



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

New York State Testing Program
Grade 8
Mathematics Test
(Haitian Creole)

Released Questions

2021

New York State administered the Mathematics Tests in May 2021 and is now making the questions from Session 1 of these tests available for review and use. Only Session 1 was required in 2021.



New York State Testing Program Grades 3–8 Mathematics

Released Questions from 2021 Tests

Background

In 2013, New York State (NYS) began administering tests designed to assess student performance in accordance with the instructional shifts and rigor demanded by the new New York State P–12 Learning Standards in Mathematics. To help in this transition to new assessments, the New York State Education Department (NYSED) has been releasing an increasing number of test questions from the tests that were administered to students across the State in the spring. This year, SED is again releasing 2021 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

In February 2021, with the ongoing COVID-19 pandemic still forcing restrictions on all educational and learning activities statewide, NYSED submitted two federal waiver requests related to state assessment and accountability requirements. The waiver requests addressed the unique circumstances caused by the pandemic that have resulted in many students receiving some or all of their instruction remotely.

Later that month, the United States Department of Education (USDE) informed states that it would not grant a blanket waiver for state assessments. However, the USDE agreed to uncouple state assessments from the Every Student Succeeds Act (ESSA) accountability requirements so that test results will be used solely as a measure of student learning. Additionally, it was decided that NYSED would administer only Session 1 of the Grades 3–8 ELA and Mathematics Tests for the Spring 2021 administration and that the tests would include previously administered questions.

The decision to use previously administered test questions in this extraordinary year was based on guidance from nationally recognized experts in the assessment field and was recommended in a [publication](#) from the Council of Chief State School Officers to state education departments. Reusing test questions provided the benefit of having established scale scores and stable item parameters. Using previously administered test questions also ensured that it will be possible to develop new test forms for 2022 and beyond. Although it was not the driver of the decision, the reuse of previously administered test questions provided an opportunity for cost savings during these unique circumstances where the instructional models used by schools varied throughout the State.

For 2021, the entire Session 1 booklet is being released as this is all that students were required to take. Additionally, NYSED is providing a map that details what learning standards 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 NYSED'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.

New York State P–12 Learning Standards Alignment

The alignment to the New York State P–12 Learning Standards for Mathematics is intended to identify the primary analytic skills necessary to successfully answer each question. 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. Specific criteria for writing test questions, as well as additional assessment information, are available at <http://www.engageny.org/common-core-assessments>.

Non: _____



Haitian Creole Edition
Grade 8
Mathematics Test
Session 1
v202

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

Ane 8

v202

Released Questions

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Ane 8 Fèy Referans Matematik

