

Name: _____



New York State Testing Program

2019 Mathematics Test Session 1

Grade 4

May 1–3, 2019

RELEASED QUESTIONS

Session 1



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.

1 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 $\frac{10}{15}$

2 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

3 Which comparison is true?

A $\frac{2}{3} = \frac{8}{12}$

B $\frac{4}{9} = \frac{8}{9}$

C $\frac{3}{4} > \frac{9}{10}$

D $\frac{2}{4} > \frac{2}{3}$

GO ON

4

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.

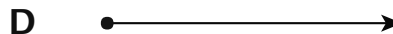
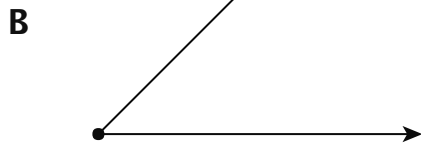
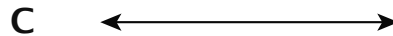
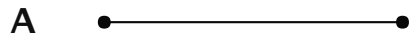
- red section seats 200 people
- blue section seats 20 fewer people than the red section
- green section seats 2 times as many people as the blue section

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

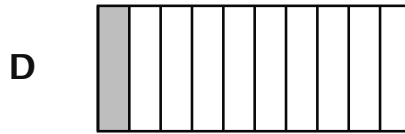
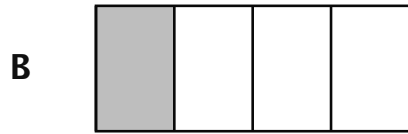
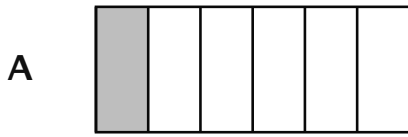
- A 260
- B 380
- C 640
- D 740

5

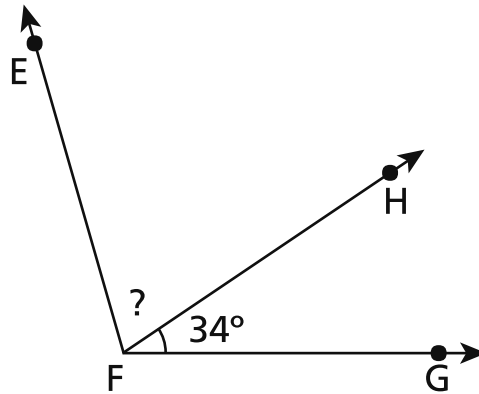
Which figure is an example of a line segment?



8 Which fraction model has a shaded area equivalent to $\frac{3}{12}$?



9 The measure of angle EFG shown below is 106 degrees.



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

- A 34
- B 56
- C 72
- D 140

15 What is the value of the expression below?

$$2,816 \times 7$$

- A 14,572
- B 14,672
- C 19,612
- D 19,712

16 What is the quotient for the expression $2,314 \div 4$?

- A 508
- B 508 r2
- C 578
- D 578 r2

17 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
- B 380
- C 440
- D 550

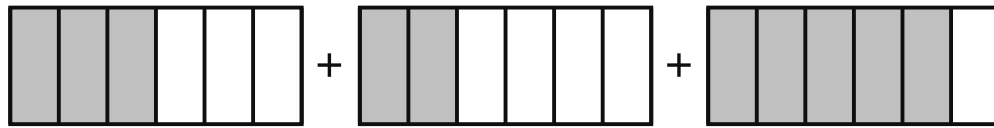
GO ON

- 20 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

- 21 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

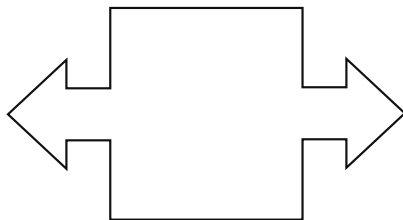
GO ON

- 27 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 $\frac{10}{6}$
- 28 What is the greatest number of lines of symmetry that can be drawn on the figure shown below?

