



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

**New York State Testing Program
Grade 3
Mathematics Test**

Released Questions

2021

New York State administered the Mathematics Tests in May 2021 and is now making the questions from Session 1 of these tests available for review and use. Only Session 1 was required in 2021.



New York State Testing Program Grades 3–8 Mathematics

Released Questions from 2021 Tests

Background

In 2013, New York State (NYS) began administering tests designed to assess student performance in accordance with the instructional shifts and rigor demanded by the new New York State P–12 Learning Standards in Mathematics. To help in this transition to new assessments, the New York State Education Department (NYSED) has been releasing an increasing number of test questions from the tests that were administered to students across the State in the spring. This year, SED is again releasing 2021 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

In February 2021, with the ongoing COVID-19 pandemic still forcing restrictions on all educational and learning activities statewide, NYSED submitted two federal waiver requests related to state assessment and accountability requirements. The waiver requests addressed the unique circumstances caused by the pandemic that have resulted in many students receiving some or all of their instruction remotely.

Later that month, the United States Department of Education (USDE) informed states that it would not grant a blanket waiver for state assessments. However, the USDE agreed to uncouple state assessments from the Every Student Succeeds Act (ESSA) accountability requirements so that test results will be used solely as a measure of student learning. Additionally, it was decided that NYSED would administer only Session 1 of the Grades 3–8 ELA and Mathematics Tests for the Spring 2021 administration and that the tests would include previously administered questions.

The decision to use previously administered test questions in this extraordinary year was based on guidance from nationally recognized experts in the assessment field and was recommended in a [publication](#) from the Council of Chief State School Officers to state education departments. Reusing test questions provided the benefit of having established scale scores and stable item parameters. Using previously administered test questions also ensured that it will be possible to develop new test forms for 2022 and beyond. Although it was not the driver of the decision, the reuse of previously administered test questions provided an opportunity for cost savings during these unique circumstances where the instructional models used by schools varied throughout the State.

For 2021, the entire Session 1 booklet is being released as this is all that students were required to take. Additionally, NYSED is providing a map that details what learning standards each released question measures, and the correct response to each question. These released materials will help students, families, educators, and the public better understand the tests and NYSED's expectations for students.

Understanding Math Questions

Multiple-Choice Questions

Multiple-choice questions are designed to assess the New York State P–12 Learning Standards for Mathematics. Mathematics multiple-choice questions will be used mainly to assess standard algorithms and conceptual standards. Multiple-choice questions incorporate both the grade-level standards and the “Standards for Mathematical Practices.” Many questions are framed within the context of real-world applications or require students to complete multiple steps. Likewise, many of these questions are linked to more than one standard, drawing on the simultaneous application of multiple skills and concepts.

New York State P–12 Learning Standards Alignment

The alignment to the New York State P–12 Learning Standards for Mathematics is intended to identify the primary analytic skills necessary to successfully answer each question. The released questions do not represent the full spectrum of the standards assessed on the State tests, nor do they represent the full spectrum of how the standards should be taught and assessed in the classroom. It should not be assumed that a particular standard will be measured by an identical question in future assessments. Specific criteria for writing test questions, as well as additional assessment information, are available at <http://www.engageny.org/common-core-assessments>.

Name: _____



New York State Testing Program

Mathematics Test Session 1

Grade 3

v202



Released Questions

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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 8×6 ?

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

4 Which fraction is equivalent to $\frac{4}{6}$?

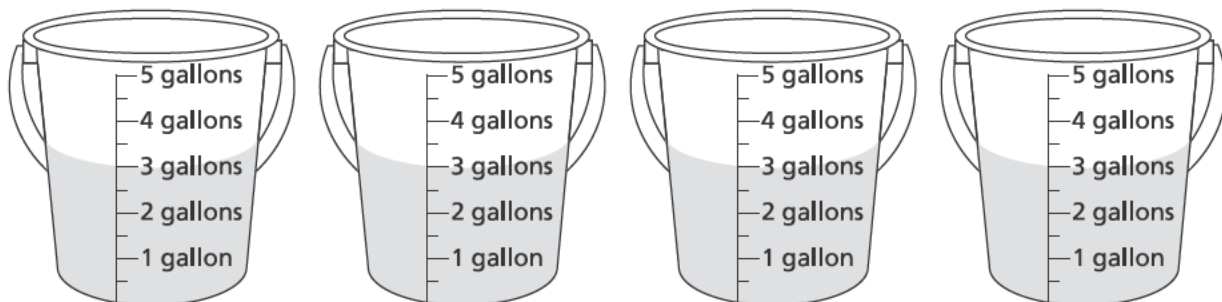
A $\frac{1}{2}$

B $\frac{2}{3}$

C $\frac{3}{4}$

D $\frac{6}{8}$

5 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 4×3

B 5×3

C 4×4

D 5×4

6 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

7 A teacher has 16 paper clips in one box and 48 paper clips in another box. The teacher separates all of the paper clips into 8 equal groups. How many paper clips are in each group?