KONVÈSYON

1 pous = 2,54 santimèt

1 mètr = 39,37 pous

1 mil = 5.280 pye

1 mil = 1.760 yad

1 mil = 1,609 kilomèt

1 kilomèt = 0,62 mil

1 liv = 16 ons

1 liv = 0,454 kilogram

1 kilogram = 2,2 liv

1 tòn = 2.000 liv

1 tas = 8 ons likid

1 pent = 2 tas

1 ka = 2 pent

1 galon = 4 ka

1 galon = 3,785 lit

1 lit = 0,264 galon

1 lit = 1.000 santimèt kib

FÒMIL

Triyang

$$A = \frac{1}{2}bh$$

Paralelogram

$$A = bh$$

Sèk

$$A = \pi r^2$$

Sèk

$$C = \pi d \text{ oswa } C = 2\pi r$$

Prism Jeneral

$$V = Bh$$

Silenn

$$V = \pi r^2 h$$

Esfè

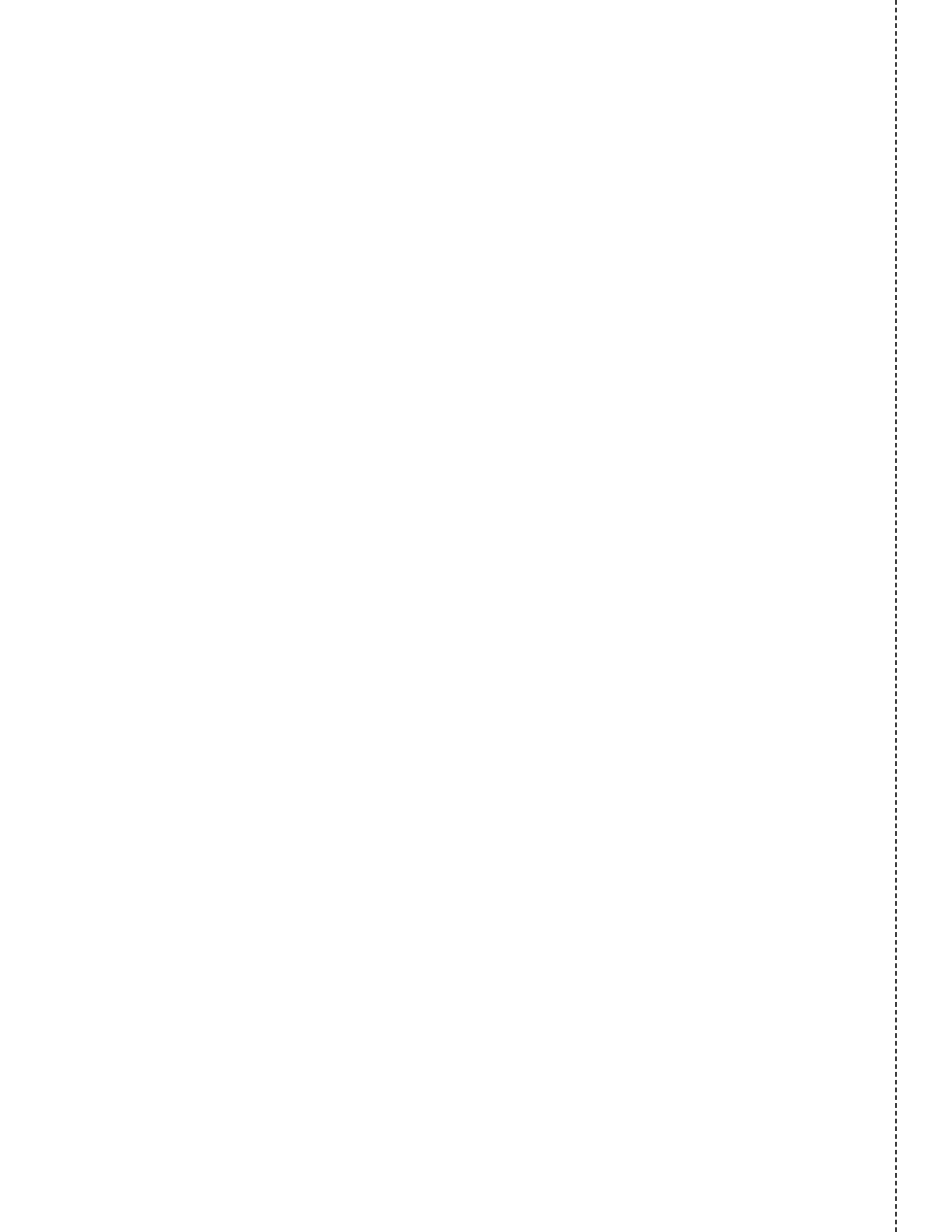
$$V = \frac{4}{3}\pi r^3$$

Kòn

$$V = \frac{1}{3}\pi r^2 h$$

Teyorèm Pitagò

$$a^2 + b^2 = c^2$$



Seyans 1



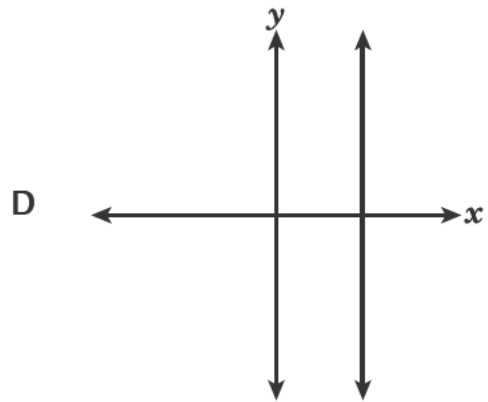
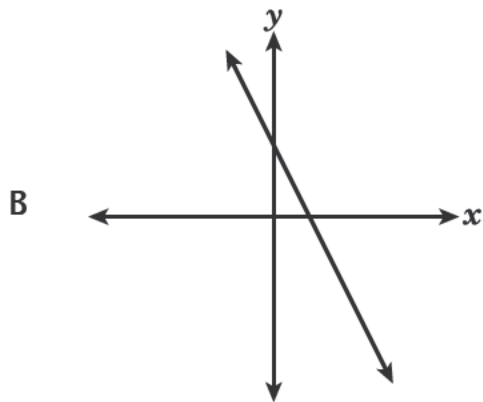
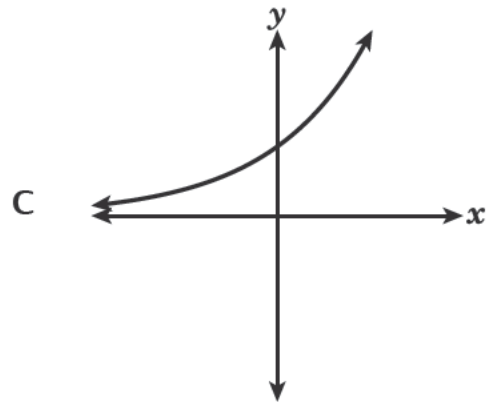
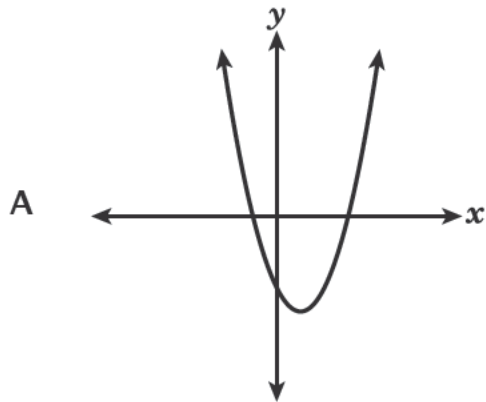
KONSÈY POU PRAN EGZAMEN AN

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, yon rapòtè ak yon kalkilatri) epi yon papye ki gen fòmil yo ladan pou w sèvi pandan egzamen an. Se oumenm k ap deside kilè chak enstriman ak fich referans lan ap ede w. Ou ka sèvi ak enstriman matematik yo avèk papye fòmil la tou nenpòt ki lè w panse l ap ede w reponn yon kesyon.

