New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 5
Mathematics Test

Released Questions

2022

New York State administered the Mathematics Tests in May 2022 and is now making approximiately 75% of the questions from these tests available for review and use.

New York State Testing Program
Grades 3–8 Mathematics

Released Questions from 2022 Exams

Background

As in past years, SED is releasing large portions of the 2022 NYS Grades 3-8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2022, included in these released materials are at least 75 percent of the test questions that appeared on the 2022 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 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.

Short-Response Questions

Short-response questions require students to complete tasks and show their work. Like multiple-choice questions, short-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.

Extended-Response Questions

Extended-response questions ask students to show their work in completing two or more tasks or a more extensive problem. Extended-response questions allow students to show their understanding of mathematical procedures, conceptual understanding, and application. Extended-response questions may also assess student reasoning and the ability to critique the arguments of others. The scoring rubric for short and extended 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 Learning Standards Alignment

The alignment(s) to the New York State P-12 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-point and three-point 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 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 2022

Mathematics Test

Session 1

April 26–28, 2022

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 1

Ane 5

26–28 Avril 2022

RELEASED QUESTIONS

Developed and published under contract with the New York State Education Department by Questar Assessment Inc., 5550 Upper 147th Street West, Minneapolis, MN 55124.

Ane 5 Fèy Referans Matematik

KONVÈSYON

1 mil = 5.280 pye
1 mil = 1.760 yad

1 liv = 16 ons
1 tòn = 2.000 liv

1 tas = 8 ons likid
1 pent = 2 tas
1 ka = 2 pent
1 galon = 4 ka
1 lit = 1.000 santimèt kib

FÒMIL

Prism Rektangilè Dwa	$V = Bh$ oswa $V = lwh$

Seyans 1

KONSÈY POU PRAN EGZAMEN AN

Men kèk sijesyon pou ede ou bay pi bon rannman:

- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan ou fè chwa ou.
- Yo ba w enstriman matematik (yon règ, ak yon rapòtè) epi yon gen fèy referans ladan 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 la tou nenpòt ki lè w panse l ap ede w reponn yon kesyon.

1 Jill gen 4 biyè yon-dola, 3 kwatè, 4 daym, ak 3 peni. Mark gen 3 biyè yon-dola, 4 daym, ak 2 peni. Ki diferans ant kantite lajan Jill genyen ak kantite lajan Mark genyen?

A $1,01

B $1,76

C $7,85

D $8,60

2 Kisa valè $6\frac{3}{5} + 3\frac{2}{3}$ ye?

A $2\frac{14}{15}$

B $9\frac{4}{15}$

C $9\frac{5}{8}$

D $10\frac{4}{15}$

3 Ki figi de dimansyon ki toujou yon kwadrilateral regilye?

A lozanj

B poligòn

C kare

D trapèz

KONTINYE

6 Janelle fè ponch fwi kote li melanje engredyan ki vin annapre yo.

- 5 pent ji zoranj
- 6 tas ji rezen
- 8 tas ji pòm

Konbyen ka ponch fwi Janelle fè?

A 3

B 6

C 24

D 96

7 Shara ap bati yon kay pou ti zwazo. Li koupe yon planch ki gen yon longè 6 pye an seksyon ki gen yon longè $\frac{1}{3}$ pye yo chak. Konbyen seksyon nan planch la Shara pral genyen lè li fin koupe l?

