



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

New York State Testing Program
Grade 4
Mathematics Test

Released Questions

2023

New York State administered the Mathematics Tests in May 2023 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 2023 Exams

Background

As in past years, SED is releasing large portions of the 2023 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2023, included in these released materials are at least 75 percent of the test questions that appeared on the 2023 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 <http://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.

Non: _____



Haitian Creole Edition
Grade 4 2023
Mathematics Test
Session 1
May 2–4, 2023

**Pwogram Egzamen
Eta Nouyòk
Egzamen Matematik
Seyans 1**

4 YÈM ANE

**Sòti 2 Me pou rive
4 Me 2023**

RELEASED QUESTIONS

Developed and published under contract with the New York State Education Department by Questar Assessment Inc., 14720 Energy Way, Apple Valley, MN 55124. Copyright © 2023 by the New York State Education Department.

Seyans 1



KONSÈY POU FÈ EGZAMEN AN

Men kèk sijesyon pou ede ou pi byen konpoze:

- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan chwazi.
- Yo ba w enstriman matematik (yon règ ak yon rapòtè) pou itilize pandan tès la. Se ou ki pou konnen kilè pou sèvi ak grenn enstriman. Ou ta dwe sèvi ak enstriman matematik yo nenpòt lè ou panse y ap ede w reponn kesyon an.

1

Ki valè ki ekivalan ak $700.000 + 5.000 + 200 + 10 + 9$?

A 705.209

B 705.219

C 750.209

D 750.219

2

Jen fè 8 tou yon pis pandan li ap kouri. Carol fè 2 fwa plis tou pase Jen.
Ki ekwasyon ou kapab itilize pou detèmine kantite tou Carol fè?

A $8 \div 2 = \underline{\quad ? \quad}$

B $8 - 2 = \underline{\quad ? \quad}$

C $8 + 2 = \underline{\quad ? \quad}$

D $8 \times 2 = \underline{\quad ? \quad}$

KONTINYE

5 Ki pwodui 432 ak 6 ?

A 2.482

B 2.492

C 2.582

D 2.592

6 Ki deklarasyon konsènan yon triyang egi ki kòrèk?

A Li gen yon ang ki egzakteman 90 degre.

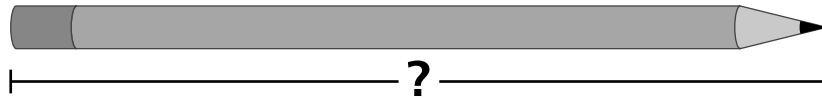
B Li gen yon ang ki pi plis pase 90 degre.

C Li gen ang ki gen mwens pase 90 degre yo chak.

D Li gen ang ki pi gran pase 90 degre yo chak.

KONTINYE

- 9 Yo montre yon kreyon anba a.



Ki longè kreyon an ye an pous?

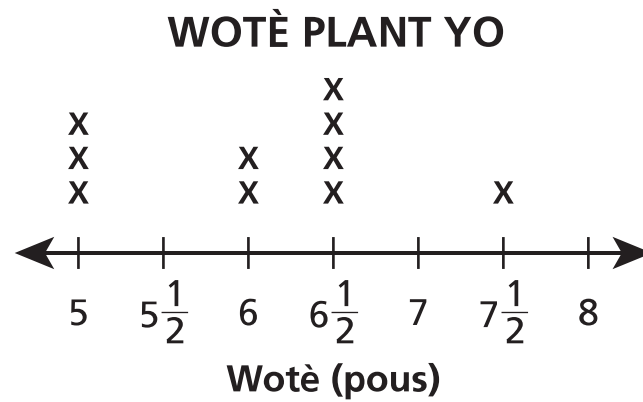
- A $4\frac{1}{4}$
- B $4\frac{1}{2}$
- C $5\frac{1}{4}$
- D $5\frac{1}{2}$
- 10 Ki nonb misk ki ekivalan ak $\frac{13}{3}$?

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

KONTINYE

13

Graf lineyè yo montre anba a reprezante wotè dis (10) plant diferan.



Ki diferans wotè, an pous, ki genyen ant plant ki pi wo a ak youn nan plant ki pi kout yo?

- A $2\frac{1}{2}$
- B 3
- C 4
- D $6\frac{1}{2}$

KONTINYE

17 Ki règ ki koresponn ak modèl nonb yo montre anba a?

64, 32, 16, 8, . . .

