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Our Students. Their Moment.

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

Released Questions

2017

New York State administered the Mathematics Common Core Tests in June 2017 and is now 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 2017 Exams

Background

In 2013, New York State 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 (SED) 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 large portions of the 2017 NYS Grades 3-8 Common Core English Language Arts and Mathematics test materials for review, discussion, and use.

For 2017, included in these released materials are at least 75 percent of the test questions that appeared on the 2017 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 of the 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 https://www.engageny.org/resource/test-guides-english-language-arts-and-mathematics.

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 future valid and reliable tests, some content must remain secure for possible use on future exams. As such, 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. 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 Common Core
Mathematics Test
Book 1
May 2–4, 2017

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Liv 1

Ane 8

2–4 Me 2017

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 8 Fèy Referans Matematik

KONVÈSYON

1 pous = 2,54 santimèt
1 mèt = 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	$C = \pi d$ 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	$a^2 + b^2 = c^2$

Liv 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 chwazi repons ou.
- Yo ba w enstriman jeometri (yon règ, ak yon rapòtè) epi yon papye ki gen fòmil yo ladan pou w sèvi pandan egzamen an. Se ou k pou konnen kilè pou sèvi ak chak grenn nan enstriman jeometri yo avèk papye fòmil la tou. Ou ka sèvi ak enstriman jeometri yo avèk papye fòmil la tou nenpòt ki lè w panse l ap ede w reponn yon kesyon.

1 Yon globil wouj nan kò yon moun gen yon dyamèt ki mezire 0,000007 mèt. Ki ekspresyon ki reprezante konbyen mèt dyamèt sa a mezire an notasyon syantifik?

A 7×10^{-6}

B 7×10^{-5}

C 7×10^{6}

D 7×10^{5}

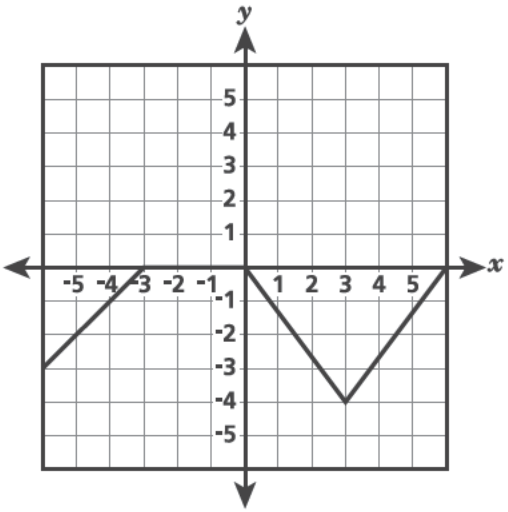
KONTINYE

2 Yon fonksyon gen pwopriyete sa yo:

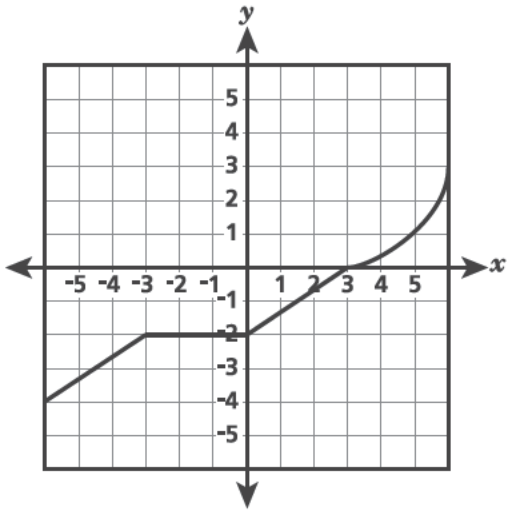
- L ap ogmante epi l ap lineyè lè valè x ant -5 ak -3.
- L ap rete konstan lè valè x ant -3 ak 0.
- L ap bese epi l ap lineyè lè valè x ant 0 ak 3.
- L ap ogmante epi li pap lineyè lè valè x ant 3 ak 5.

Ki graf ki reprezante fonksyon sa a **pi byen**?

