



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

**New York State Testing Program
Grade 5
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 5 2023
Mathematics Test
Session 1
May 2–4, 2023

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

5 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 sijasyon pou ede ou pi byen konpoze:

- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan ou fè chwa ou.
- Nou ba w enstriman matematik (yon règ, ak yon rapòtè) epi gen yon fèy referans ladan l pou sèvi pandan egzamen an. Se ou ki pou konnen kilè pou sèvi ak chak grenn enstriman ak fèy referans la tou. Ou dwe sèvi ak enstriman matematik yo avèk fèy referans lan tou nenpòt lè w panse l ap ede w reponn yon kesyon.

1 Genyen $\frac{7}{8}$ nan yon pizza antye nan frijidè Anthony an. Li manje $\frac{3}{8}$ nan pizza antye a pou manje midi. Ki fraksyon nan pizza antye a ki rete apre Anthony fin manje pizza pou manje midi a?

A $\frac{10}{8}$

B $\frac{5}{8}$

C $\frac{4}{8}$

D $\frac{3}{8}$

2 Ki nonb ki reprezante katrevendisnèf milyèm?

A 0,099

B 0,990

C 9,900

D 99,000

3 Yon bwat livrezon nan fòm yon pris rektangilè dwat gen yon baz ki gen yon sifas 16 pye kare ak yon wotè 6 pye. Ki volim bwat la, an pye kib?

A 22

B 96

C 192

D 1.536

KONTINYE

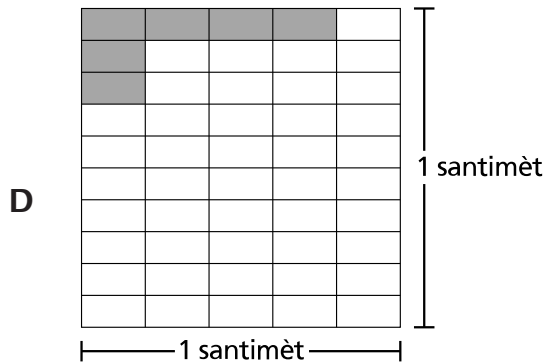
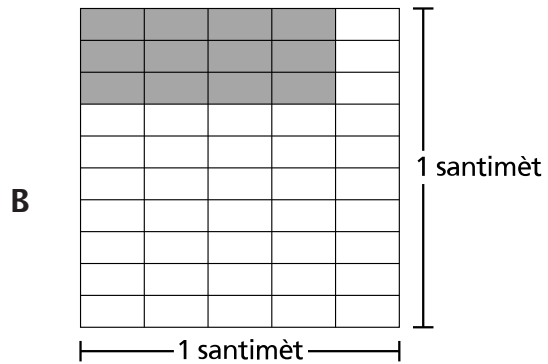
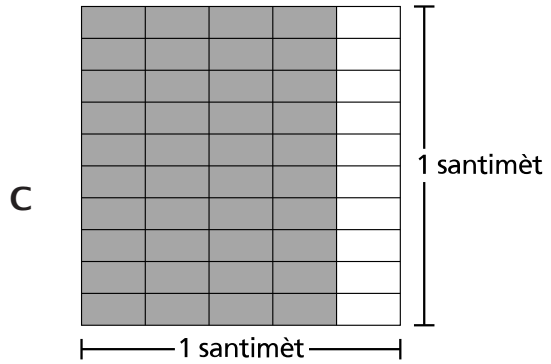
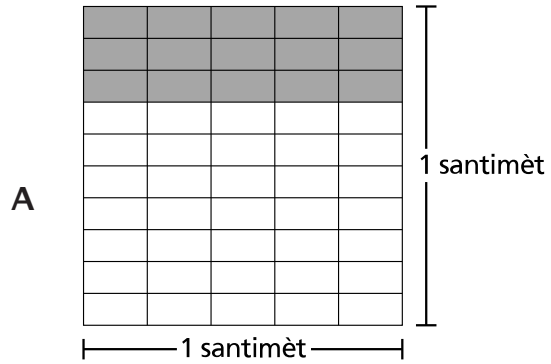
8 Ki nonb ki gen menm ekspresyon ak 32×10^4 ?