A 2

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

C $10\frac{1}{3}$

D 18

KONTINYE

13 Ki valè ki fè konparezon ki anba la a vrè?

$\underline{\quad ? \quad} < 0,6$

A $0,6$

B $0,7$

C $0,59$

D $0,64$

14 Yon elèv fè devwa li nan 1 èdtan ak 34 minit. Konbyen minit li pran pou elèv la fini devwa li?

A 26

B 60

C 94

D 134

15 Kisa ki valè ekspresyon ki anba la a?

$2.158 \div 26$

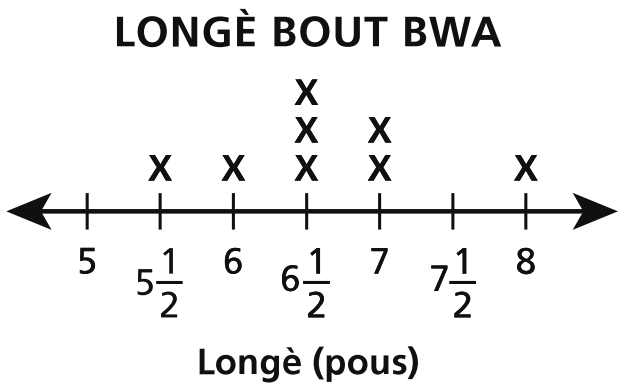
A 80

B 83

C 86

D 89

18 Madmwazèl Torres gen yon bwat ki gen bout bwa. Li mezire longè chak bout bwa nan demi pous ki pi pre a. Nou montre rezilta yo nan dyagram lineyè ki anba la a.



Konbyen pous longè apwoksimatif bout bwa yo ye lè ou mete yo bout pa bout?

A $19\frac{1}{2}$

B 33

C $45\frac{1}{2}$

D 53

19 Ki ekspresyon ki ekivalan ak $65 \times 0,15$?

A $65 \times 0,1 + 0,05$

B $65 \times 0,05 + 0,1$

C $(65 \times 0,1) + (65 \times 0,5)$

D $(65 \times 0,1) + (65 \times 0,05)$

20 Kisa ki valè ekspresyon ki anba la a?

$$14\frac{1}{3} - 6\frac{5}{8}$$

A $7\frac{1}{24}$

B $7\frac{17}{24}$

C $8\frac{7}{24}$

D $8\frac{23}{24}$

21 Trey ak 4 zanmi li yo pataje egalego yon bokal sòs pòm ki 12 ons. Konbyen ons sòs pòm chak moun resevwa?

A $\frac{5}{12}$

B $2\frac{2}{5}$

C 17

D 60

KONTINYE

22 Kisa valè $\frac{3}{10} + \frac{27}{100}$ ye?

A $\frac{30}{10}$

B $\frac{30}{100}$

C $\frac{57}{10}$

D $\frac{57}{100}$

23 Ki deklarasyon sou kosyan $425,378 \div 10^3$ lan ki vrè?

A Pwen desimal la sitiye sou bò goch 4 la.

B Pwen desimal la sitiye sou bò dwat 8 la.

C Pwen desimal la sitiye ant 3 ak 7.

D Pwen desimal la sitiye ant 4 ak 2.

Ane 5

2022

Egzamen Matematik

Seyans 1

26–28 Avril 2022

Grade 5

2022

Mathematics Test

Session 1

April 26–28, 2022

Non: _____

Haitian Creole Edition

Grade 5 2022
Mathematics Test
Session 2
April 26–28, 2022

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 2

Ane 5

26–28 Avril 2022

RELEASED QUESTIONS

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1 tas = 8 ons likid
1 pent = 2 tas
1 ka = 2 pent
1 galon = 4 ka
1 lit = 1.000 santimèt kib

FÒMIL

Prism Rektangilè Dwa	$V = Bh$ oswa $V = lwh$

Seyans 2

KONSÈY POU PRAN EGZAMEN AN

Men kèk sijesyon pou ede ou bay pi bon rannman:

- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan ou fè chwa ou oswa ekri repons ou.
- Yo ba w enstriman matematik (yon règ, ak yon rapòtè) epi yon gen fèy referans ladan 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 la tou nenpòt ki 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 Ki valè ki manke nan ekwasyon ki anba la a?

$$\frac{4}{10} + \frac{?}{100} = \frac{7}{10}$$

A 1

B 3

C 10

D 30

32 Ki ekspresyon ki ekivalan ak $\frac{2}{3} \times 7$?

A $2 \times 7 \div 3$

B $2 \times 3 \div 7$

C $7 \times 3 \div 2$

D $7 \div 2 \times 3$

33 Ki figi de dimansyon ki toujou gen 4 kote egal ak 4 ang dwa?

A paralelogram

B rektang

C lozanj

D kare

KONTINYE

34 Ki ekspresyon ki gen yon valè ki mwens pase 1 ?

A $\frac{3}{4} \times \frac{4}{3}$

B $\frac{3}{4} \times \frac{6}{3}$

C $\frac{3}{4} \times \frac{4}{4}$

D $\frac{3}{4} \times \frac{8}{4}$

35 Ki fraksyon ki gen menm valè ak $0,28$?

A $\frac{28}{1}$

B $\frac{28}{10}$

C $\frac{28}{100}$

D $\frac{28}{1.000}$

36 Mesye Davis achte 4 pitza pou yon dine familyal. Li koupe chak pitza an sizyèm. Konbyen moso pitza Mesye Davis genyen pou dine familyal la?

