New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 3
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 3 2022

Mathematics Test

Session 1

April 26–28, 2022

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 1

Ane 3

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.

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 yon règ pou w itilize pandan egzamen an. Sèvi ak règ la nenpòt lè ou panse l ap ede w reponn kesyon an.

1 Mesye Green achte 4 pake tas. Chak pake gen 8 tas. Ki ekspresyon ou ka itilize pou jwenn kantite tas Mesye Green achte?

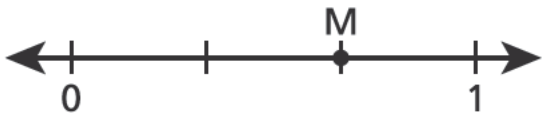
A $8 \div 4$

B $8 - 4$

C $8 + 4$

D 8×4

2 Ki fraksyon ki reprezante ak pwen M sou dwat nimerik ki anba la a?



A $\frac{3}{4}$

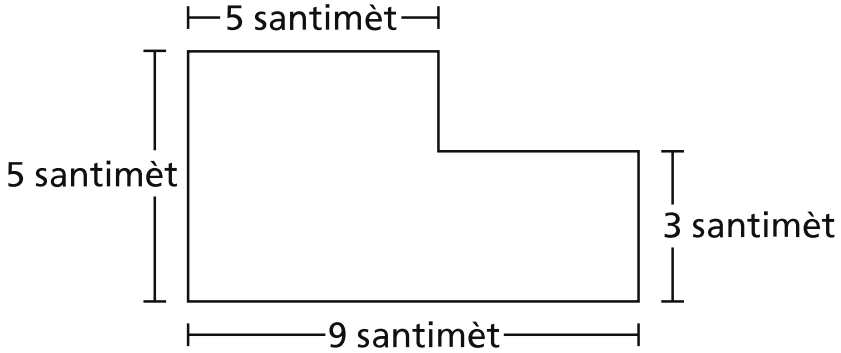
B $\frac{2}{4}$

C $\frac{3}{2}$

D $\frac{2}{3}$

KONTINYE

3 Yon elèv te konbine de (2) rektang pou kreye figi ki parèt anba la a.



Ki sifas, an santimèt kare, fòm elèv la te kreye a?

A 22

B 37

C 45

D 52

4 Yon travayè gen 3 sak galèt pou itilize nan yon jaden. Mas chak sak se 9 kilogram. Kisa ki mas total, an kilogram, tout sak galèt yo?

A 3

B 6

C 12

D 27

9 Ki ekspresyon ki ekivalan ak 5×7 ?

A $5 + (4 + 3)$

B $5 \times (4 \times 3)$

C $(5 + 3) \times (5 + 4)$

D $(5 \times 3) + (5 \times 4)$

10 Zach touche menm kantite lajan an chak semèn nan fè travay lakou. Si li touche $36 nan fen 4 semèn, konbyen lajan Zach touche chak semèn?

A $9

B $32

C $40

D $144

11 Kisa valè 7×70 ye?

A 49

B 77

C 490

D 770

12 Yon elèv trase yon rektang sou yon fèy papye. Li make de kote 1 inite ak lòt de kote yo 2 inite. Ki sifas rektang lan?

A 2 inite kare

B 4 inite

C 4 inite kare

D 6 inite

KONTINYE

15 Ki nimewo ki fè ekwasyon sa a kòrèk?

$48 \div \underline{\quad ? \quad} = 8$

A 6

B 7

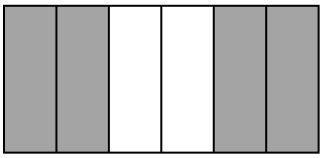
C 40

D 56

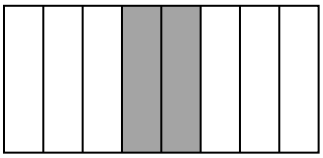
16 Pati ki kolore an gri nan modèl la ki anba la a reprezante yon fraksyon.

Ki figi ki kolore an gri pou reprezante yon fraksyon ki ekivalan modèl ki la a?

