New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 3
Mathematics Test

Released Questions

2024

New York State administered the Mathematics Tests in May 2024
and is making approximately 75% of the questions
from these tests available for review and use.

New York State Testing Program
Grades 3–8 Mathematics

Released Questions from 2024 Exams

Background

As in past years, SED is releasing large portions of the 2024 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2024, included in these released materials are at least 75 percent of the test questions that appeared on the 2024 tests (including all constructed-response questions) that counted toward students' scores. Additionally, SED is also providing a map that details what 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 the New York State Education Department's expectations for students.

Understanding Math Questions

Multiple-Choice Questions

Multiple-choice questions are designed to assess the New York State P–12 Next Generation 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.

One-Credit Constructed-Response Questions

One-credit constructed-response questions require students to complete a task and provide only their final answer. These one-credit questions will often require multiple steps, assessing procedural skills, as well as conceptual understanding and application. While students may show how they arrived at their final answer, only the final answer will be scored.

Two-Credit Constructed-Response Questions

Two-credit constructed-response questions require students to complete tasks and show their work. These two-credit response questions will often require multiple steps, the application of multiple mathematics skills, and real-world applications. Many of the short-response questions will cover conceptual and application standards.

Three-Credit Constructed-Response Questions

Three-credit constructed-response questions ask students to show their work in completing two or more tasks or a more extensive problem. These three-credit response questions allow students to show their understanding of mathematical procedures, conceptual understanding, and application. Three-credit response questions may also assess student reasoning and the ability to critique the arguments of others. The scoring rubric for all constructed-response questions can be found in the grade-level Educator Guides at https://www.nysed.gov/state-assessment/grades-3-8-ela-and-math-test-manuals.

New York State P–12 Next Generation Learning Standards Alignment

The alignment(s) to the New York State P–12 Next Generation Learning Standards for Mathematics is/are 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 procedure and conceptual understanding. For example, two-credit and three-credit constructed-response questions require students to show an understanding of mathematical procedures, concepts, and applications.

These Released Questions Do Not Comprise a "Mini Test"

To ensure it is possible to develop future tests, some content must remain secure. This document is *not* intended to be representative of the entire test, to show how operational tests look, or to provide information about how teachers should administer the test; rather, its purpose is to provide an overview of how the test reflects the demands of the New York State P–12 Next Generation Learning Standards.

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.

Name: _____

New York State Testing Program

Mathematics Test
Session 1

Grade 3

Spring 2024

RELEASED QUESTIONS

Session 1

TIPS FOR TAKING THE TEST

Here are some ideas to help you do your best:

- Read each question carefully. Take your time.
- You have a ruler that you can use on the test if it helps you answer the question.

1 There are 40 stickers on a sheet of paper. The stickers are in rows with 8 stickers in each row. Which expression represents how to find the number of rows of stickers on the sheet of paper?

A $40 \div 8$

B $40 - 8$

C 40×8

D $40 + 8$

2 A number is rounded to the nearest ten. The result is 300. Which number could be the number before it was rounded?

A 289

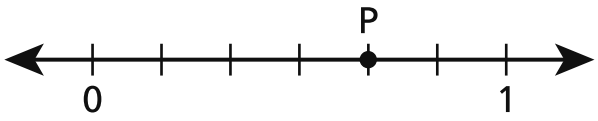
B 296

C 308

D 315

GO ON

4 Which fraction is represented by point P on the number line below?



A $\frac{2}{6}$

B $\frac{4}{6}$

C $\frac{3}{7}$

D $\frac{5}{7}$

8 A librarian has 9 boxes of books. Each box has 8 books. Which expression represents how to find the total number of books the librarian has?