1

Ki graf ki reprezante yon fonksyon lineyè x ?



2

Kisa ki valè ekspresyon ki pi ba a?

$$\frac{1,6 \times 10^5}{0,2 \times 10^2}$$

A $0,8 \times 10^3$

B 8×10^3

C $0,8 \times 10^7$

D 8×10^7

KONTINYE

3

Nan yon faktori, depans pou fabrike kantite diferan bwòs dan nan tablo ki pi ba a.

PRI BWÒS DAN YO

Kantite Bwòs Dan	3	6	9	12
Pri (dola)	\$4,50	\$9,00	\$13,50	\$18,00

Yon fonksyon lineyè reprezante depans yo selon kantite bwòs dan yo fabrike. Ki deklarasyon sou to chanjman fonksyon sa a ki vrè?

- A Depans la ogmante pa \$1,50 pou chak bwòs dan anplis yo fabrike.
- B Depans la ogmante pa \$4,50 pou chak bwòs dan anplis yo fabrike.
- C Depans la ogmante pa \$9,00 pou chak 3 bwòs dan anplis yo fabrike.
- D Depans la ogmante pa \$18,00 pou chak 3 bwòs dan anplis yo fabrike.

4

Yon konpayi fè kòn krèm glase de gwosè diferan. Kòn ki pi piti yo gen yon wotè 3,5 pous ak yon dyamèt 3 pous. Kòn ki pi gwo yo gen yon wotè 5,1 pous ak yon dyamèt 4,5 pous. Apeprè nan ki kantite volim kòn ki pi gwo a pi gwo pase volim kòn ki piti a ye lè w awondi li nan dizyèm pous kib ki pi pre a?

- A 18,8
- B 56,4
- C 75,2
- D 225,5

KONTINYE

5

Chris ak Sam fè lajan nan netwaye nèj, jan sa dekri pi ba a.

- Kantite lajan Chris touche reprezante ak ekwasyon $y = 8,25x$, kote y se kantite total lajan, an dola, li te touche nan x èdtan.
- Tablo ki pi ba a montre relasyon ant kantite total lajan Sam te touche, y , an dola, ak kantite total èdtan li te travay, x , an èdtan.

KANTITE LAJAN SAM FÈ

x	4	6	8
y	30	45	60

Ki deklarasyon ki konpare kòrèkteman to Chris ak Sam te fè lajan nan netwaye nèj?

- A** Sam fè \$0,75 plis pa èdtan pase Chris.
- B** Chris fè \$0,75 plis pa èdtan pase Sam.
- C** Sam fè \$0,25 plis pa èdtan pase Chris.
- D** Chris fè \$0,25 plis pa èdtan pase Sam.

6

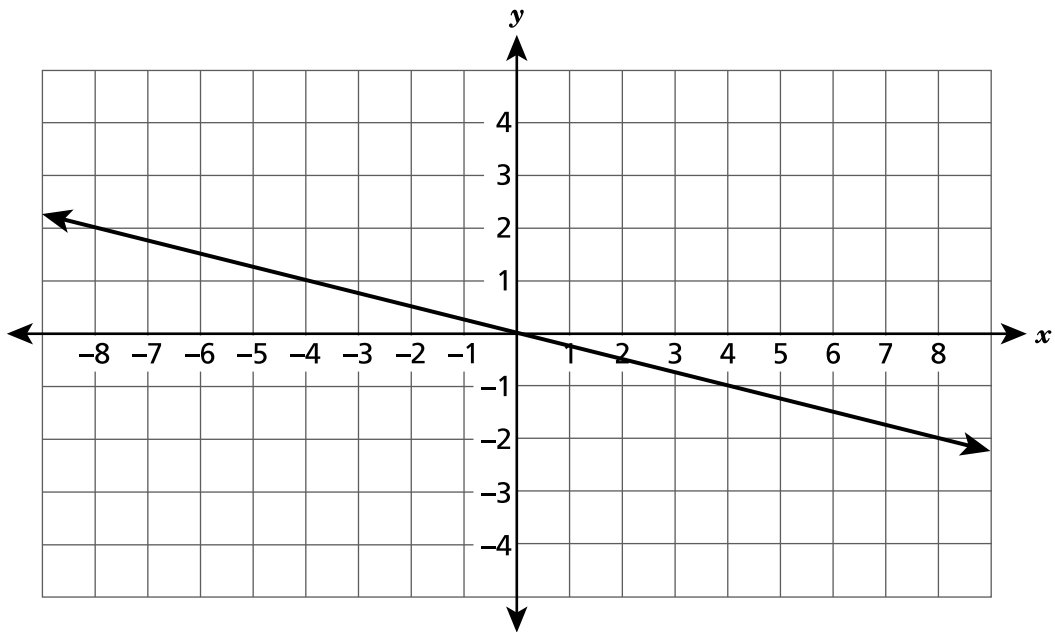
Ki ekwasyon ki reprezante yon fonksyon x ki **pa** lineyè?