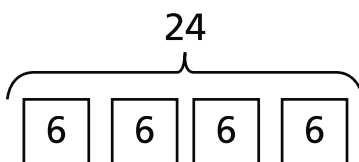


- A 0
- B 1
- C 2
- D 4

29 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

30 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

STOP

Grade 4
2019
Mathematics Test
Session 1
May 1–3, 2019

Name: _____



New York State Testing Program

2019 Mathematics Test Session 2

Grade 4

May 1–3, 2019

RELEASED QUESTIONS

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Session 2



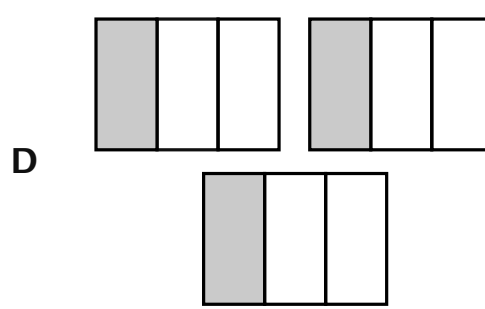
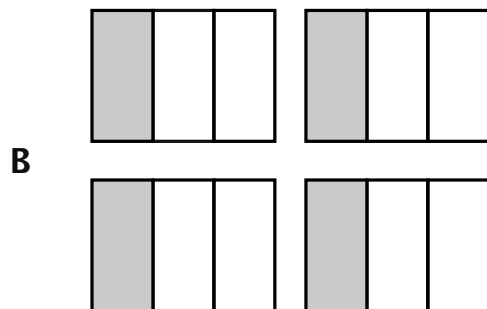
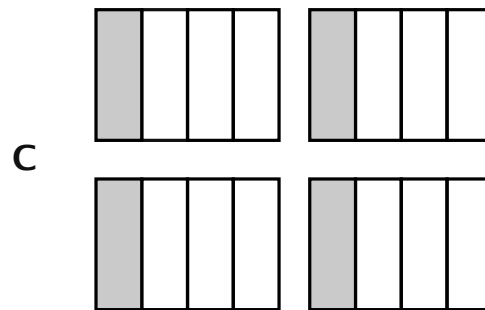
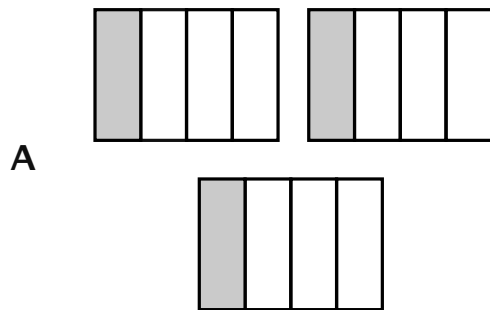
TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

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- 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.
- Be sure to show your work when asked.

31

In which model could the shaded parts represent $4 \times \frac{1}{3}$?



32

A truck is parked next to a tree. The height of the truck is 6 feet. The height of the tree is 3 times the height of the truck. Which equation can be used to find the height of the tree?

A $6 + 3 = \underline{\quad ? \quad}$

B $6 \times 3 = \underline{\quad ? \quad}$

C $(6 \times 3) + 3 = \underline{\quad ? \quad}$

D $(6 \times 3) + 6 = \underline{\quad ? \quad}$

GO ON

33 Which expression can be used to solve the equation below?

$$4,600 \div 5 = \underline{\quad ? \quad}$$

- A** $(46 \div 5) + (100 \div 5)$
- B** $(400 \div 5) - (600 \div 5)$
- C** $(4,000 \div 5) - (60 \div 5)$
- D** $(4,000 \div 5) + (600 \div 5)$

34 Which statement about an object turning 90 degrees around in a circle is true?

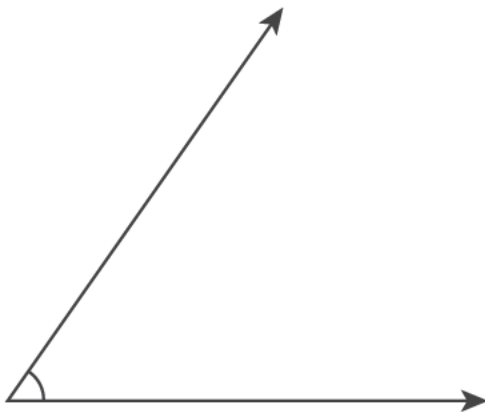
- A** It turns $\frac{1}{4}$ of the way around in a circle.
- B** It turns $\frac{2}{4}$ of the way around in a circle.
- C** It turns $\frac{3}{4}$ of the way around in a circle.
- D** It turns $\frac{4}{4}$ of the way around in a circle.

35 Which statement represents the number sentence below?

$$8 = 4 \times 2$$

- A** 4 is 8 times as many as 2
- B** 4 is 2 times as many as 8
- C** 8 is 2 times as many as 2
- D** 8 is 4 times as many as 2

- 36 What is the measure, in degrees, of the angle shown below?