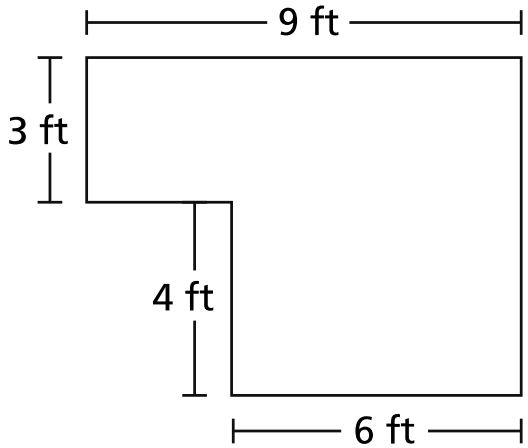
A $9 - 8$

B $9 + 8$

C $9 \div 8$

D 9×8

9 A diagram of a flower garden is shown below.



What is the total area, in square feet, of the flower garden?

A 22

B 27

C 51

D 54

GO ON

12 Which fraction is equivalent to 3?

A $\frac{1}{3}$

B $\frac{3}{1}$

C $\frac{3}{3}$

D $\frac{6}{3}$

13 A teacher covers a wall with 100 square pictures made by students. The pictures are the same size, and the wall is covered completely without any gaps or overlaps. Each picture has side lengths of 1 foot. What is the total area of the wall?

A 1 foot

B 100 feet

C 1 square foot

D 100 square feet

18 Which expression is equivalent to 5×4 ?

A $(5 + 2) \times (5 + 2)$

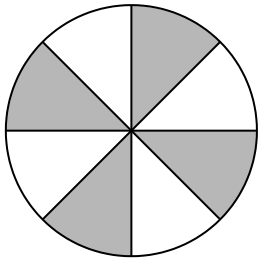
B $(5 \times 2) + (5 \times 2)$

C $(5 + 2) + (5 + 2)$

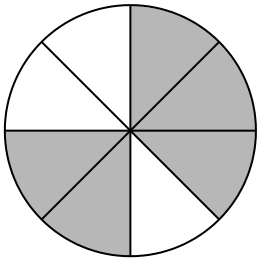
D $(5 \times 2) \times (5 \times 2)$

21 In which model is the fraction of the whole shaded to represent the fraction $\frac{3}{8}$?

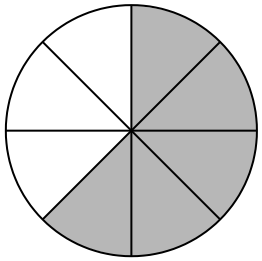
A



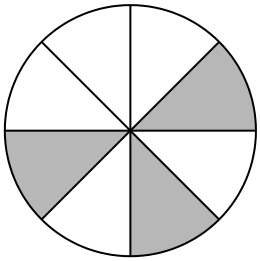
C



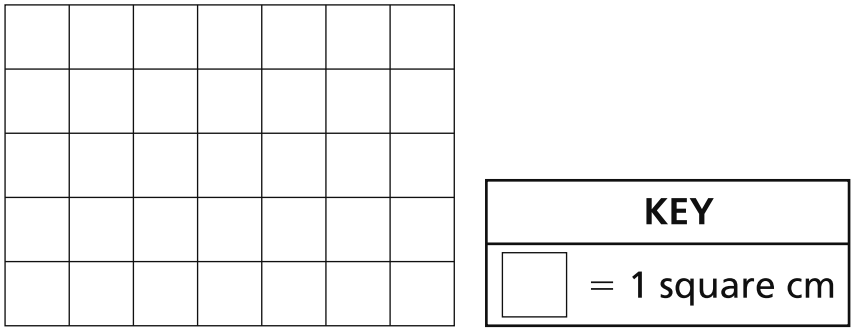
B



D



23 A rectangle is shown below.



Which expression **cannot** be used to find the area, in square centimeters, of the rectangle?