A

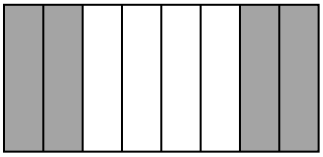


C



B

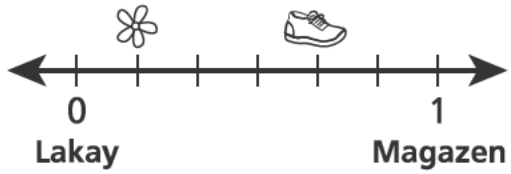
D



KONTINYE

22 Greg mache 1 mil soti lakay li pou ale nan yon magazen. Aprè li mache $\frac{2}{6}$ mil, li kanpe pou pran sant yon flè. Aprè li mache yon lòt $\frac{3}{6}$ mil, li kanpe pou lase tenis li. Ki dwat nimerik ki montre kòrèkteman kote Greg te pran sant flè a ak kote li te lase tenis li a?

A



C

B

D

Ane 3
2022
Egzamen Matematik
Seyans 1
26–28 Avril 2022

Grade 3
2022
Mathematics Test
Session 1
April 26–28, 2022

Non: _____

Haitian Creole Edition

Grade 3 2022
Mathematics Test
Session 2
April 26–28, 2022

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 2

Ane 3

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.

Seyans 2

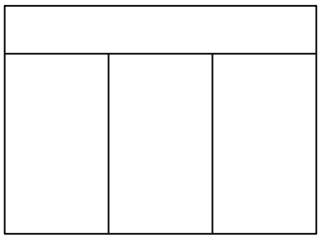
KONSÈY POU PRAN EGZAMEN AN

Men kèk sijesyon pou ede ou bay pi bon rannman:

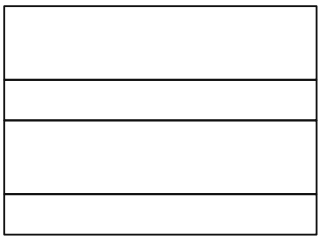
- Li chak kesyon avèk atansyon epi reflechi sou chak repons anvan ou fè chwa ou oswa ekri repons ou.
- Yo ba w yon règ pou w itilize pandan egzamen an. Sèvi ak règ la nenpòt lè ou panse l ap ede w reponn kesyon an.
- Pa bliye montre kijan w fè jwenn repons lan lè yo mande ou sa.

26 Ki rektang ki divize an 4 pati egalego?

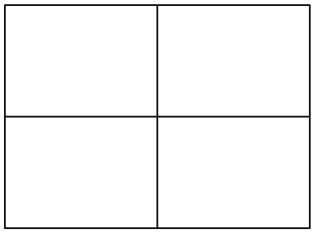
A



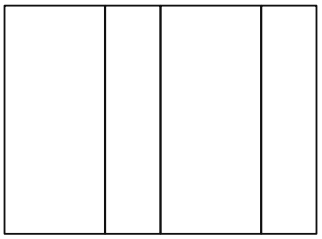
C



B



D



27 Yon magazen bèt gen 4 rezèvwa pwason menm gwosè. Yon travayè mete 10 lit dlo nan chak rezèvwa pwason. Konbyen lit dlo ototal travayè a mete nan tout rezèvwa pwason yo?

A 4

B 6

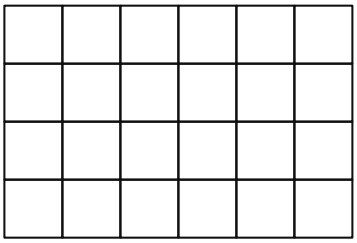
C 14

D 40

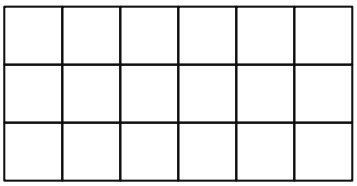
KONTINYE

28 Ki aranjman ki reprezante 3×6 ?

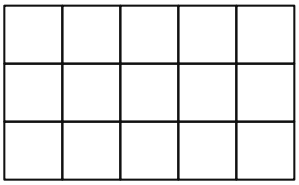
A



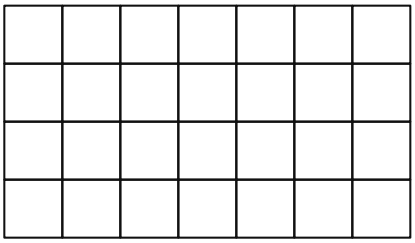
C



B



D



29 Ki modèl nimewo ki itilize règ ajoute 3 a ?

A 2, 6, 18, 48, . . .