- A** $y = 4(x + 3)$
- B** $y = 4^2 + 3x$
- C** $y = 4x + 3x^2$
- D** $y = \frac{4 + x}{3}$

KONTINYE

7

Ki ekwasyon ki reprezante dwat yo endike sou plan kowòdone ki pi ba a?



- A $y = 4x$
- B $y = -4x$
- C $y = \frac{1}{4}x$
- D $y = -\frac{1}{4}x$

KONTINYE

8

Distans ki pi pre ant Latè ak Mas se apeprè $3,39 \times 10^7$ mil. Fize pi rapid ki kite Latè a vwayaje nan yon vitès mwayèn apeprè $3,6 \times 10^4$ milalè. Nan to sa a, ki ekspresyon yo te ka itilize pou detèmine apeprè kantite èdtan fize a t ap pran pou vwayaje nan distans sa a?

A $(3,39 \times 10^7) - (3,6 \times 10^4)$

B $(3,6 \times 10^4) - (3,39 \times 10^7)$

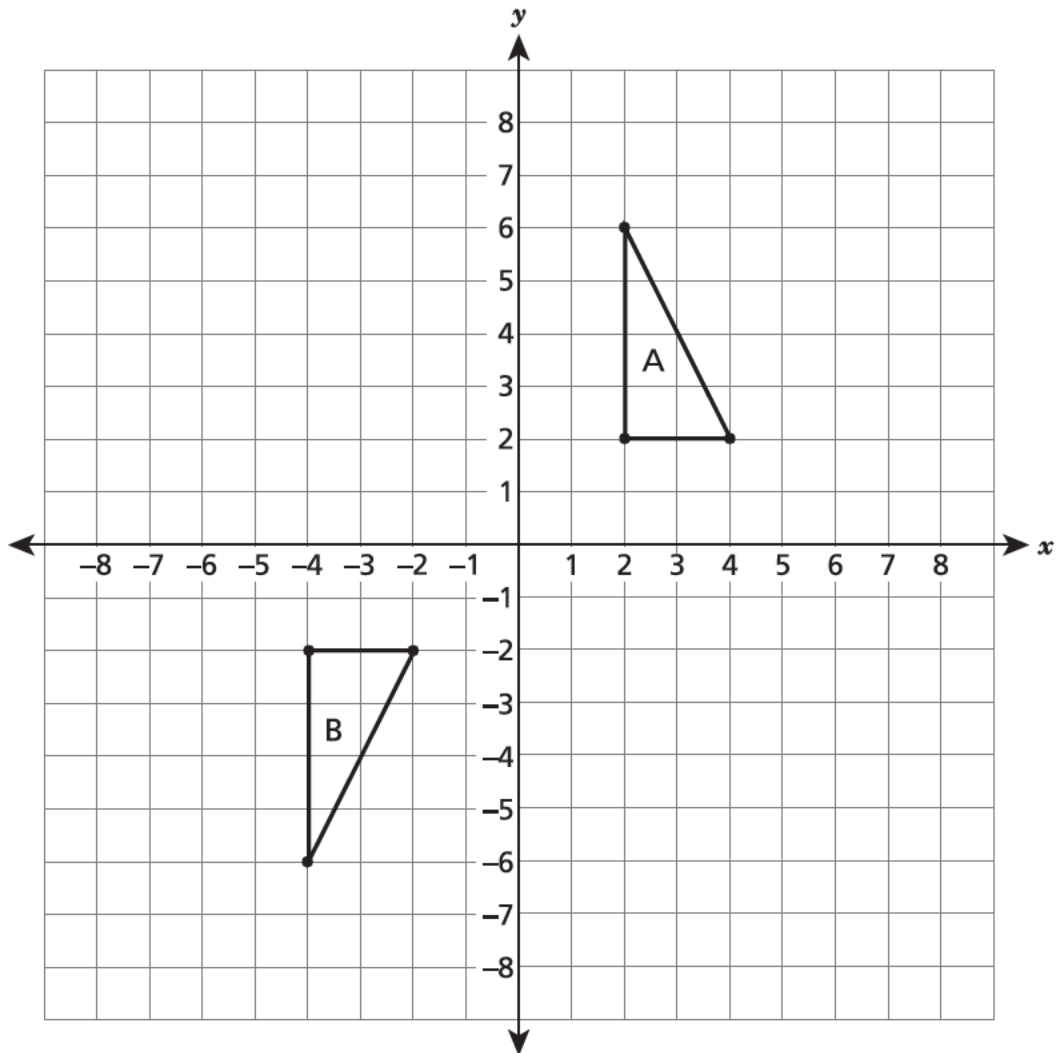
C $(3,39 \times 10^7) \div (3,6 \times 10^4)$

D $(3,6 \times 10^4) \div (3,39 \times 10^7)$

KONTINYE

9

Yo reprezante triyang A ak triyang B sou plan kowòdone ki pi ba a.



Ki sekans transfòmasyon k ap deziye triyang A sou imaj kongriyan li, triyang B ?

- A yon refleksyon sou aks x , apres a yon refleksyon sou aks y
- B yon translasyon 8 inite anba, epi yon refleksyon sou aks y
- C yon refleksyon sou aks x , apres a yon translasyon 6 inite agoch
- D yon wotasyon 90° nan sans zegwi yon mont toutotou orijin lan, apres a yon translasyon 6 inite agoch

KONTINYE

10

Ki sistèm ekwasyon ki pa gen okenn solisyon?

