to identify the primary analytic skills necessary to successfully answer each question. However, some questions measure proficiencies described in multiple standards, including a balanced combination of procedural and conceptual understanding.