- A 55
- B 65
- C 125
- D 135

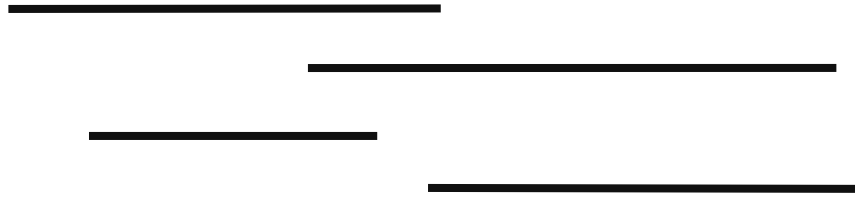
- 37 The model below is shaded to represent a fraction.



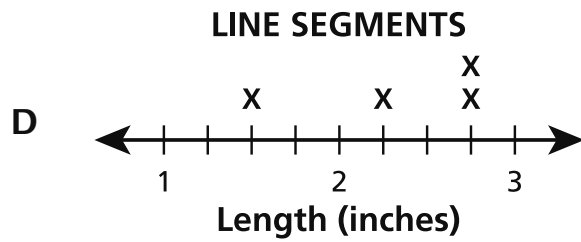
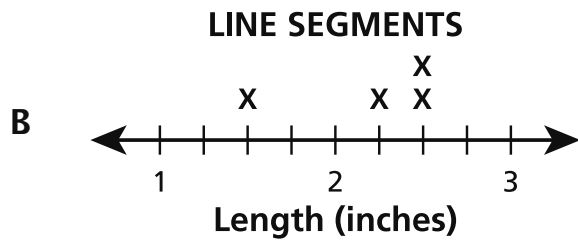
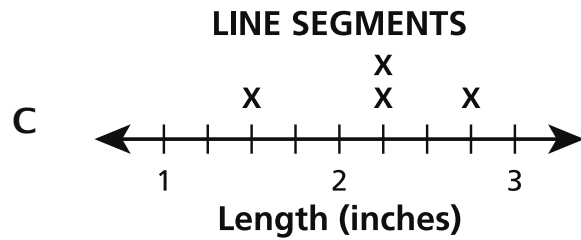
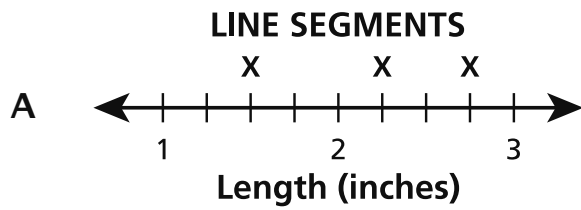
Which fraction model is shaded to represent an equivalent fraction?



The picture below shows line segments of different lengths, in inches.

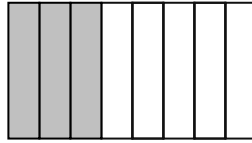


Measure each line segment. Which line plot correctly shows the lengths of the line segments?



39

The shaded part of the model below represents the fraction of a candy bar that Jill ate.



Tom has the same size candy bar. He eats 2 times the amount that Jill ate. What fraction of the candy bar does Tom eat?

Show your work.

Answer _____ of the candy bar

GO ON

40

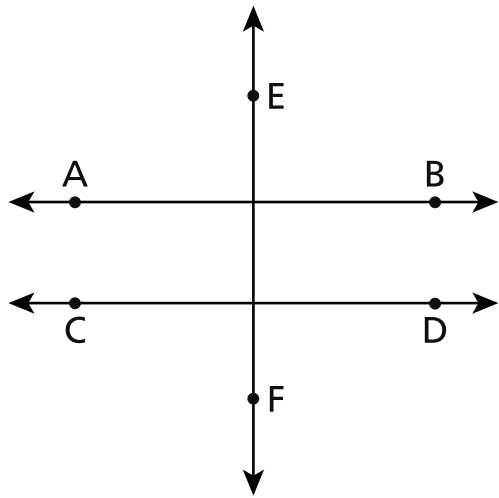
Use each digit shown below to create a 5-digit number with the greatest value and a 5-digit number with the least value. Each digit can only be used once in each number. Then write a number sentence using $>$, $<$, or $=$ to compare the two numbers you created.

2, 9, 1, 3, 8

Show your work.

GO ON

41 The diagram below shows line AB, line CD, and line EF.



Identify **two** lines on the diagram that appear to be perpendicular to each other.

Explain how you determined your answer.

GO ON

42

Mick and Jackie buy a large sandwich to share. They each eat $\frac{2}{5}$ of the sandwich.

How much of the sandwich is remaining?

Show your work.

Answer _____ of the sandwich

GO ON

43

How does the value of the digit 3 in the number 63,297 compare to the value of the digit 3 in the number 60,325? Be sure to include what you know about place value in your answer.

Explain your answer.