- A 3,2
- B 320
- C 0,0032
- D 320.000

KONTINYE

9

Ki modèl ki gen lonb ki reprezante sifas yon rektang ki gen $\frac{4}{5}$ santimèt longè ak $\frac{3}{10}$ santimèt lajè?



KONTINYE

10

Yon pakin nan yon sant komèsyal genyen 2.232 plas pou pakin. Gen 24 plas pou pakin nan chak ranje. Konbyen ranje ki genyen nan pakin nan?

- A 89
- B 93
- C 94
- D 97

11

Yon pwofesè gen 20 pye fisèl pou li itilize pou yon pwojè nan klas la. Li itilize tout fisèl yo, epi li bay 8 elèv yon kantite ki egal. Ki kantite fisèl, an pye, chak elèv jwenn?

- A $2\frac{1}{5}$
- B $2\frac{3}{10}$
- C $2\frac{1}{2}$
- D $2\frac{3}{4}$

KONTINYE

14

Ki chif ki ap nan plas dizèn nan apre yo fin divize 8.642 pa 10 ?

A 2

B 4

C 6

D 8

KONTINYE

17 Ki ekspresyon ki gen yon valè ki mwens pase $1\frac{1}{2}$?

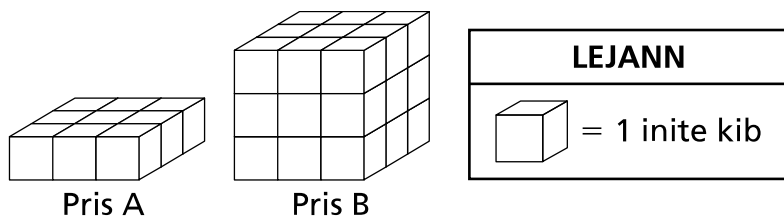
A $1\frac{1}{2} \times \frac{3}{2}$

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

C $1\frac{1}{2} \times 2$

D $1\frac{1}{2} \times 1$

18 Anba a, nou montre yon dyagram ki genyen de (2) pris rektangilè dwat, chak pris fèt an inite kib.



Ki volim total Pris A ak Pris B a, an inite kib?

A 9

B 18

C 27

D 36

KONTINYE

20

Total nèj ki tonbe pou yon vil ant vandredi ak dimanch se 34 pous.

- Nan vandredi te gen 11,25 pous nèj ki te tonbe.
- Nan samdi te gen 9,9 pous nèj ki te tonbe.

Konbyen pous nèj ki te tonbe nan dimanch?

- A 12,85
- B 13,15
- C 20,34
- D 21,15

21

Dorian mache nan yon vitès mwayèn ki se $2\frac{1}{2}$ mil pa èdtan. Li mache pandan $\frac{3}{4}$ èdtan.

Konbyen mil li mache?

- A $1\frac{3}{4}$
- B $1\frac{7}{8}$
- C $2\frac{3}{8}$
- D $3\frac{1}{4}$

KONTINYE

26

Madam Roman achte 3,5 liv grenn pou zwazo. Li peye \$4,28 pou chak liv. Konbyen kòb Madam Roman peye pou tout grenn zwazo yo?

- A \$4,28
- B \$7,78
- C \$12,84
- D \$14,98

KONTINYE

29

Yon boutik vann plizyè pake plim koulè nwa, plim koulè ble, ak plim koulè wouj.

- $\frac{4}{9}$ nan pake yo se plim koulè nwa
- $\frac{1}{6}$ nan pake yo se plim koulè ble

Ki fraksyon nan pake yo ki se plim koulè wouj?

