

Name: \_\_\_\_\_



# *New York State Testing Program*

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## **2018 Mathematics Test Session 1**

# **Grade 3**

**May 1–3, 2018**

**Released Questions**

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**Session 1**

# 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 a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.

**1** Which expression is another way to show  $8 \times 6$  ?

**A**  $(2 + 4) + 6$

**B**  $(2 + 4) \times 6$

**C**  $(2 \times 4) + 6$

**D**  $(2 \times 4) \times 6$

**2** The distance from Chicago to New York City is 794 miles. What is 794 rounded to the nearest hundred?

**A** 700

**B** 794

**C** 800

**D** 894

**3** What number makes the equation true?

$$4 = \underline{\quad ? \quad} \div 7$$

**A** 11

**B** 21

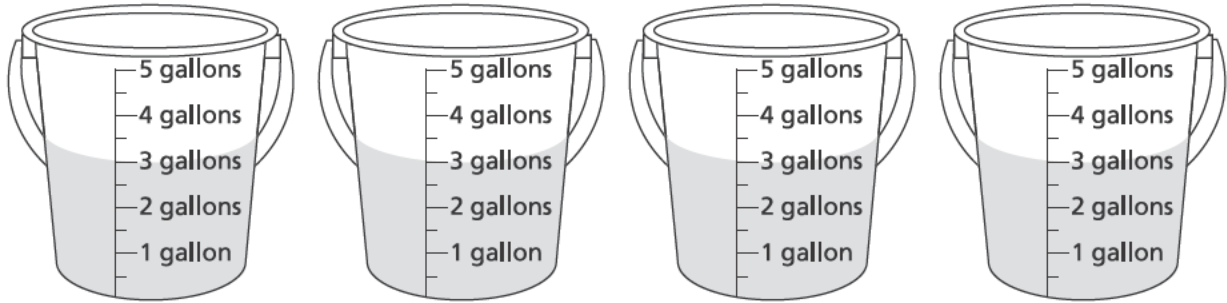
**C** 28

**D** 32

**GO ON**

**6**

A third-grade class is having a car wash. They put the same amount of water in each bucket, as shown.



Which expression can be used to find the total amount of water, in gallons, in all the buckets?

- A  $4 \times 3$
- B  $5 \times 3$
- C  $4 \times 4$
- D  $5 \times 4$

**7**

A bulletin board can be covered completely by 30 square pieces of paper without any gaps or overlaps. If each piece of paper has side lengths of 1 foot, what is the total area of the bulletin board?

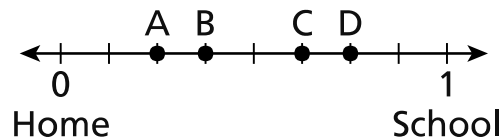
- A 1 foot
- B 30 feet
- C 1 square foot
- D 30 square feet

**GO ON**

- 17 Joe and Mike both ran the same race. Joe finished the race 4 minutes before Mike. If Mike finished the race at 4:02 p.m., what time did Joe finish the race?

- A 3:58 p.m.
- B 4:06 p.m.
- C 8:02 p.m.
- D 12:02 p.m.

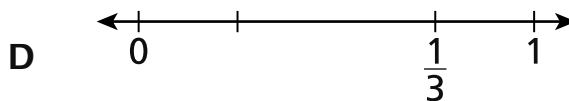
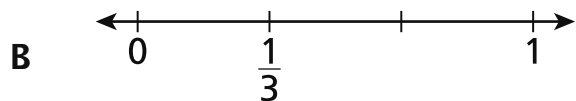
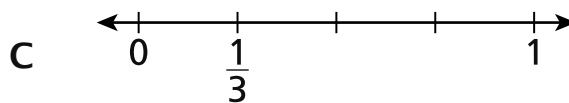
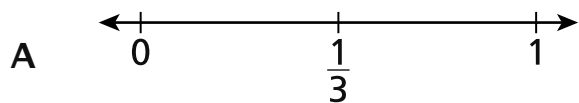
- 18 The distance between Liam's home and his school is exactly 1 mile, as shown on the number line below.