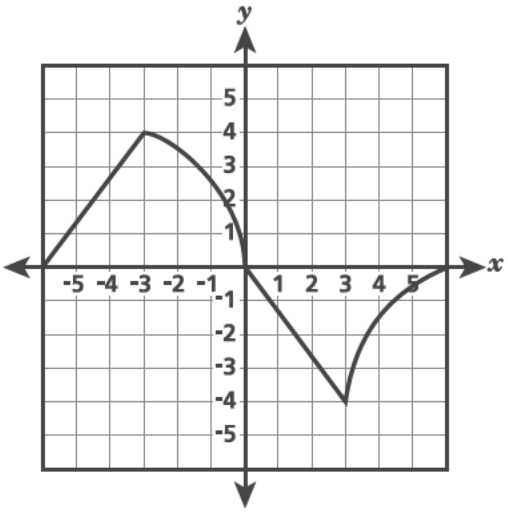
A



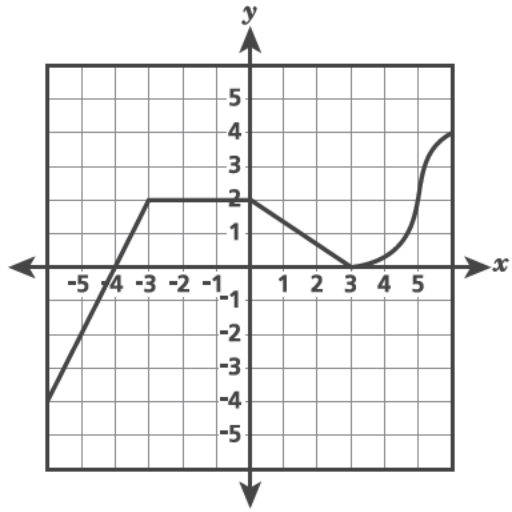
C



B

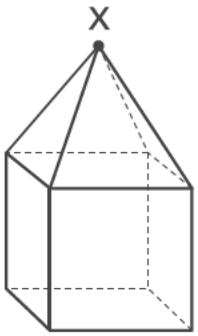


D



KONTINYE

3 Figi jeyometri ki pi ba a fèt avèk yon piramid kare sou tèt yon kib. Yon plan vètikal pase nan pwen X epi li pèpandikilè ak baz toude fòm yo, kote li koupe figi jeyometri a an de mwatye egal.



Ki fòm ki kreye ak entèseksyon plan vètikal yo ak fòm twa dimansyon yo?

A kare

B triyang

C eksagòn

D pentagòn

KONTINYE

4 Madmwazèl Gibson te fè yon premye depo pou $500 lè li te louvri yon kont labank. Aprè premye depo la, li te mete menm kantite lajan an chak mwa. Tablo ki pi ba a montre kantite total lajan, *a*, li te mete sou kont la aprè kèk mwa, *t*, depi lè l te louvri l la.

Kantite mwa *(t)*	**Kantite Lajan li Mete *(a)***
4	$1.500
8	$2.500
10	$3.000
13	$3.750

Ki ekwasyon ki reprezante relasyon ant *a* ak *t*?

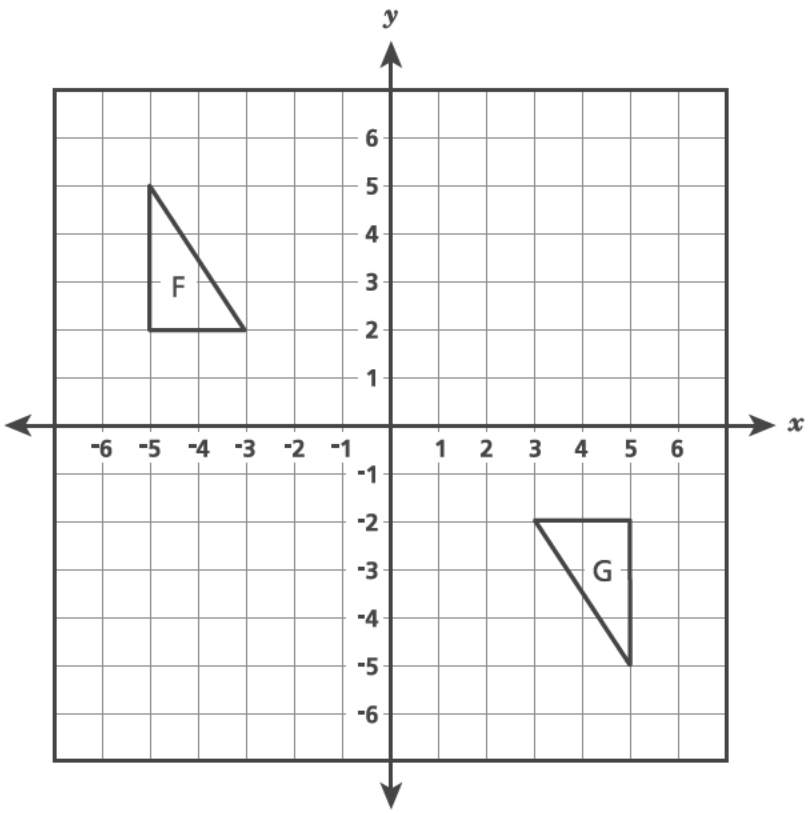
A $a = 250t$

B $a = 500t$

C $a = 250t + 500$

D $a = 500t + 250$

5 Nou montre triyang F ak triyang G anba la a.



Ki sekans ki **pa** transfòme triyang F an triyang G?