A
$$\begin{cases} 3x + 4y = 5 \\ 6x + 8y = 10 \end{cases}$$

B
$$\begin{cases} 7x - 2y = 9 \\ 7x - 2y = 13 \end{cases}$$

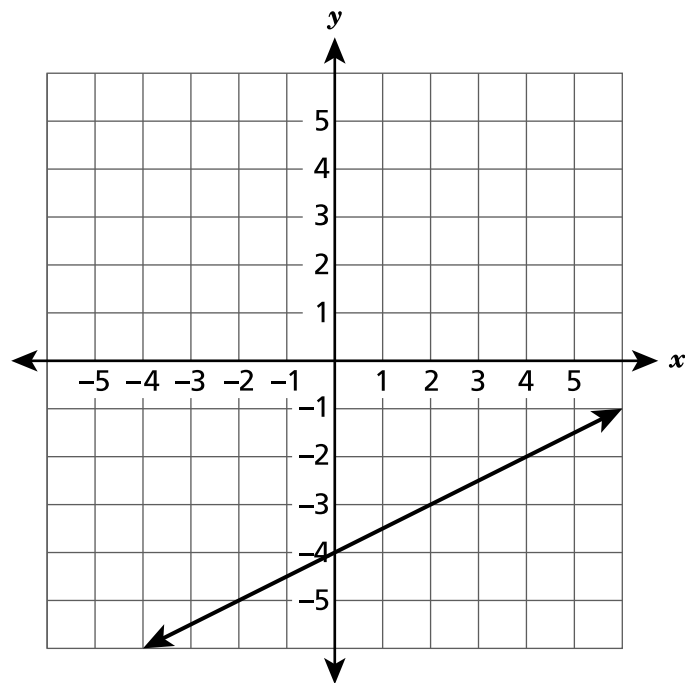
C
$$\begin{cases} 2x - y = -11 \\ -2x + y = 11 \end{cases}$$

D
$$\begin{cases} 3x + 6y = 1 \\ x + y = 0 \end{cases}$$

KONTINYE

11

Gen yon dwat ki trase sou plan kowòdone ki pi ba a.



Yo pral trase dwat $y = -x + 2$ sou menm plan kowòdone a pou kreye yon sistèm ekwasyon. Ki solisyon sistèm ekwasyon sa a?

- A $(-2, 4)$
- B $(0, -4)$
- C $(2, -4)$
- D $(4, -2)$

KONTINYE

12

Fonksyon lineyè K pase nan pwen $(-3, 7)$ ak $(3, 3)$. Kisa ki to chanjman fonksyon K?

A $-\frac{3}{2}$

B $-\frac{2}{3}$

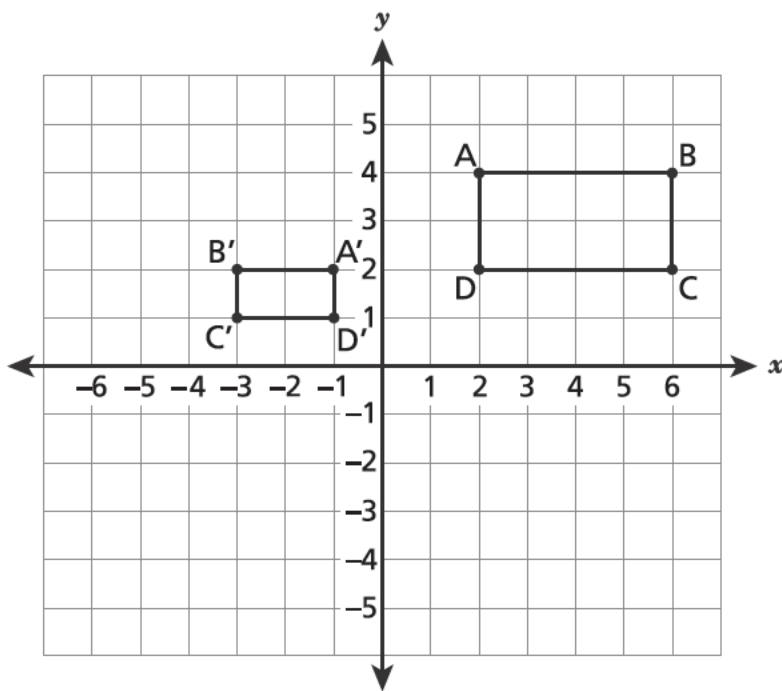
C $\frac{3}{2}$

D $\frac{2}{3}$

KONTINYE

13

Rektang $A'B'C'D'$ similè ak rektang $ABCD$, jan yo montre nan plan kowòdone ki pi ba a.



Ki sekans transfòmasyon ki deziye rektang $ABCD$ nan rektang $A'B'C'D'$?