A $\frac{5}{15}$

B $\frac{7}{18}$

C $\frac{10}{15}$

D $\frac{11}{18}$

KANPE LA

5yèm ane

2023

Egzamen Matematik

Seyans 1

Sòti 2 Me pou rive 4 Me 2023

Grade 5

2023

Mathematics Test

Session 1

May 2–4, 2023

Non: _____



Haitian Creole Edition
Grade 5 2023
Mathematics Test
Session 2
May 2–4, 2023

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

5 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



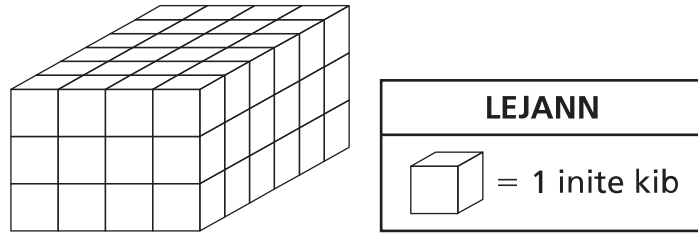
KONSÈY POU FÈ EGZAMEN AN

Men kèk sijesyon pou ede ou pi byen konpoze:

- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan ou chwazi, oswa ekri repons ou an.
- Nou ba w enstriman matematik (yon règ, ak yon rapòtè) epi gen yon fèy referans ladan l pou sèvi pandan egzamen an. Se ou ki pou konnen kilè pou sèvi ak chak grenn enstriman ak fèy referans la tou. Ou dwe sèvi ak enstriman matematik yo avèk fèy referans lan tou nenpòt lè w panse l ap ede w reponn yon kesyon.
- Pa bliye montre kijan w fè jwenn repons lan lè yo mande ou sa.

31

Anba a, nou montre dyagram yon pris rektangilè dwat ki fèt an inite kib.



Ki volim pris rektangilè dwat la, an inite kib?

- A 13
- B 24
- C 60
- D 72

32

Yo mete 210 pòm menm jan nan 14 bwat. Konbyen pòm ki gen nan chak bwat?

- A 12
- B 14
- C 15
- D 21

KONTINYE

33 Diane mache sou yon distans $3\frac{3}{8}$ mil nan samdi. Li mache sou yon distans $1\frac{5}{6}$ mil pou pi piti nan dimanch pase sa li fè nan samdi. Konbyen mil Diane mache nan dimanch?

A $1\frac{13}{24}$

B $2\frac{11}{24}$

C $2\frac{13}{24}$

D $5\frac{5}{24}$

34 Ki deklarasyon konsènan yon lozanj ak yon kare ki toujou kòrèk?

A Toude fòm yo se paralelogram ki genyen kat (4) kote egal.

B Toude fòm yo se paralelogram ki genyen kat (4) ang dwat.

C Toude fòm yo se kwadrilatè ki gen egzakteman de (2) ang egi.

D Toude fòm yo se kwadrilatè ki gen egzakteman yon (1) pè kote paralèl.

35 Yon kuizinye nan yon restoran gen 13 galon lèt. Ki kantite lèt, an ka, kuizinye a genyen?

A 17

B 26

C 42

D 52

KONTINYE

36

Kesyon sa a vo 1 kredi.

Nou montre wotè, an pous, kat (4) tou ki fèt avèk kidan anba a.

- 33,1
- 33,2
- 29,3
- 33,3

Ekri yon fraz nimerik pou konpare wotè de (2) tou ki pi wo yo, an pous. Pa bliye mete senbòl $>$, $<$, oubyen $=$ nan repons ou an.

Repons _____

KONTINYE

37

Kesyon sa a vo 1 kredi.

Andre ap itilize yon mòso riban ki mezire 15 pye pou yon pwojè atistik. Li koupe riban an mòso egal ki mezire $\frac{1}{3}$ pye nan longè. Li ap itilize tout riban an, ki kantite mòso riban Andre koupe?

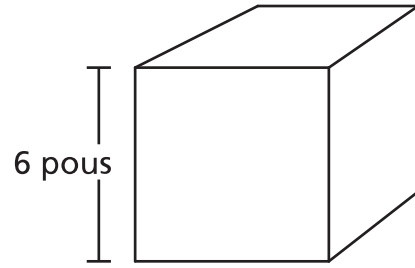
Repons _____ mòso

KONTINYE

38

Kesyon sa a vo 1 kredi.

Ki volim kib yo montre nan dyagram anba a, an pous kib?



Repons _____ pous kib

KONTINYE

39

Kesyon sa a vo 2 kredi.