A $5 + 5 + 5 + 5 + 5 + 5 + 5$

B $7 + 7 + 7 + 7 + 7$

C $5 \times 7 \times 5 \times 7$

D 7×5

GO ON

25 What number multiplied by 8 equals 48 ?

A 4

B 6

C 7

D 8

STOP

Grade 3
Mathematics Test
Session 1
Spring 2024

Name: _____

New York State Testing Program

Mathematics Test
Session 2

Grade 3

Spring 2024

RELEASED QUESTIONS

Session 2

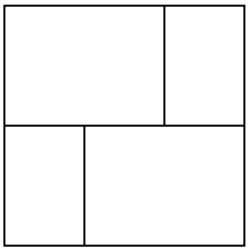
TIPS FOR TAKING THE TEST

Here are some ideas to help you do your best:

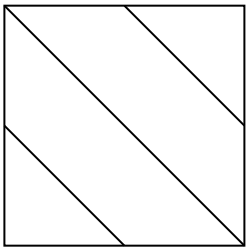
- Read each question carefully. Take your time.
- You have a ruler that you can use on the test if it helps you answer the question.
- Be sure to show your work when asked.
- Be sure to explain your answer when asked.

26 Which square appears to be divided into parts that each have an area of $\frac{1}{4}$ of the whole?

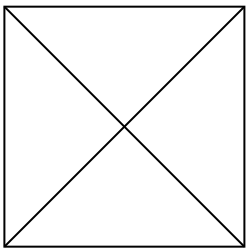
A



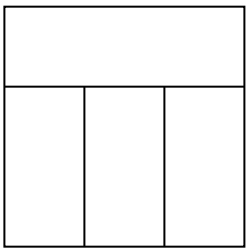
C



B



D



27 A number pattern is shown below.

1, 5, 9, 13, . . .

What are the next three numbers in the pattern?

A 16, 19, 22

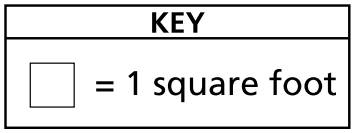
B 16, 20, 24

C 17, 20, 23

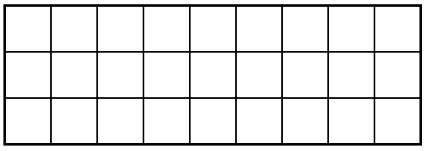
D 17, 21, 25

GO ON

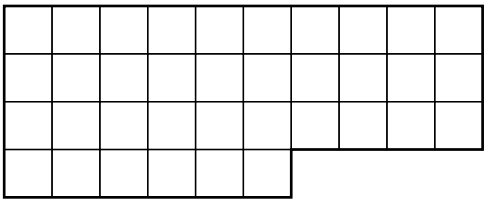
28 A bathroom floor has an area of 36 square feet. Which figure could represent the area of the bathroom floor?



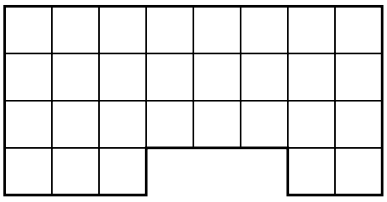
A



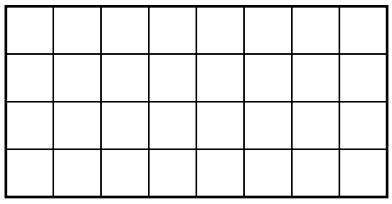
C



B



D



29 Cecilia is creating holes to plant seeds in her garden. She has 12 corn seeds and 15 bean seeds and will plant all of the seeds. Which set of equations can be used to find the total number of holes, h, Cecilia will create if she puts exactly 3 seeds of the same type in each hole?

A
$12 \div 3 = 4$
$15 \div 3 = 5$
$h = 4 + 5$

B
$12 \div 3 = 4$
$15 \div 3 = 5$
$h = 4 \times 5$

C
$12 - 3 = 9$
$15 - 3 = 12$
$h = 9 + 12$

D
$12 - 3 = 9$
$15 - 3 = 12$
$h = 9 \times 12$

30 Which two fractions are equivalent?

A $\frac{2}{3}$ and $\frac{3}{6}$

B $\frac{1}{4}$ and $\frac{4}{8}$

C $\frac{2}{4}$ and $\frac{3}{6}$

D $\frac{1}{2}$ and $\frac{2}{8}$

GO ON

31 **This question is worth 1 credit.**

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school?