- A soustrè 8
- B divize pa 2
- C divize pa 8
- D miltipliye pa 2

19 Ki valè ki manke nan ekwasyon ki anba a?

$$\underline{\quad ? \quad} \times \frac{3}{6} = 15 \times \frac{1}{6}$$

- A 3
- B 5
- C 12
- D 18

KONTINYE

20

Tiffany gen 5 fwa pòm wouj pase pòm vèt. Li genyen 20 pòm wouj, konbyen pòm vèt li genyen?

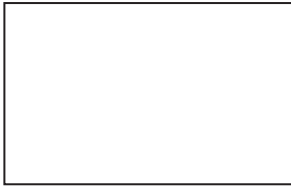
- A 4
- B 15
- C 25
- D 100

KONTINYE

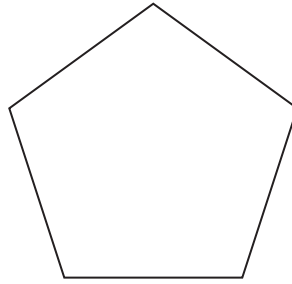
23

Ki figi ki sanble gen egzakteman de dwat simetrik?

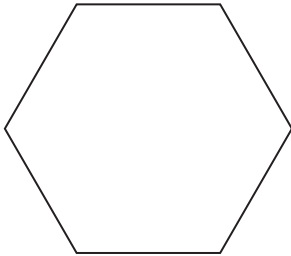
A



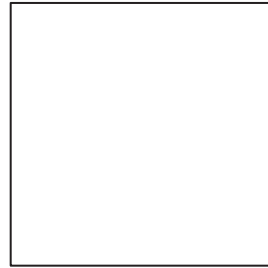
C



B



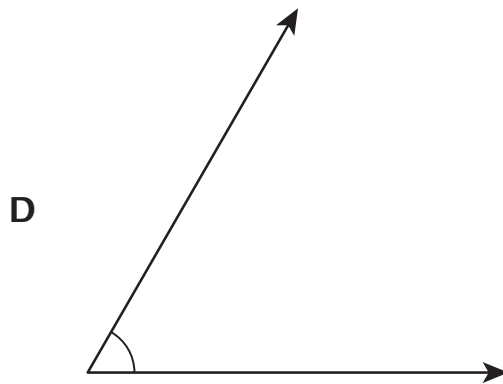
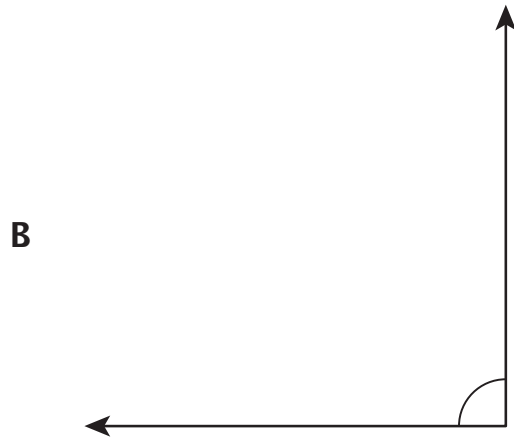
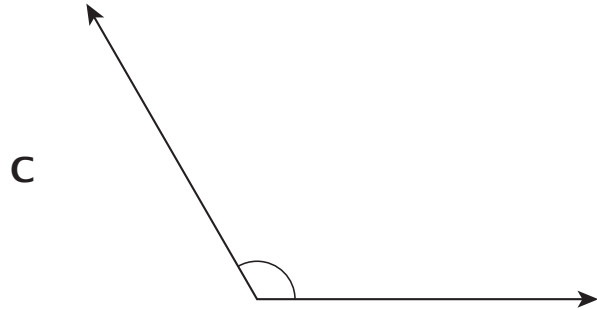
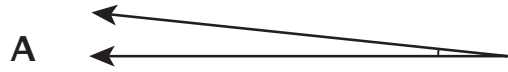
D



KONTINYE

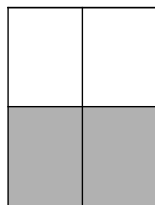
25

Ki ang ki mezire 60° ?