B 3, 7, 11, 15, . . .

C 3, 9, 27, 54, . . .

D 4, 7, 10, 13, . . .

30 Ki fraksyon ki mwens pase $\frac{1}{4}$?

A $\frac{2}{4}$

B $\frac{4}{4}$

C $\frac{1}{3}$

D $\frac{1}{6}$

31 Mica gen 35 boul chiklèt. Li bay yo tout ba 7 zanmi. Chak zanmi jwenn menm kantite boul chiklèt la. Ki ekspresyon ou ka itilize pou jwenn kantite boul chiklèt Mica bay chak zanmi?

A $35 - 7$

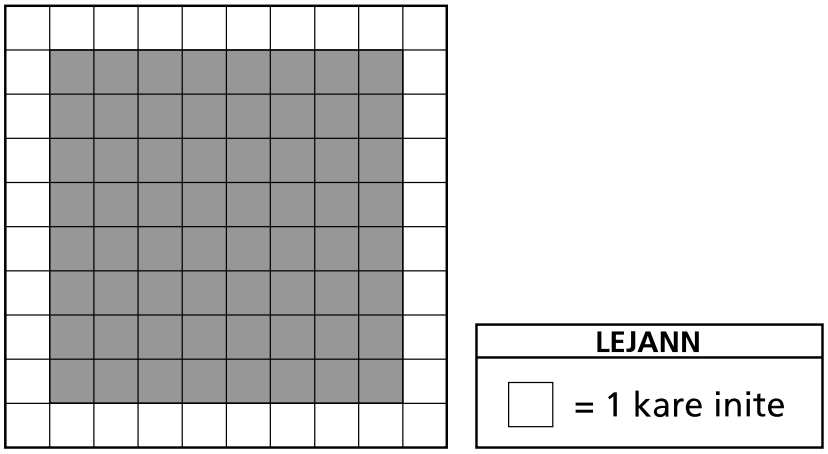
B $35 \div 7$

C $35 + 7$

D 35×7

KONTINYE

32 Figi ki anba la a fèt ak kare inite. Kèk nan kare inite yo kolore an gri epi kèk nan kare inite yo pa kolore an gri.



Ki pwosesis ki dekri yon fason pou jwenn sifas la, an kare inite, pou pati ki kolore an gri nan figi a?

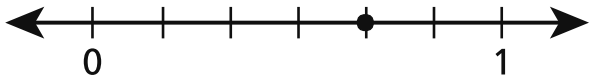
A konte tout kare inite yo nan tout figi a nèt

B konte sèlman kare inite ki kolore an gri nan figi a

C adisyone tout longè kote tout figi a nèt

D adisyone sèlman longè kote ki kolore an gri yo nan figi a

33 Dwat nimerik ki anba la a montre yon pwen.



Ki fraksyon ekivalan ki reprezante ak pozisyon pwen an sou dwat nimerik la?

A $\frac{1}{3}$

B $\frac{2}{3}$

C $\frac{2}{4}$

D $\frac{3}{4}$

KONTINYE

34 Twa klas ale nan yon joune nan zou a. Anba la a se yon lis kantite elèv nan chak klas.

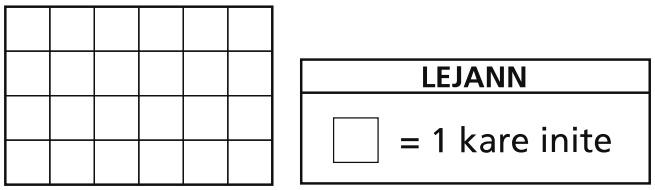
- Klas A gen 24 elèv.
- Klas B gen 23 elèv.
- Klas C gen 25 elèv.