GO ON

44

Ms. Peterson wants to replace all the floor tiles in her kitchen. The kitchen floor is 12 feet long and 7 feet wide. If Ms. Peterson already has 45 one-foot square tiles, how many more one-foot square tiles does she need to completely cover the kitchen floor?

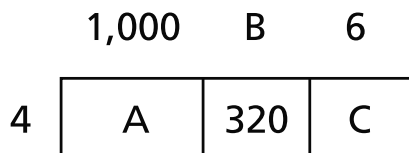
Show your work.

Answer _____ more tiles

GO ON

45

The height of Mountain P is 1,086 feet. The height of Mountain Q is 4 times the height of Mountain P. The area model shown below represents one way to find the height of Mountain Q.



What are the missing values for A, B, and C in the area model?

Show your work.

Answer A _____, B _____, and C _____

What is the height, in feet, of Mountain Q?

Show your work.

Answer _____ feet

STOP

Grade 4
2019
Mathematics Test
Session 2
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THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2019 Mathematics Tests Map to the Standards
Grade 4 Released Questions on EngageNY

Question	Type	Key	Points	Standard	Cluster	Multiple Choice Questions:	Constructed Response Questions:	
						Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
Session 1								
1	Multiple Choice	B	1	CCSS.Math.Content.4.NF.B.4c	Number and Operations - Fractions	0.79		
2	Multiple Choice	B	1	CCSS.Math.Content.4.OA.B.4	Operations and Algebraic Thinking	0.84		
3	Multiple Choice	A	1	CCSS.Math.Content.4.NF.A.2	Number and Operations - Fractions	0.68		
4	Multiple Choice	D	1	CCSS.Math.Content.4.OA.A.2	Operations and Algebraic Thinking	0.55		
5	Multiple Choice	A	1	CCSS.Math.Content.4.G.A.1	Geometry	0.67		
8	Multiple Choice	B	1	CCSS.Math.Content.4.NF.A.1	Number and Operations - Fractions	0.6		
9	Multiple Choice	C	1	CCSS.Math.Content.4.MD.C.7	Measurement and Data	0.74		
15	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.5	Number and Operations in Base Ten	0.71		
16	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.6	Number and Operations in Base Ten	0.7		
17	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.3	Operations and Algebraic Thinking	0.68		
20	Multiple Choice	C	1	CCSS.Math.Content.4.NBT.A.3	Number and Operations in Base Ten	0.64		
21	Multiple Choice	B	1	CCSS.Math.Content.4.MD.A.3	Measurement and Data	0.48		
27	Multiple Choice	D	1	CCSS.Math.Content.4.NF.B.3a	Number and Operations - Fractions	0.68		
28	Multiple Choice	C	1	CCSS.Math.Content.4.G.A.3	Geometry	0.59		
29	Multiple Choice	A	1	CCSS.Math.Content.4.MD.C.5a	Measurement and Data	0.41		
30	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.1	Operations and Algebraic Thinking	0.63		
Session 2								
31	Multiple Choice	B	1	CCSS.Math.Content.4.NF.B.4a	Number and Operations - Fractions	0.83		
32	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.2	Operations and Algebraic Thinking	0.92		
33	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.6	Number and Operations in Base Ten	0.76		

34	Multiple Choice	A	1	CCSS.Math.Content.4.MD.C.5b	Measurement and Data	0.63		
35	Multiple Choice	D	1	CCSS.Math.Content.4.OA.A.1	Operations and Algebraic Thinking	0.58		
36	Multiple Choice	A	1	CCSS.Math.Content.4.MD.C.6	Measurement and Data	0.59		
37	Multiple Choice	D	1	CCSS.Math.Content.4.NF.A.1	Number and Operations - Fractions	0.74		
38	Multiple Choice	C	1	CCSS.Math.Content.3.MD.B.4	Measurement and Data	0.58		
39	Constructed Response		2	CCSS.Math.Content.4.NF.B.4b	Number and Operations - Fractions		1.46	0.73
40	Constructed Response		2	CCSS.Math.Content.4.NBT.A.2	Number and Operations in Base Ten		1.04	0.52
41	Constructed Response		2	CCSS.Math.Content.4.G.A.2	Geometry		0.97	0.49
42	Constructed Response		2	CCSS.Math.Content.4.NF.B.3d	Number and Operations - Fractions		1.22	0.61
43	Constructed Response		2	CCSS.Math.Content.4.NBT.A.1	Number and Operations in Base Ten		1.04	0.52
44	Constructed Response		2	CCSS.Math.Content.4.MD.A.3	Measurement and Data		1.13	0.57
45	Constructed Response		3	CCSS.Math.Content.4.NBT.B.5	Number and Operations in Base Ten		1.32	0.44

*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.