A yon 180° nan sans zegwi yon mont alantou orijin nan

B yon 180° nan sans envès zegwi yon mont alantou orijin nan

C yon refleksyon sou aks *x* ak yon refleksyon sou aks *y*

D yon refleksyon sou aks *y* ak yon wotasyon a 90° nan sans zegwi yon mont alantou orijin lan

KONTINYE

6 Ki fraz ki eksplike kalite fonksyon ekwasyon sa a reprezante a $y = x^2 + 9$?

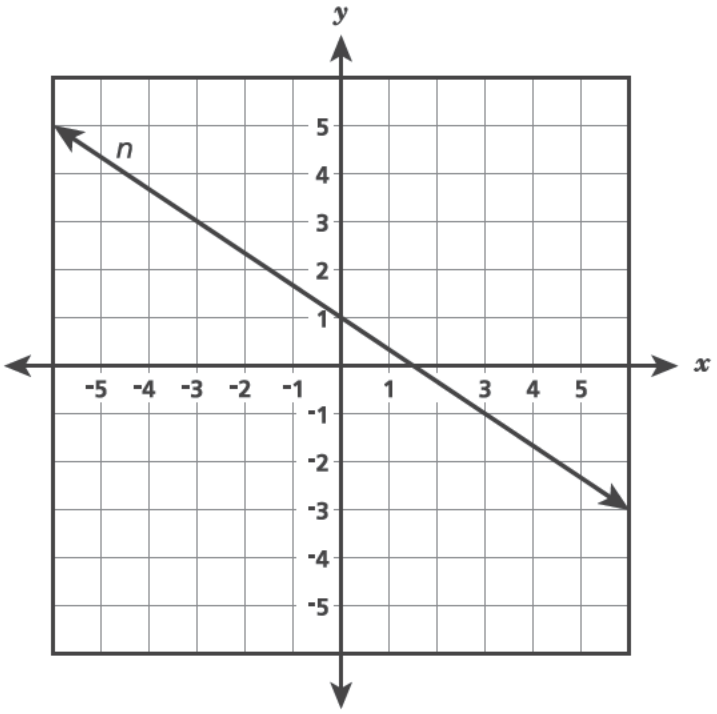
A Fonksyon an lineyè paske li gen plis pase yon tèm.

B Fonksyon an lineyè paske varyab *x* monte nan dezyèm pisans.

C Fonksyon an pa lineyè paske li gen plis pase yon tèm.

D Fonksyon an pa lineyè paske varyab *x* monte nan dezyèm pisans.

7 Sou kadriyaj ki pi ba a *n* w ap wè yon liy.



Nou pral trase liy *q* sou menm kadriyaj la. Sèl lè w ap jwenn solisyon pou sistèm ekwasyon lineyè ki fòme ak liy *n* ak *q* a se lè $x = \frac{3}{2}$ ak $y = 0$. Ki ekwasyon ki te ka reprezante liy *q* a?

A $y = \frac{3}{2}x$

B $y = \frac{4}{3}x - 2$

C $y = -\frac{5}{2}x + 1$

D $y = -\frac{2}{3}x + \frac{3}{2}$

KONTINYE

8 Tablo a reprezante Fonksyon lineyè F.

x	y
4	18
6	24
10	36

Ekwasyon $y = 4x + 2$ reprezante Fonksyon G.

Ki fraz matematik ki kòrèk?

A To chanjman Fonksyon G a pi piti pase to chanjman Fonksyon F la paske $2 < 3$.

B To chanjman Fonksyon G a pi piti pase to chanjman Fonksyon F la paske $4 < 9$.

C To chanjman Fonksyon G plis pase to chanjman Fonksyon F paske $2 > \frac{9}{7}$.

D To chanjman Fonksyon G plis pase to chanjman Fonksyon F paske $4 > 3$.