KONTINYE

- 29 Pati fonsè nan modèl yo montre anba a reprezante yon fraksyon nan modèl antye a.



Ki fraksyon ki ekivalan ak valè pati ki fonsè nan modèl ki reprezante a?

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

- 30 Ki valè $7.225 \div 6$?

- A 1.204
- B 1.204 r1
- C 1.205
- D 1.205 r1

4yèm ane

2023

Egzamen Matematik

Seyans 1

Sòti 2 Me pou rive 4 Me 2023

Grade 4

2023

Mathematics Test

Session 1

May 2–4, 2023

Non: _____



Haitian Creole Edition
Grade 4 2023
Mathematics Test
Session 2
May 2–4, 2023

**Pwogram Egzamen
Eta Nouyòk
Egzamen Matematik
Seyans 2**

4 YÈM ANE

**Sòti 2 Me pou rive
4 Me 2023**

RELEASED QUESTIONS

Developed and published under contract with the New York State Education Department by Questar Assessment Inc., 14720 Energy Way, Apple Valley, MN 55124. Copyright © 2023 by the New York State Education Department.

Seyans 2

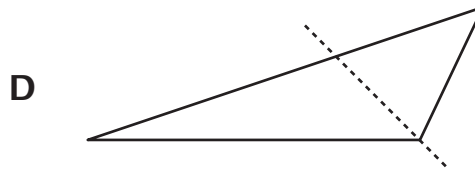
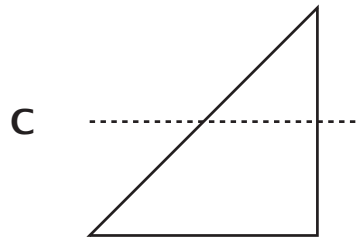
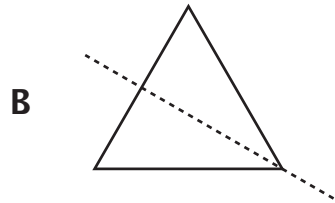
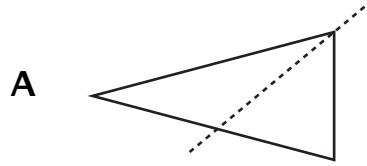


KONSÈY POU FÈ EGZAMEN AN

Men kèk sijesyon pou ede ou pi byen konpoze:

- Li chak kesyon avèk atansyon epi reflechi sou repons lan anvan ou chwazi oswa ekri repons ou an.
- Yo ba w enstriman matematik (yon règ ak yon rapòtè) pou itilize pandan tès la. Se ou ki pou konnen kilè pou sèvi ak grenn enstriman. Ou ta dwe sèvi ak enstriman matematik yo nenpòt lè ou panse y ap ede w reponn kesyon an.
- Pa bliye montre kijan w fè jwenn repons lan lè yo mande ou sa.

31 Nan ki triyang liy pwentiye a sanble se yon dwat simetri?



32 Ki konparezon ki kòrèk?

A $\frac{1}{4} < \frac{2}{8}$

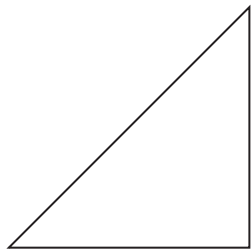
B $\frac{1}{3} > \frac{3}{6}$

C $\frac{3}{6} = \frac{5}{8}$

D $\frac{2}{3} = \frac{4}{6}$

KONTINYE

33 Ki deklarasyon konsènan figi yo montre anba a ki kòrèk?



- A Sanble tout ang li yo egi.
- B Sanble tout ang li yo obti.
- C Sanble li gen de (2) kote paralèl.
- D Sanble li gen de (2) kote pèpandikilè.

34 Tim gen 3 pakè makè. Chak pakè genyen 12 makè. Ki ekwasyon ou kapab itilize pou jwenn kantite total makè, n , Tim genyen?

- A $12 \times n = 3$
- B $3 \times 12 = n$
- C $3 \div n = 12$
- D $12 \div 3 = n$

35 Ki valè 24×11 ?

- A 35
- B 48
- C 264
- D 364

KONTINYE

36

Kesyon sa a vo 1 kredi.

Rosie te melanje $1\frac{3}{4}$ galon ji jenjanm ak $\frac{3}{4}$ galon ji pòm pou li fè ji fwi. Konbyen galon ji fwi Rosie rive fè avèk ji jenjanm la ak ji pòm nan?