Liam buys a snack at a store that is  $\frac{3}{8}$  mile from his home. What point on the number line shows the location of the store?

- A point A
- B point B
- C point C
- D point D

- 22 Which number line shows the fraction  $\frac{1}{3}$  plotted correctly?



- 23 A store has 8 fish tanks that each have 40 liters of water. What is the total number of liters of water in all of the fish tanks?

- A 5
- B 48
- C 280
- D 320

- 24 Last week, Paul ate 2 cookies each day for 5 days. This week, he ate 2 cookies each day for 4 days. Which expression can be used to represent the total number of cookies Paul ate in these two weeks?

- A  $2 \times (5 \times 4)$
- B  $2 \times (5 + 4)$
- C  $(2 \times 5) \times (2 \times 4)$
- D  $(2 + 5) \times (2 + 4)$

25

Kay and Juanita each have a garden of the same size and shape.

- Kay grows flowers in  $\frac{1}{6}$  of her garden.
- Juanita grows flowers in  $\frac{1}{3}$  of her garden.

Which statement shows a correct comparison of the sections of flowers grown in Kay's garden and Juanita's garden?

**A**  $\frac{1}{6} > \frac{1}{3}$

**B**  $\frac{1}{6} < \frac{1}{3}$

**C**  $\frac{1}{3} = \frac{1}{6}$

**D**  $\frac{1}{3} + \frac{1}{6}$

**STOP**



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**Grade 3**  
**2018**  
**Mathematics Test**  
**Session 1**  
May 1–3, 2018

Name: \_\_\_\_\_



# *New York State Testing Program*

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## **2018 Mathematics Test Session 2**

# **Grade 3**

**May 1–3, 2018**

**Released Questions**

The possession or use of any communications device is strictly prohibited when taking this examination. If you have or use any communications device, no matter how briefly, your examination will be invalidated and no score will be calculated for you.

# Session 2



## 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 or writing your response.
- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.
- Be sure to show your work when asked.

**26** What number makes both equations true?

$$6 \times \underline{\quad ? \quad} = 48$$

$$48 \div 6 = \underline{\quad ? \quad}$$

- A** 7
- B** 8
- C** 42
- D** 54

**27** A teacher puts 5 packages of craft paper into a cabinet. Each package has 80 sheets of paper. What is the total number of sheets of craft paper that the teacher puts into the cabinet?

- A** 40
- B** 85
- C** 400
- D** 450

**GO ON**

**28** Jaime has a small container that holds exactly  $\frac{1}{4}$  cup of dog food. How many times should Jaime fill the container and pour it into the dog's bowl to make sure the dog gets exactly  $\frac{1}{2}$  cup of food?

**A**  $\frac{1}{4}$

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

**C** 2

**D** 4

**29** Which situation can be solved using the expression  $21 \div 3$ ?

**A** finding the number of shirts when there are 3 groups of 21 shirts

**B** finding the number of dresses when 21 more dresses are placed on a rack with 3 dresses

**C** finding the number of jackets left over when 3 out of 21 jackets are sold

**D** finding the number of skirts on each rack when a total of 21 skirts are placed equally on 3 racks

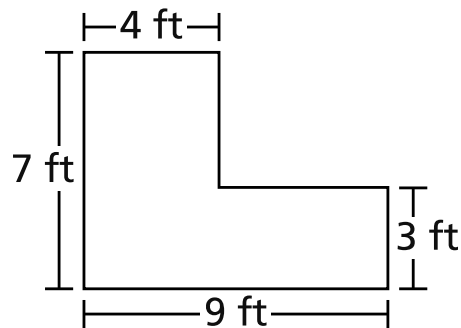
- 30 A number pattern is shown below.

5, 9, 13, 17, 21, 25, 29

Which rule could have been used to make the pattern?

- A Start with 0. Add 4 each time to get the next number.
- B Start with 0. Add 5 each time to get the next number.
- C Start with 5. Add 4 each time to get the next number.
- D Start with 5. Add 5 each time to get the next number.