- A** yon translasyon 8 inite agoch, apresa yon dilatasyon ak yon faktè echèl $\frac{1}{2}$ avèk yon sant dilatasyon nan orijin lan
- B** yon refleksyon sou aks y , apresa yon dilatasyon ak yon faktè echèl $\frac{1}{2}$ avèk yon sant dilatasyon nan orijin lan
- C** yon dilatasyon ak yon faktè echèl $\frac{1}{2}$ avèk yon sant dilatasyon nan orijin lan, apresa yon 90° wotasyon nan sans envès zegwi mont toutotou orijin lan
- D** yon 90° wotasyon nan sans envès zegwi yon mont toutotou orijin lan, apresa yon dilatasyon ak yon faktè echèl $\frac{1}{2}$ avèk yon sant dilatasyon nan orijin lan

KONTINYE

14 Patty gen yon bwat flè ki gen fòm yon pris rektangilè epi dimansyon andedan li se 15 pous an longè, 8 pous an lajè, ak 6 pous an wotè. Patty pral ranpli bwat flè $\frac{3}{4}$ ak tè. Konbyen pous kib tè ki pral nan bwat flè a?

A 387

B 516

C 540

D 720

15 Sou yon plan kowòdone, graf yon dwat pase atravè orijin lan ak pwen (10, 14). Kisa ki ekwasyon dwat la?

A $y = \frac{5}{7}x$

B $y = \frac{7}{5}x$

C $y = x + \frac{5}{7}$

D $y = x + \frac{7}{5}$

KONTINYE

16 Ki deklarasyon sou solisyon ekwasyon ki pi ba a ki vrè?

$$3 = -\frac{1}{3}x$$

- A Pa gen solisyon.
- B Gen yon sèl solisyon, $x = -1$.
- C Gen yon sèl solisyon, $x = -9$.
- D Gen yon kantite solisyon enfini.

17 Yo te fè yon etid pou detèmine relasyon ant laj, x , an ane, pou yon sèten mak motosiklèt ak valè li, y , an dola. Ekwasyon $y = -750x + 8.500$ reprezante done yo pi byen. Selon ekwasyon an, ki estimasyon valè yon motosiklèt ki gen 5 lane?

- A \$3.750
- B \$4.750
- C \$7.750
- D \$12.250

18 Ki deklarasyon ki dekri **pi byen** done ki nan yon dyagram dispèsyon kote valè y yo ap diminye pandan valè x yo ap ogmante?

- A Yo ka reprezante done yo pi byen ak yon dwat vètikal.
- B Yo ka reprezante done yo pi byen ak yon dwat orizontal.
- C Yo ka reprezante done yo pi byen ak yon dwat ki gen yon pant pozitif.
- D Yo ka reprezante done yo pi byen ak yon dwat ki gen yon pant negatif.

KONTINYE

19

Ki relasyon pwopòsyonèl ki gen pi gran to chanjman?

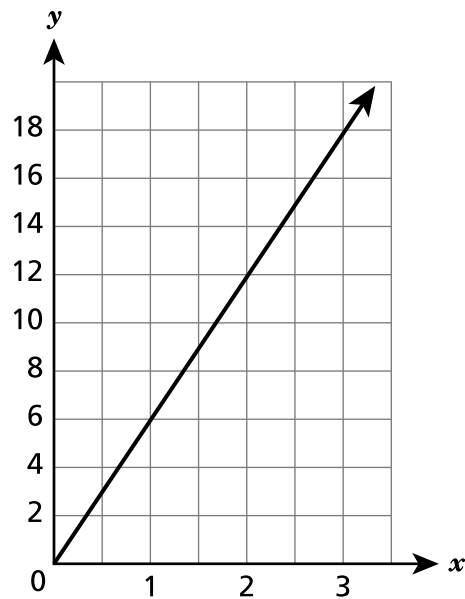
A $y = 7x$

C

x	y
0	0
2	8
4	16
6	24

B Valè y ogmante pa 12 pou chak ogmantasyon 4 nan valè x .

D



20

Yon po flè gen fòm yon silenn epi li gen yon dyamèt 5 pous ak yon wotè 7 pous. Ki ekwasyon ou ta ka itilize pou detèmine volim po flè a, an pous kib?

A $V = \pi(5)^2(7)$

B $V = \pi(7)^2(5)$

C $V = \pi(7)^2(2,5)$

D $V = \pi(2,5)^2(7)$

KONTINYE

21 Planèt Mèki gen yon distans apeprè $3,6 \times 10^7$ mil ak solèy la, epi planèt Jipitè gen yon distans apeprè $4,8 \times 10^8$ mil. Apeprè konbyen fwa planèt Jipitè pi lwen solèy la pase planèt Mèki?

- A 1,3
- B 7,5
- C 13,3
- D 17,3

22 Ki ekspresyon ki ekivalan ak $(5^{-2})^5 \times 5^4$?

- A 5^{12}
- B 5^7
- C $\frac{1}{5^6}$
- D $\frac{1}{5^{40}}$

KONTINYE

Yo montre fonksyon lineyè M ak P pi ba a.