- A 6
- B 8
- C 24
- D 64

8 What number makes the equation below true?

$$80 \times 7 = \underline{\quad? \quad}$$

- A 56
- B 87
- C 150
- D 560

GO ON

9 What number makes these two equations true?

$$9 \times \underline{\quad ? \quad} = 45$$

$$45 \div 9 = \underline{\quad ? \quad}$$

- A** 4
- B** 5
- C** 7
- D** 8

10 A student has a collection of 72 baseball cards. All of the cards are stored in an album with 8 cards on each page. Which expression can be used to find the total number of pages of baseball cards in the student's album?

- A** $72 + 8$
- B** $72 - 8$
- C** 72×8
- D** $72 \div 8$

11 Emma and 5 other children equally share a large rectangular table. What fraction of the table does each child get?

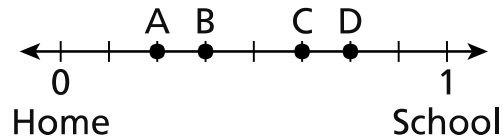
- A** $\frac{1}{6}$
- B** $\frac{1}{5}$
- C** $\frac{1}{4}$
- D** $\frac{1}{2}$

GO ON

- 12 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.

- 13 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

GO ON

- 14 There are 54 water balloons in a bucket. The balloons are given to 9 teams. Each team gets the same number of balloons. How many water balloons will each team get?

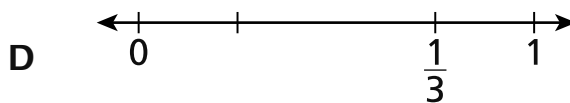
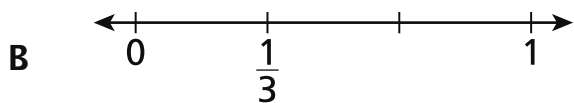
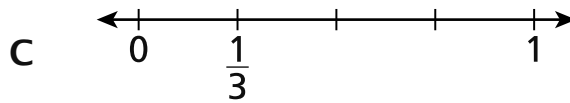
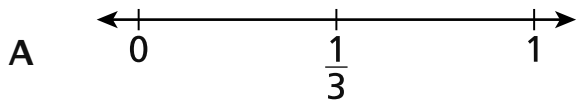
- A 6
- B 7
- C 45
- D 63

- 15 What rule was used for the number pattern below?

64, 32, 16, 8, 4, 2, ...

- A add 2
- B subtract 2
- C divide by 2
- D multiply by 2

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



GO ON

17 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

18 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 $(2 + 5) \times (2 + 4)$

GO ON

19

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

Grade 3
Mathematics Test
Session 1
v202

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2021 Mathematics Tests Map to the Standards
Grade 3 Released Questions

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
2	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.1	Numbers and Operations in Base Ten		
3	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
4	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3b	Number and Operations— Fractions	Number and Operations— Fractions	
5	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
6	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data	Measurement and Data	
7	Multiple Choice	B	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
8	Multiple Choice	D	1	CCSS.Math.Content.3.NBT.A.3	Numbers and Operations in Base Ten		
9	Multiple Choice	B	1	CCSS.Math.Content.3.OA.B.6	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
10	Multiple Choice	D	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
11	Multiple Choice	A	1	CCSS.Math.Content.3.G.A.2	Geometry		
12	Multiple Choice	A	1	CCSS.Math.Content.3.MD.A.1	Measurement and Data	Measurement and Data	
13	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations— Fractions	Number and Operations— Fractions	
14	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
15	Multiple Choice	C	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
16	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2a	Number and Operations— Fractions	Number and Operations— Fractions	
17	Multiple Choice	D	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data	Measurement and Data	
18	Multiple Choice	B	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
19	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3d	Number and Operations— Fractions	Number and Operations— Fractions	

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.