Answer _____ a.m.

32 **This question is worth 1 credit.**

Write the number 3,194 in expanded form.

Answer _____

GO ON

33 **This question is worth 1 credit.**

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize?

Answer _____ tickets

34 **This question is worth 2 credits.**

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

35 **This question is worth 2 credits.**

A list of fractions is shown below.

$$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

36 **This question is worth 2 credits.**

A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.

Answer $ _____

GO ON

37 **This question is worth 2 credits.**

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get?

Show your work.

Answer _____ pounds of clay

38 **This question is worth 3 credits.**

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

STOP

Grade 3
Mathematics Test
Session 2
Spring 2024

THE STATE EDUCATION DEPARTMENT

THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

2024 Mathematics Tests Map to the Standards

Grade 3

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	A	1	NGLS.Math.Content.NY-3.OA.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
2	Multiple Choice	B	1	NGLS.Math.Content.NY-3.NBT.1	Number and Operations in Base Ten		
4	Multiple Choice	B	1	NGLS.Math.Content.NY-3.NF.2b	Number and Operations - Fractions	Number and Operations - Fractions	
8	Multiple Choice	D	1	NGLS.Math.Content.NY-3.OA.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
9	Multiple Choice	C	1	NGLS.Math.Content.NY-3.MD.7d	Measurement and Data	Measurement and Data	
12	Multiple Choice	B	1	NGLS.Math.Content.NY-3.NF.3c	Number and Operations - Fractions	Number and Operations - Fractions	
13	Multiple Choice	D	1	NGLS.Math.Content.NY-3.MD.5b	Measurement and Data	Measurement and Data	
18	Multiple Choice	B	1	NGLS.Math.Content.NY-3.OA.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
21	Multiple Choice	D	1	NGLS.Math.Content.NY-3.NF.1	Number and Operations - Fractions	Number and Operations - Fractions	
23	Multiple Choice	C	1	NGLS.Math.Content.NY-3.MD.7a	Measurement and Data	Measurement and Data	
25	Multiple Choice	B	1	NGLS.Math.Content.NY-3.OA.6	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
Session 2							
26	Multiple Choice	B	1	NGLS.Math.Content.NY-3.G.2	Geometry		
27	Multiple Choice	D	1	NGLS.Math.Content.NY-3.OA.9	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
28	Multiple Choice	C	1	NGLS.Math.Content.NY-3.MD.6	Measurement and Data	Measurement and Data	
29	Multiple Choice	A	1	NGLS.Math.Content.NY-3.OA.8a	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
30	Multiple Choice	C	1	NGLS.Math.Content.NY-3.NF.3b	Number and Operations - Fractions	Number and Operations - Fractions	
31	Constructed Response	n/a	1	NGLS.Math.Content.NY-3.MD.1	Measurement and Data	Measurement and Data	
32	Constructed Response	n/a	1	NGLS.Math.Content.NY-3.NBT.4b	Number and Operations in Base Ten		
33	Constructed Response	n/a	1	NGLS.Math.Content.NY-3.OA.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
34	Constructed Response	n/a	2	NGLS.Math.Content.NY-3.MD.7b	Measurement and Data	Measurement and Data	
35	Constructed Response	n/a	2	NGLS.Math.Content.NY-3.NF.3b	Number and Operations - Fractions	Number and Operations - Fractions	
36	Constructed Response	n/a	2	NGLS.Math.Content.NY-3.NBT.3	Number and Operations in Base Ten		NGLS.Math.Content.NY-3.OA.8a
37	Constructed Response	n/a	2	NGLS.Math.Content.NY-3.OA.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
38	Constructed Response	n/a	3	NGLS.Math.Content.NY-3.NF.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.