Repons _____ galon

KONTINYE

37

Kesyon sa a vo 1 kredi.

Ki nonb 88.678 ki awondi nan milyèm ki pi pre a?

Repons _____

KONTINYE

38

Kesyon sa a vo 1 kredi.

Konbyen ang yon (1) degre ki genyen nan yon sèk konplè?

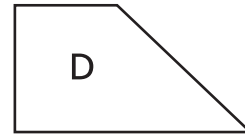
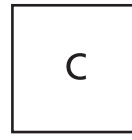
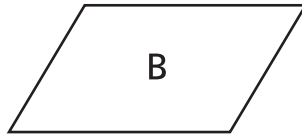
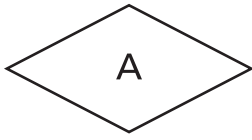
Repons _____ ang yon (1) degre

KONTINYE

39

Kesyon sa a vo 2 kredi.

Kiyès nan kwadrilatè yo montre anba a ki sanble se rektang? Asire w ou ajoute sa ou konnen konsènan ang ak kote yo nan repons ou an.



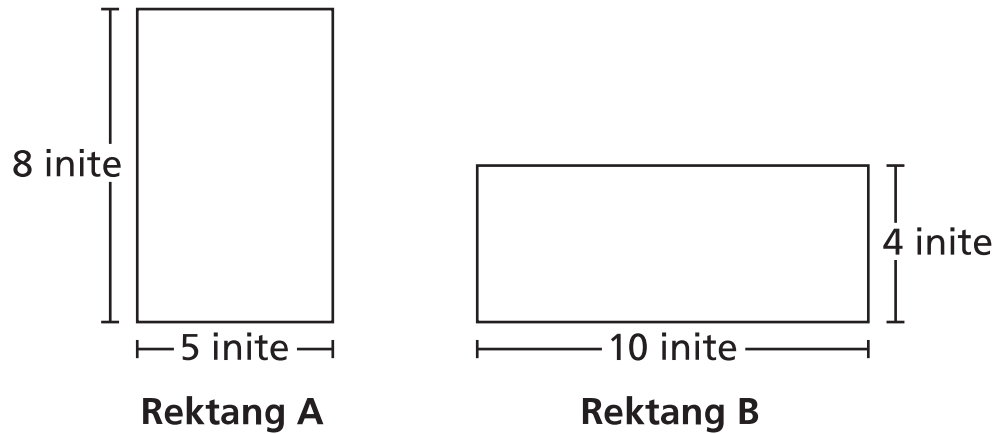
Eksplike kijan ou fè konnen repons ou an kòrèk.

KONTINYE

40

Kesyon sa a vo 2 kredi.

Yon elèv desinen de (2) rektang yo montre anba a.



Elèv la panse de (2) rektang yo genyen menm sipèfisi, men perimèt yo diferan. Èske sa elèv la di kòrèk? Asire w ou bay sipèfisi ak perimèt toude figi yo nan repons ou an.

Eksplike repons ou an.

KONTINYE

41**Kesyon sa a vo 2 kredi.**

Ki fraksyon yo kapab ajoute nan ekspresyon yo montre anba a pou li genyen valè total yon antye?

$$\frac{2}{12} + \frac{7}{12}$$

Montre kijan ou fè pou jwenn repons lan.

Repons _____

KONTINYE

42

Kesyon sa a vo 2 kredi.

Stacey te jwe menm jwèt la de (2) fwa. Li te fè 36 pwen dezyèm fwa li te jwe a, ki se 4 fwa kantite pwen li te fè premye fwa li te jwe a. Konbyen pwen Stacey te fè premye fwa li te jwe a?

Eksplike kijan ou fè konnen repons ou an kòrèk.

KONTINYE

43

Kesyon sa a vo 2 kredi.

Madam Leonard gen \$110 pou achte yon boutèy penti atizana nan boutik la. Chak boutèy koute \$9. Ki pi gwo kantite boutèy Madam Leonard kapab achte avèk kantite lajan li genyen an?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ boutèy

KONTINYE

Kesyon sa a vo 3 kredi.

Mesye Benson ap prepare anmbègè sou baz enfòmasyon ki anba yo.