Josiah fè 195 ons limonad antou. Li vide limonad la nan plizyè boutèy ki mezire 16 ons jiskaske chak boutèy fin plen. Ki pi gwo kantite boutèy Josiah kapab ranpli nèt avèk limonad la?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ boutèy

KONTINYE

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

Nou montre yon pwoblèm sou miltiplikasyon anba a.

$$42 \times \frac{5}{8}$$

Gen yon elèv ki fè konnen pwodui a ap pi plis pase 42. Èske sa elèv la di a kòrèk? Eksplike san ou pa kalkile pwodui a.

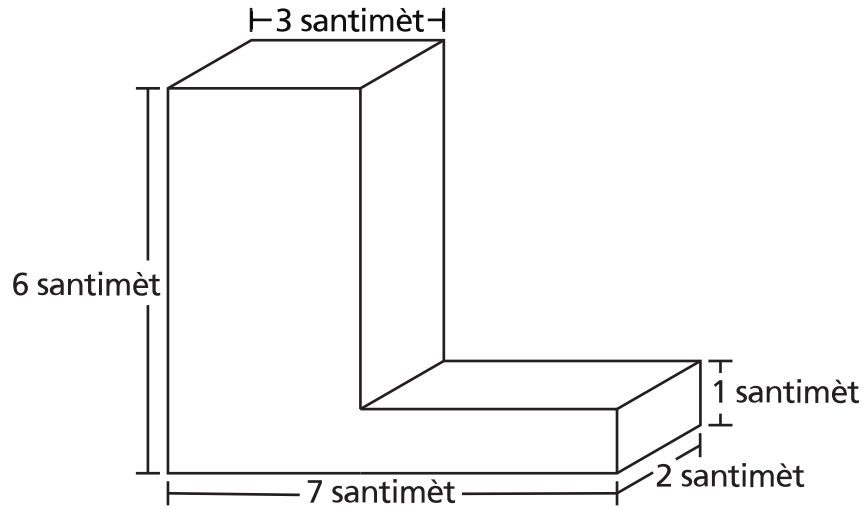
Eksplike kijan ou fè konnen repons ou an kòrèk.

KONTINYE

41

Kesyon sa a vo 2 kredi.

Nou montre dyagram yon figi ki gen 3 dimansyon anba a.



Ki volim figi a, an santimèt kib?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ santimèt kib

KONTINYE

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

Yon elèv ekri 67,203 sou fòm elaji jan nou montre sa anba a.

$$(6 \times 10) + (7 \times 1) + \left(2 \times \frac{1}{10}\right) + \left(3 \times \frac{1}{100}\right)$$

Elèv la fè yon erè. Ki kote elèv la fè erè a? Nan repons ou an, ekri kantite a nan fòm elaji ki kòrèk la.

Eksplike repons ou an.

KONTINYE

43

Kesyon sa a vo 2 kredi.

Adam ouvri yon bwat konsè v ki gen $\frac{1}{2}$ -liv ton. Li itilize tout ton an pou bay chat li yo manje. Li mete yon kantite ton ki egal nan 4 veso pou chat li yo. Konbyen ton, an liv, ki gen nan chak veso?

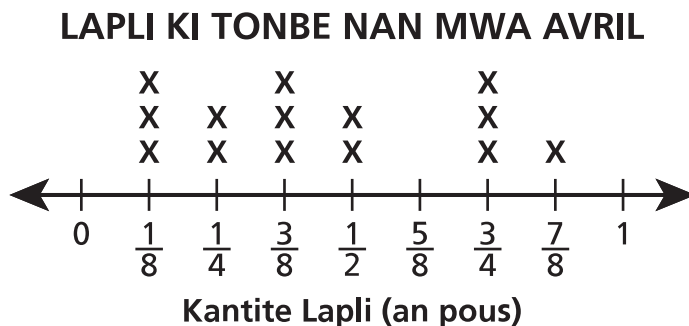
Montre kijan ou fè pou jwenn repons lan.

Repons _____ liv

KONTINYE

Kesyon sa a vo 3 kredi.

Dyagram lineyè ki anba a montre kantite lapli yo anrejistre ki te tonbe nan yon vil pandan mwa Avril la.