9 Ki solisyon ekwasyon ki pi ba a?

$$\frac{2}{3}x + 5 = 1$$

A $x = -6$

B $x = 4$

C $x = -4{,}5$

D $x = 9$

10 Yon konpayi te fè tès pwisans sou yon seri batri ki menm kalite. Konpayi a te kalkile ekwasyon $y = 100 - 8{,}9x$, kote x se konbyen èdtan itilizasyon yo epi y se pousantaj enèji batri ki rete a, reprezante dire batri a avi. Daprè ekwasyon an, ki **pi bon** prediksyon ki ka fèt sou pousantaj enèji batri ki rete aprè 11 èdtan sèvis?

A 1,2%

B 2,1%

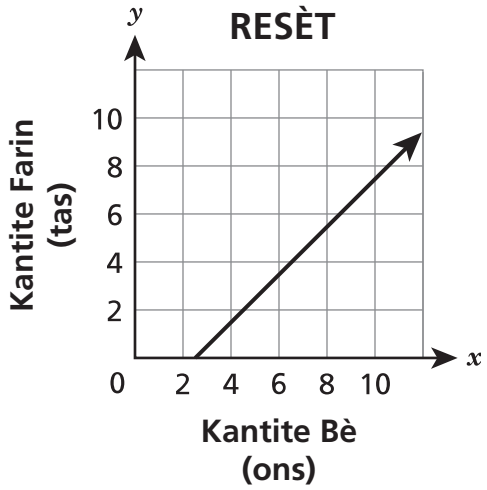
C 10%

D 97,9%

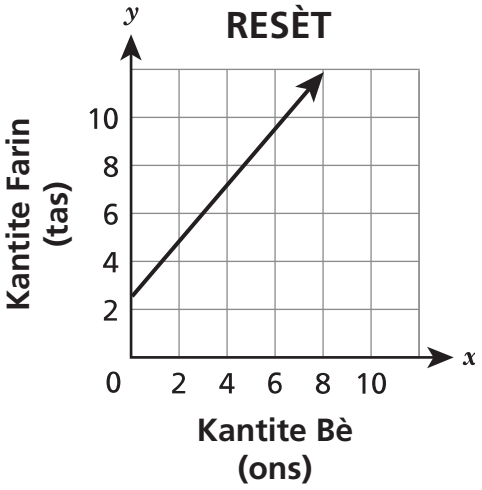
KONTINYE

15 Yon kizinye itilize 2,5 tas farin pou chak ons bè nan yon resèt. Ki graf ki reprezante relasyon ant kantite farin ak kantite bè ki nan resèt la?