- 31 The shape of Cindy's flower garden is shown below.



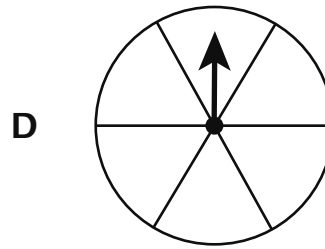
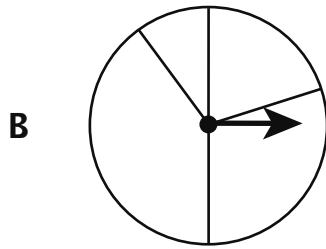
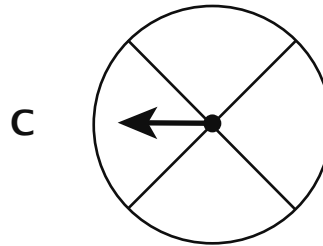
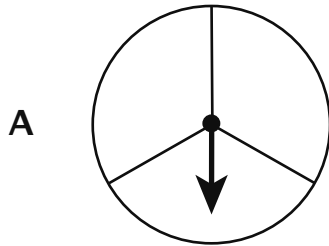
What is the area, in square feet, of Cindy's flower garden?

- A 23
- B 32
- C 43
- D 47

**GO ON**

32

The Diaz family used a spinner to play a game. The spinner was in the shape of a circle. Each section of the spinner was  $\frac{1}{4}$  of the whole circle. Which picture shows a spinner that the Diaz family used?



33

Which fraction is equivalent to 4?

A  $\frac{1}{4}$

B  $\frac{8}{4}$

C  $\frac{4}{4}$

D  $\frac{4}{1}$

**GO ON**



34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m. ?

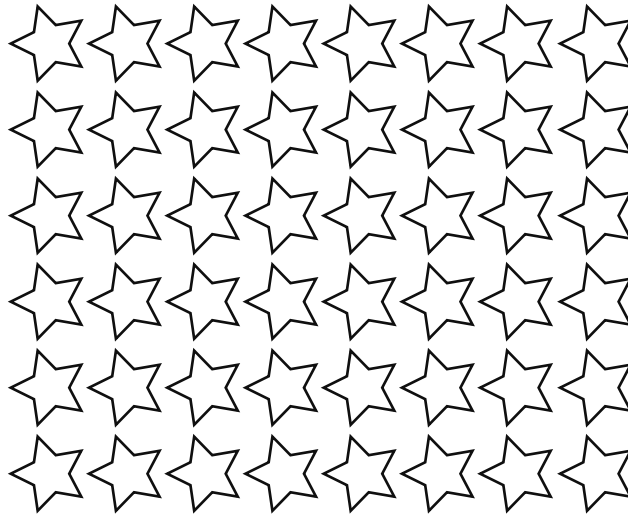
*Show your work.*

*Answer* \_\_\_\_\_ p.m.

**GO ON**

35

Ethan made the array below to show the product of  $6 \times 7$ .



Does Ethan's model show the product of  $6 \times 7$ ? Explain why or why not.

**Answer**

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36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

**Answer**

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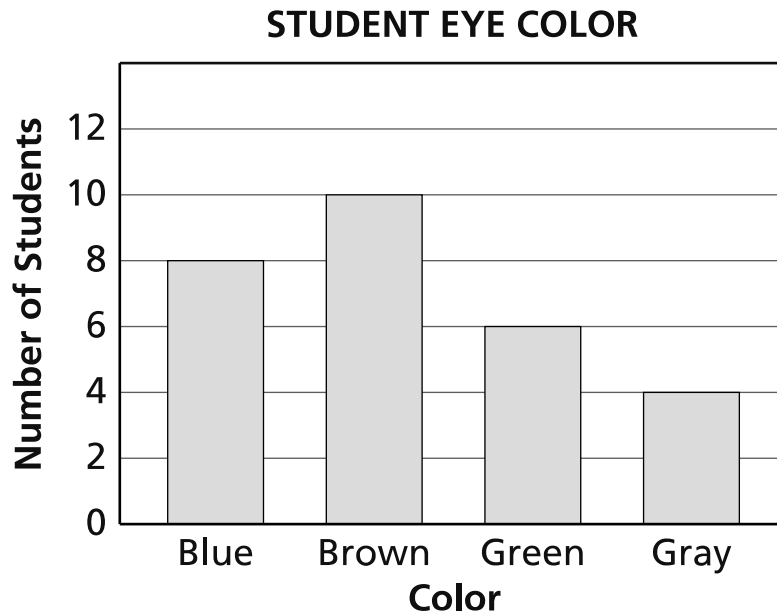
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**GO ON**