A 6

B 10

C 20

D 24

37 Nicolas bwè $\frac{2}{3}$ lit dlo nan maten epi $\frac{1}{2}$ lit dlo pandan manje midi. Pandan antrènman baskètbòl, li bwè yon lòt $\frac{2}{3}$ lit dlo. Konbyen lit dlo Nicolas bwè ototal?

A $\frac{3}{5}$

B $\frac{5}{8}$

C $1\frac{1}{6}$

D $1\frac{5}{6}$

38 Kijan ou ekri sis san katreven ak katòz milyèm nan fòm estanda?

A 608,014

B 608,14

C 680,014

D 680,14

KONTINYE

39 Kallie travay nan yon magazen pou bèt. Yon pati nan travay li se ajoute kantite kòrèk adousisè dlo nan chak rezèvwa pwason. Lis ki anba la a bay enfòmasyon sou kantite rezèvwa pwason ak kantite adousisè dlo li itilize.

- Gen 12 rezèvwa pwason ki bezwen adousisè dlo.
- Chak rezèvwa pwason ranpli ak 20 ka dlo.
- Pou chak 10 galon dlo, Kallie itilize 1 ti kiyè adousisè dlo.

Konbyen ti kiyè adousisè dlo ototal Kallie pral itilize pou tout dlo ki nan 12 rezèvwa pwason yo?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ ti kiyè

40 Perimèt yon triyang ekilateral se $\frac{1}{8}$ inite. Ki longè chak kote nan triyang lan ye, an inite?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ inite

KONTINYE

41 Nan nonm 714,438 la, kijan valè chif 4 agoch vigil desimal la konpare ak valè chif 4 adwat vigil desimal la?

Eksplike repons ou an.

42 Maddy achte 5 kaye ak 3 plim. Anba la a se pri chak atik yo.

- kaye: $2,85 chak
- plim: $1,79 chak

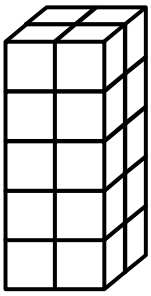
Maddy peye pou kaye ak plim yo ak yon biyè $20,00. Konbyen monnen Maddy pral resevwa?

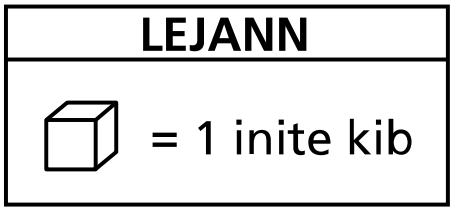
Montre kijan ou fè pou jwenn repons lan.

Repons $ _____

KONTINYE

43 Colin sèvi ak kib inite pou bati 4 tou ki menm. W ap jwenn yon foto youn nan tou yo anba a.





Konbyen inite kib volim total 4 tou Colin bati yo?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ inite kib

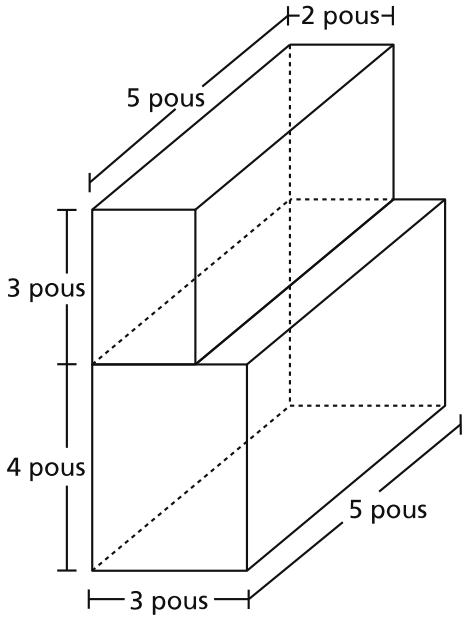
44 Sam gen yon objektif pou li mache $3\frac{1}{2}$ mil avan fen jounen an. Li mache $1\frac{1}{8}$ mil avan manje midi epi $\frac{3}{4}$ mil apre li repoze. Kisa ki rès distans, an mil, Sam bezwen mache pou reyalize objektif li?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ mil

KONTINYE

45 Gen yon dyagram de pris rektangilè anba la a.



Eksplike pwosesis pou detèmine volim konbine de pris yo. Pa bliye mete volim total la nan repons ou an.