Nan zou a, yo mete tout elèv yo nan 8 gwoup egalego. Konbyen elèv ki nan chak gwoup?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ elèv

35 Sa se yon figi jeyometri anba la a.



Yo ajoute yon lòt ranje 6 kare inite nan figi a. Ki sifas total nouvo figi a ye aprè yo ajoute kare inite yo?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ kare inite

KONTINYE

36 Manadjè nan yon sinema bezwen kòmande 267 nouvo syèj. Si yo vann syèj yo sèlman an gwoup 10, kisa ki **pi piti** kantite syèj manadjè a dwe kòmande?

Eksplike kijan ou fè konnen repons ou an kòrèk.

37 Sam bezwen rezoud pwoblèm ki anba la a.

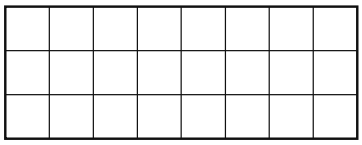
$$\underline{\ ?\ } \times 7 = 63$$

Li itilize ekwasyon $63 \div 7 = \underline{\ ?\ }$ pou jwenn nonm enkoni an. Èske pwosesis sa a pral ede Sam rezoud pwoblèm nan?

Eksplike kijan ou fè konnen repons ou an kòrèk.

KONTINYE

38 Figi ki anba la a fèt ak kare inite.



LEJANN
☐ = 1 kare inite

Ekri epi rezoud yon ekwasyon adisyon **ak** yon ekwasyon miltiplikasyon ou ka itilize pou jwenn sifas figi a.

Montre kijan ou fè pou jwenn repons lan.

39 Ekri yon fraksyon ki gen yon valè ki plis pase $\frac{3}{8}$ ak 3 kòm nimeratè a. Pa bliye mete sa w konnen tou sou fraksyon nan repons ou an.

Eksplike kijan ou fè konnen repons ou an kòrèk.

KONTINYE

40 Selena ap antrene pou yon kous. Semèn pase, li te kouri 4 mil chak jou nan 3 jou diferan. Sèvi ak senbòl X la pou fè yon aranjman ki reprezante kantite mil total Selena te kouri semèn pase.

Montre kijan ou fè pou jwenn repons lan.

Semèn sa a, Selena gen plan kouri yon total 20 mil. Si li kouri 4 mil chak jou, konbyen jou li pral bezwen kouri semèn sa a?

Montre kijan ou fè pou jwenn repons lan.

Repons _____ jou

Ane 3
2022
Egzamen Matematik
Seyans 2
26–28 Avril 2022

Grade 3
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 3

Question	Type	Key	Points	Standard	Cluster
Session 1					
1	Multiple Choice	D	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking
2	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations - Fractions
3	Multiple Choice	B	1	CCSS.Math.Content.3.MD.C.7d	Measurement and Data
4	Multiple Choice	D	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data
9	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking
10	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking
11	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.3	Number and Operations in Base Ten
12	Multiple Choice	A	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data
15	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking
16	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3b	Number and Operations - Fractions
22	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2a	Number and Operations - Fractions
Session 2					
26	Multiple Choice	B	1	CCSS.Math.Content.3.G.A.2	Geometry
27	Multiple Choice	D	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data
28	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking
29	Multiple Choice	D	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking
30	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3d	Number and Operations - Fractions
31	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking
32	Multiple Choice	B	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data
33	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3a	Number and Operations - Fractions
34	Constructed Response		2	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking
35	Constructed Response		2	CCSS.Math.Content.3.MD.C.6	Measurement and Data
36	Constructed Response		2	CCSS.Math.Content.3.NBT.A.1	Number and Operations in Base Ten
37	Constructed Response		2	CCSS.Math.Content.3.OA.B.6	Operations and Algebraic Thinking
38	Constructed Response		2	CCSS.Math.Content.3.MD.C.7a	Measurement and Data
39	Constructed Response		2	CCSS.Math.Content.3.NF.A.3d	Number and Operations - Fractions
40	Constructed Response		3	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking

*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.