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.



How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

*Show your work.*

*Answer* \_\_\_\_\_ fewer students

**GO ON**

**38**

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

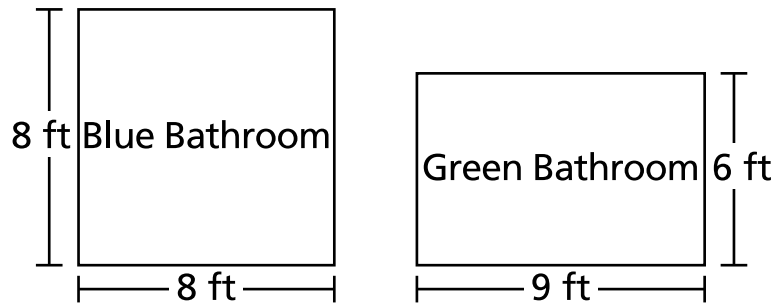
*Show your work.*

*Answer* \_\_\_\_\_ tennis balls

**GO ON**

39

The sizes of two bathroom floors in Beth's house are shown below.



Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

*Explain your answer.*

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40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.
- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

*Show your work.*

*Answer* \_\_\_\_\_ feet

**STOP**





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Grade 3  
2018  
Mathematics Test  
Session 2  
May 1–3, 2018

**THE STATE EDUCATION DEPARTMENT**  
**THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234**  
**2018 Mathematics Tests Map to the Standards**  
**Grade 3 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)
<b>Session 1</b>								
1	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	0.78		
2	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.1	Numbers and Operations in Base Ten	0.85		
3	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking	0.75		
6	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking	0.88		
7	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data	0.61		
17	Multiple Choice	A	1	CCSS.Math.Content.3.MD.A.1	Measurement and Data	0.66		
18	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations— Fractions	0.70		
22	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2a	Number and Operations— Fractions	0.62		
23	Multiple Choice	D	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data	0.43		
24	Multiple Choice	B	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	0.31		
25	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3d	Number and Operations— Fractions	0.66		
<b>Session 2</b>								
26	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking	0.87		
27	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.3	Numbers and Operations in Base Ten	0.71		
28	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.3a	Number and Operations— Fractions	0.51		
29	Multiple Choice	D	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking	0.60		

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)
<b>Session 2 continued</b>								
30	Multiple Choice	C	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking	0.77		
31	Multiple Choice	C	1	CCSS.Math.Content.3.MD.C.7d	Measurement and Data	0.36		
32	Multiple Choice	C	1	CCSS.Math.Content.3.G.A.2	Geometry	0.94		
33	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3c	Number and Operations— Fractions	0.32		
34	Constructed Response		2	CCSS.Math.Content.3.MD.A.1	Measurement and Data		1.14	0.57
35	Constructed Response		2	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking		1.62	0.81
36	Constructed Response		2	CCSS.Math.Content.3.NF.A.1	Number and Operations— Fractions		1.00	0.50
37	Constructed Response		2	CCSS.Math.Content.3.MD.B.3	Measurement and Data		1.12	0.56
38	Constructed Response		2	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking		1.26	0.63
39	Constructed Response		2	CCSS.Math.Content.3.MD.C.7b	Measurement and Data		1.10	0.55
40	Constructed Response		3	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking		1.17	0.39

\*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.