Repons

Si pris sou tèt figi gen yon wotè 4 pous olye de 3 pous, kisa ki t ap diferans ant volim pris orijinal anwo a ak nouvo pris ki anwo a?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ pous kib

Ane 5
2022
Egzamen Matematik
Seyans 2
26–28 Avril 2022

Grade 5
2022
Mathematics Test
Session 2
April 26–28, 2022

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2022 Mathematics Tests Map to the Standards
Grade 5

Question	Type	Key	Points	Standard	Cluster
Session 1					
1	Multiple Choice	B	1	CCSS.Math.Content.4.MD.A.2	Measurement and Data
2	Multiple Choice	D	1	CCSS.Math.Content.5.NF.A.1	Number and Operations - Fractions
3	Multiple Choice	C	1	CCSS.Math.Content.5.G.B.4	Geometry
6	Multiple Choice	B	1	CCSS.Math.Content.5.MD.A.1	Measurement and Data
7	Multiple Choice	D	1	CCSS.Math.Content.5.NF.B.7b	Number and Operations - Fractions
13	Multiple Choice	C	1	CCSS.Math.Content.4.NF.C.7	Number and Operations in Base Ten
14	Multiple Choice	C	1	CCSS.Math.Content.4.MD.A.1	Measurement and Data
15	Multiple Choice	B	1	CCSS.Math.Content.5.NBT.B.6	Number and Operations in Base Ten
18	Multiple Choice	D	1	CCSS.Math.Content.5.MD.B.2	Measurement and Data
19	Multiple Choice	D	1	CCSS.Math.Content.5.NBT.B.7	Number and Operations in Base Ten
20	Multiple Choice	B	1	CCSS.Math.Content.5.NF.A.1	Number and Operations - Fractions
21	Multiple Choice	B	1	CCSS.Math.Content.5.NF.B.3	Number and Operations - Fractions
22	Multiple Choice	D	1	CCSS.Math.Content.4.NF.C.5	Number and Operations - Fractions
23	Multiple Choice	A	1	CCSS.Math.Content.5.NBT.A.2	Number and Operations in Base Ten
Session 2					
31	Multiple Choice	D	1	CCSS.Math.Content.4.NF.C.5	Number and Operations - Fractions
32	Multiple Choice	A	1	CCSS.Math.Content.5.NF.B.4a	Number and Operations - Fractions
33	Multiple Choice	D	1	CCSS.Math.Content.5.G.B.3	Geometry
34	Multiple Choice	C	1	CCSS.Math.Content.5.NF.B.5a	Number and Operations - Fractions
35	Multiple Choice	C	1	CCSS.Math.Content.4.NF.C.6	Number and Operations in Base Ten
36	Multiple Choice	D	1	CCSS.Math.Content.5.NF.B.7b	Number and Operations - Fractions
37	Multiple Choice	D	1	CCSS.Math.Content.5.NF.A.2	Number and Operations - Fractions
38	Multiple Choice	C	1	CCSS.Math.Content.5.NBT.A.3a	Number and Operations in Base Ten
39	Constructed Response		2	CCSS.Math.Content.5.MD.A.1	Measurement and Data
40	Constructed Response		2	CCSS.Math.Content.5.NF.B.7a	Number and Operations - Fractions
41	Constructed Response		2	CCSS.Math.Content.5.NBT.A.1	Number and Operations in Base Ten
42	Constructed Response		2	CCSS.Math.Content.5.NBT.B.7	Number and Operations in Base Ten
43	Constructed Response		2	CCSS.Math.Content.5.MD.C.4	Measurement and Data
44	Constructed Response		2	CCSS.Math.Content.5.NF.A.2	Number and Operations - Fractions
45	Constructed Response		3	CCSS.Math.Content.5.MD.C.5c	Measurement and Data

*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.