- Li genyen 4 liv vyann.
- Li itilize $\frac{1}{4}$ liv vyann pou chak anmbègè.
- Li fè 9 anmbègè.

Konbyen liv vyann Mesye Benson te kite aprè li fin fè tout anmbègè yo?

Eksplike kijan ou fè pou jwenn repons lan.

4yèm ane

2023

Egzamen Matematik

Seyans 2

Sòti 2 Me pou rive 4 Me 2023

Grade 4

2023

Mathematics Test

Session 2

May 2–4, 2023

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2023 Mathematics Tests Map to the Standards
Grade 4 Released Questions

Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	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	NGLS.Math.Content.NY-4.NBT.2a	Number and Operations in Base Ten		0.8446		
2	Multiple Choice	D	1	NGLS.Math.Content.NY-4.OA.1	Operations and Algebraic Thinking	NGLS.Math.Content.NY-4.OA.2	0.8901		
5	Multiple Choice	D	1	NGLS.Math.Content.NY-4.NBT.5	Number and Operations in Base Ten		0.5227		
6	Multiple Choice	C	1	NGLS.Math.Content.NY-4.G.2a	Geometry		0.7673		
9	Multiple Choice	A	1	NGLS.Math.Content.NY-3.MD.4	Measurement and Data		0.4896		
10	Multiple Choice	C	1	NGLS.Math.Content.NY-4.NF.3c	Number and Operations - Fractions	NGLS.Math.Content.NY-4.NF.3b	0.5912		
13	Multiple Choice	A	1	NGLS.Math.Content.NY-4.MD.4	Measurement and Data		0.5230		
17	Multiple Choice	B	1	NGLS.Math.Content.NY-4.OA.5	Operations and Algebraic Thinking		0.4852		
19	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NF.4b	Number and Operations - Fractions		0.7625		
20	Multiple Choice	A	1	NGLS.Math.Content.NY-4.OA.2	Operations and Algebraic Thinking		0.4757		
23	Multiple Choice	A	1	NGLS.Math.Content.NY-4.G.3	Geometry		0.4949		
25	Multiple Choice	D	1	NGLS.Math.Content.NY-4.MD.6	Measurement and Data		0.7627		
29	Multiple Choice	C	1	NGLS.Math.Content.NY-4.NF.1	Number and Operations - Fractions		0.6225		
30	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NBT.6	Number and Operations in Base Ten		0.6966		
Session 2									
31	Multiple Choice	B	1	NGLS.Math.Content.NY-4.G.3	Geometry		0.7753		
32	Multiple Choice	D	1	NGLS.Math.Content.NY-4.NF.2	Number and Operations - Fractions		0.6466		
33	Multiple Choice	D	1	NGLS.Math.Content.NY-4.G.1	Geometry		0.3905		
34	Multiple Choice	B	1	NGLS.Math.Content.NY-4.OA.3a	Operations and Algebraic Thinking		0.8271		
35	Multiple Choice	C	1	NGLS.Math.Content.NY-4.NBT.5	Number and Operations in Base Ten		0.8158		
36	Constructed Response		1	NGLS.Math.Content.NY-4.NF.3d	Number and Operations - Fractions			0.7396	0.7396
37	Constructed Response		1	NGLS.Math.Content.NY-4.NBT.3	Number and Operations in Base Ten			0.6004	0.6004
38	Constructed Response		1	NGLS.Math.Content.NY-4.MD.5a	Measurement and Data			0.6389	0.6389
39	Constructed Response		2	NGLS.Math.Content.NY-4.G.2c	Geometry			0.2392	0.1196
40	Constructed Response		2	NGLS.Math.Content.NY-3.MD.8b	Measurement and Data			0.4233	0.2117
41	Constructed Response		2	NGLS.Math.Content.NY-4.NF.3b	Number and Operations - Fractions			0.6407	0.3204
42	Constructed Response		2	NGLS.Math.Content.NY-4.OA.2	Operations and Algebraic Thinking			0.6132	0.3066
43	Constructed Response		2	NGLS.Math.Content.NY-4.NBT.6	Number and Operations in Base Ten			0.5910	0.2955
44	Constructed Response		3	NGLS.Math.Content.NY-4.NF.4c	Number and Operations - Fractions			0.2975	0.0992

*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.