FONKSYON M

x	y
-2	-9
0	1
2	11
4	21

FONKSYON P

$$y = 7x + 9$$

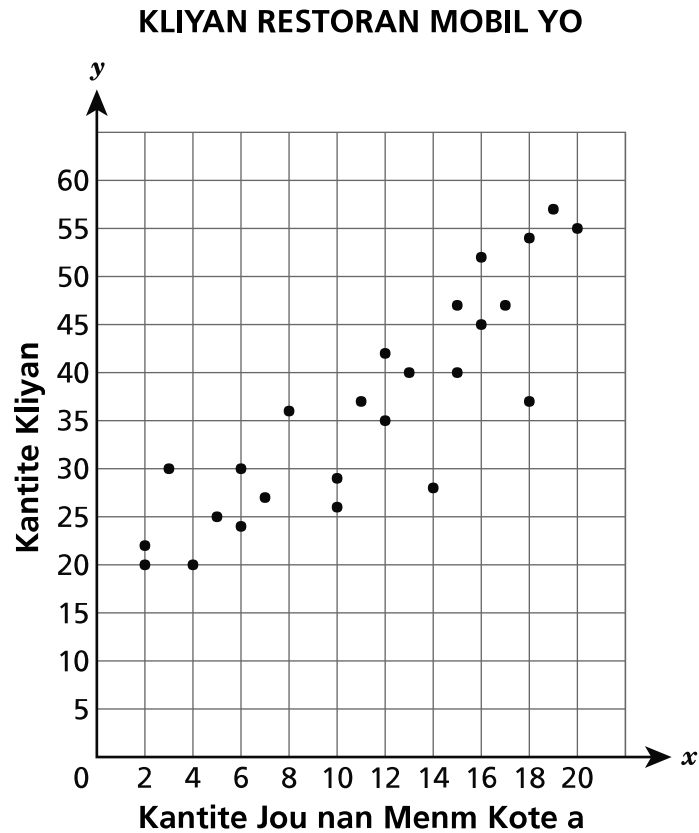
Lè w ap konpare to chanjman yo, ki deklarasyon sou Fonksyon M ak Fonksyon P ki vrè?

- A To chanjman yo diferan de 2.
- B To chanjman yo diferan de 4.
- C Fonksyon M gen pi gran to chanjman pase Fonksyon P.
- D Fonksyon M ak Fonksyon P gen menm to chanjman.

KONTINYE

24

Dyagram dispèsyon ki pi ba a montre mwayen kantite kliyan ki al achte nan yon restoran mobil pa jou, selon kantite jou restoran mobil la rete menm kote a.



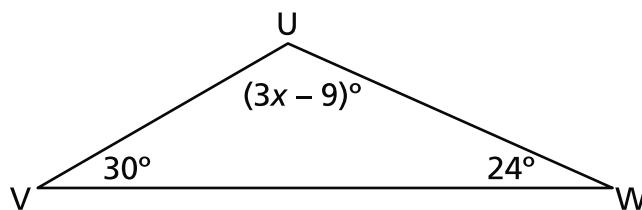
Ki deklarasyon ki dekri **pi byen** asosyasyon ant kantite jou restoran mobil la rete menm kote a ak kantite kliyan ki al achte manje nan restoran mobil la pa jou?

- A Pa gen okenn asosyasyon.
- B Gen yon asosyasyon non-lineyè.
- C Gen yon asosyasyon lineyè pozitif.
- D Gen yon asosyasyon lineyè negatif.

KONTINYE

25

Yo montre nan dyagram ki anba a mezi ang yo nan triyang UVW.