Ki kantite total lapli, an pous, yo te anrejistre nan mwa Avril?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ pous

Kantite total lapli ki te tonbe nan vil la pandan mwa Out la se te $8\frac{1}{4}$ pous. Ki diferans ki genyen nan kantite total lapli, an pous, ki te tonbe ant mwa Out ak mwa Avril?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ pous

5yèm ane

2023

Egzamen Matematik

Seyans 2

Sòti 2 Me pou rive 4 Me 2023

Grade 5

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 5 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	C	1	NGLS.Math.Content.NY-5.NF.2	Number and Operations - Fractions		0.8386		
2	Multiple Choice	A	1	NGLS.Math.Content.NY-5.NBT.3a	Number and Operations in Base Ten		0.7290		
3	Multiple Choice	B	1	NGLS.Math.Content.NY-5.MD.5b	Measurement and Data		0.6640		
8	Multiple Choice	D	1	NGLS.Math.Content.NY-5.NBT.2	Number and Operations in Base Ten		0.7008		
9	Multiple Choice	B	1	NGLS.Math.Content.NY-5.NF.4b	Number and Operations - Fractions		0.4596		
10	Multiple Choice	B	1	NGLS.Math.Content.NY-5.NBT.6	Number and Operations in Base Ten		0.6637		
11	Multiple Choice	C	1	NGLS.Math.Content.NY-5.NF.3	Number and Operations - Fractions		0.5505		
14	Multiple Choice	C	1	NGLS.Math.Content.NY-5.NBT.1	Number and Operations in Base Ten	NGLS.Math.Content.NY-5.NBT.2	0.5570		
17	Multiple Choice	B	1	NGLS.Math.Content.NY-5.NF.5a	Number and Operations - Fractions		0.5380		
18	Multiple Choice	D	1	NGLS.Math.Content.NY-5.MD.4	Measurement and Data		0.6600		
20	Multiple Choice	A	1	NGLS.Math.Content.NY-5.NBT.7	Number and Operations in Base Ten		0.4028		
21	Multiple Choice	B	1	NGLS.Math.Content.NY-5.NF.6	Number and Operations - Fractions		0.3210		
26	Multiple Choice	D	1	NGLS.Math.Content.NY-5.NBT.7	Number and Operations in Base Ten		0.5025		
29	Multiple Choice	B	1	NGLS.Math.Content.NY-5.NF.2	Number and Operations - Fractions		0.4339		
Session 2									
31	Multiple Choice	D	1	NGLS.Math.Content.NY-5.MD.4	Measurement and Data		0.7249		
32	Multiple Choice	C	1	NGLS.Math.Content.NY-5.NBT.6	Number and Operations in Base Ten		0.5397		
33	Multiple Choice	A	1	NGLS.Math.Content.NY-5.NF.2	Number and Operations - Fractions		0.4590		
34	Multiple Choice	A	1	NGLS.Math.Content.NY-5.G.4	Geometry		0.5202		
35	Multiple Choice	D	1	NGLS.Math.Content.NY-5.MD.1	Measurement and Data		0.7378		
36	Constructed Response		1	NGLS.Math.Content.NY-5.NBT.3b	Number and Operations in Base Ten			0.5240	0.5240
37	Constructed Response		1	NGLS.Math.Content.NY-5.NF.7c	Number and Operations - Fractions			0.3846	0.3846
38	Constructed Response		1	NGLS.Math.Content.NY-5.MD.5b	Measurement and Data			0.4519	0.4519
39	Constructed Response		2	NGLS.Math.Content.NY-5.NBT.6	Number and Operations in Base Ten			0.5655	0.2828
40	Constructed Response		2	NGLS.Math.Content.NY-5.NF.5b	Number and Operations - Fractions			0.3059	0.1530
41	Constructed Response		2	NGLS.Math.Content.NY-5.MD.5c	Measurement and Data			0.3082	0.1541
42	Constructed Response		2	NGLS.Math.Content.NY-5.NBT.3a	Number and Operations in Base Ten			0.4890	0.2445
43	Constructed Response		2	NGLS.Math.Content.NY-5.NF.7c	Number and Operations - Fractions			0.3506	0.1753
44	Constructed Response		3	NGLS.Math.Content.NY-5.MD.2	Measurement and Data			0.3523	0.1174

*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.