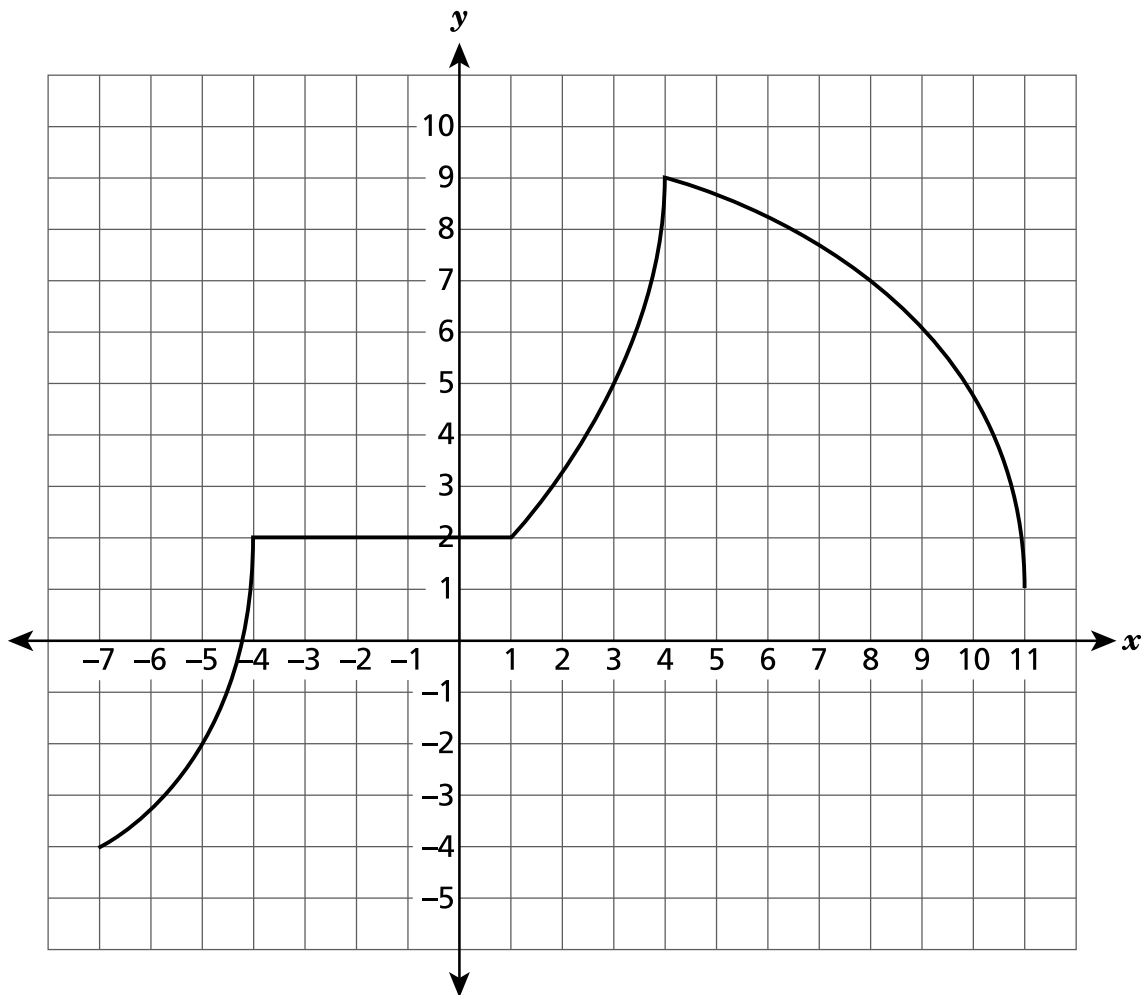


Ki valè x ?

- A 21
- B 39
- C 45
- D 126

KONTINYE

Yo endike graf yon fonksyon nan plan kowòdone ki pi ba a.



Ki deklarasyon ki dekri kòrèkteman fonksyon an sou yon sèten entèval?

- A Fonksyon an ap diminye epi li non-lineyè ant $x = -7$ ak $x = -4$.
- B Fonksyon an ap ogmante epi li lineyè ant $x = -4$ ak $x = 1$.
- C Fonksyon an ap ogmante epi li lineyè ant $x = 1$ ak $x = 4$.
- D Fonksyon an ap diminye epi li non-lineyè ant $x = 4$ ak $x = 11$.

Ane 8
Egzamen Matematik
Seyans 1
v202

Grade 8
Mathematics Test
Session 1
v202

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2021 Mathematics Tests Map to the Standards
Grade 8 Released Questions

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	B	1	CCSS.Math.Content.8.F.A.3	Functions	Functions	
2	Multiple Choice	B	1	CCSS.Math.Content.8.EE.A.4	Expressions and Equations	Expressions and Equations	
3	Multiple Choice	A	1	CCSS.Math.Content.8.F.B.4	Functions	Functions	
4	Multiple Choice	A	1	CCSS.Math.Content.8.G.C.9	Geometry	Geometry	
5	Multiple Choice	B	1	CCSS.Math.Content.8.EE.B.5	Expressions and Equations	Expressions and Equations	
6	Multiple Choice	C	1	CCSS.Math.Content.8.F.A.3	Functions	Functions	
7	Multiple Choice	D	1	CCSS.Math.Content.8.EE.B.6	Expressions and Equations	Expressions and Equations	
8	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.4	Expressions and Equations	Expressions and Equations	
9	Multiple Choice	C	1	CCSS.Math.Content.8.G.A.2	Geometry	Geometry	
10	Multiple Choice	B	1	CCSS.Math.Content.8.EE.C.8b	Expressions and Equations	Expressions and Equations	
11	Multiple Choice	D	1	CCSS.Math.Content.8.EE.C.8b	Expressions and Equations	Expressions and Equations	
12	Multiple Choice	B	1	CCSS.Math.Content.8.F.B.4	Functions	Functions	
13	Multiple Choice	B	1	CCSS.Math.Content.8.G.A.4	Geometry	Geometry	
14	Multiple Choice	C	1	CCSS.Math.Content.7.G.B.6	Geometry	Geometry	
15	Multiple Choice	B	1	CCSS.Math.Content.8.EE.B.6	Expressions and Equations	Expressions and Equations	
16	Multiple Choice	C	1	CCSS.Math.Content.8.EE.C.7a	Expressions and Equations	Expressions and Equations	
17	Multiple Choice	B	1	CCSS.Math.Content.8.SP.A.3	Statistics and Probability		
18	Multiple Choice	D	1	CCSS.Math.Content.8.SP.A.2	Statistics and Probability		
19	Multiple Choice	A	1	CCSS.Math.Content.8.EE.B.5	Expressions and Equations	Expressions and Equations	
20	Multiple Choice	D	1	CCSS.Math.Content.8.G.C.9	Geometry	Geometry	
21	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.3	Expressions and Equations	Expressions and Equations	
22	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.1	Expressions and Equations	Expressions and Equations	
23	Multiple Choice	A	1	CCSS.Math.Content.8.F.A.2	Functions	Functions	
24	Multiple Choice	C	1	CCSS.Math.Content.8.SP.A.1	Statistics and Probability		
25	Multiple Choice	C	1	CCSS.Math.Content.8.G.A.5	Geometry	Geometry	
26	Multiple Choice	D	1	CCSS.Math.Content.8.F.B.5	Functions	Functions	

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.