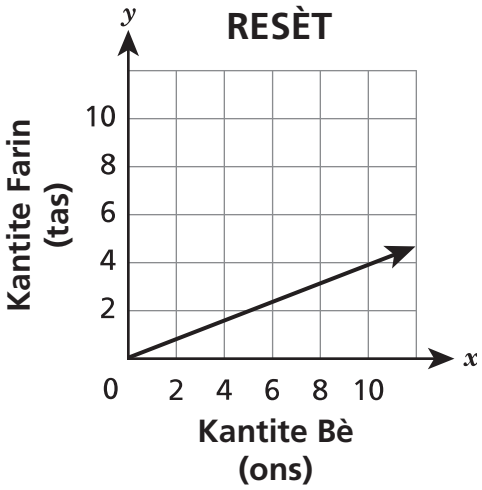
A



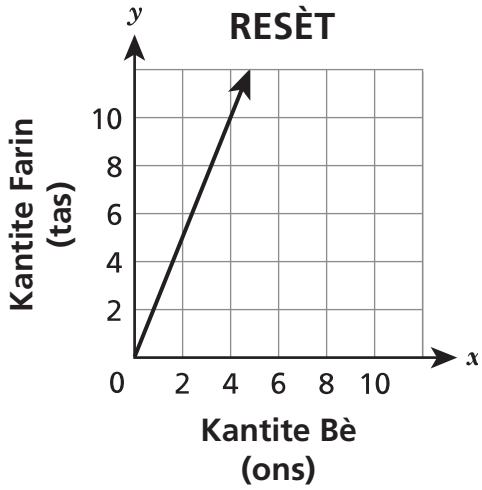
C



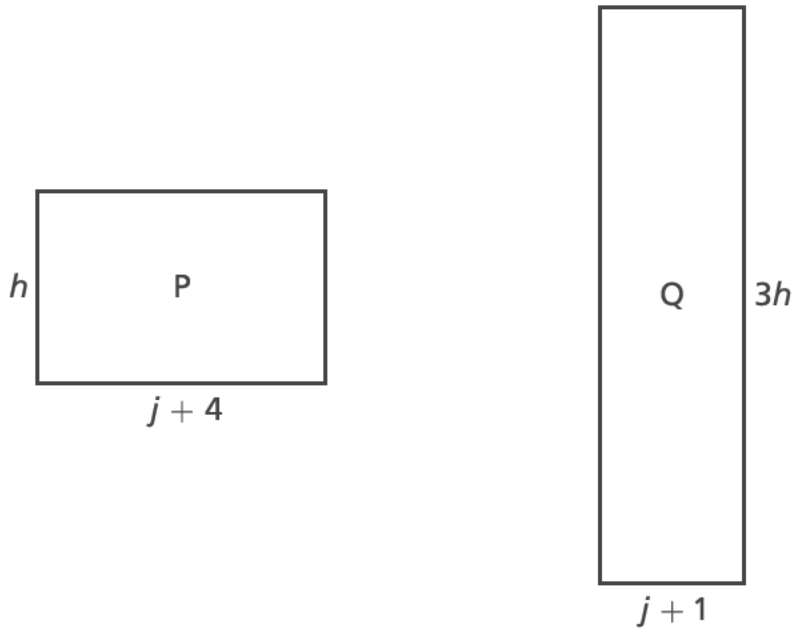
B



D



18 Gen de rektang pi ba a. Rektang P gen yon perimèt ki a 20 pous. Rektang Q gen yon perimèt ki a 30 pous.



Kisa ki valè j ak h?

A $j = 3$ epi $h = 3$

B $j = 10$ epi $h = 4$

C $j = 2$ epi $h = 4$

D $j = 9.5$ epi $h = 6.5$

19 Yon klèb eskolè t ap vann mayo pou sanble lajan. Aprè yo te fin vann mayo yo, yon lis repètwa montre yo te vann 108 mayo ble ak 96 mayo vèt. Nan mayo yo gen sa tay 60 piti, 86 mwayèn, ak 58 laj. Ki tablo ki pi byen prezante done sa yo?

A

KANTITE MAYO YO VANN

Koulè	Piti	Mwayèn	Laj
Ble	60	86	58
Vèt	60	86	58

B

KANTITE MAYO YO VANN

Koulè	Piti	Mwayèn	Laj
Ble	34	46	28
Vèt	26	40	30

C

KANTITE MAYO YO VANN

Koulè	Piti	Mwayèn	Laj
Ble	30	43	29
Vèt	30	43	29

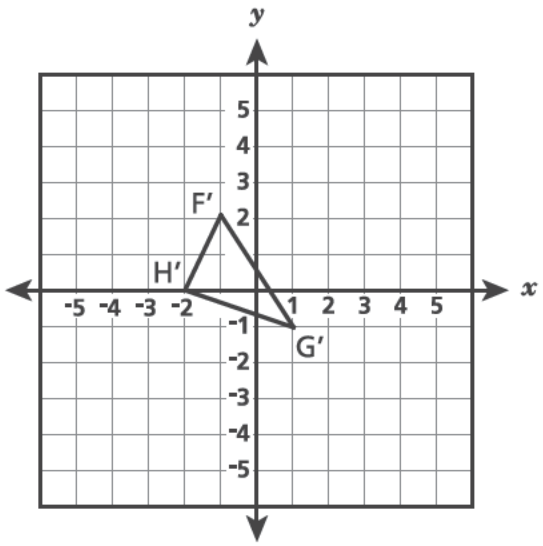
D

KANTITE MAYO YO VANN

Koulè	Piti	Mwayèn	Laj
Ble	26	40	30
Vèt	34	46	28

KONTINYE

20 W ap jwenn somè yon triyang nan F(−4, −2), G(2, 2), ak H(0, −4). Yon sekans transfòmasyon sou FGH kreye yon triyang F'G'H', jan nou montre li anba la a.



Ki sekans transfòmasyon triyang FGH ki kreye yon triyang F'G'H'?

A yon wotasyon a 90° nan sans zegwi yon mont alantou orijin nan, apresa yon dilatasyon ki se faktè yon echèl ki a 2 ak yon dilatasyon ki nan mitan orijin nan

B yon wotasyon a 90° nan sans envès zegwi yon mont alantou orijin nan, apresa yon dilatasyon ki se faktè yon echèl ki a 2 ak yon dilatasyon ki nan mitan orijin nan

C yon wotasyon 90° nan sans envès zegwi yon mont alantou orijin nan, apresa yon dilatasyon ki se faktè yon echèl $\frac{1}{2}$ ak yon dilatasyon ki nan mitan orijin nan

D yon wotasyon a 90° nan sans zegwi yon mont alantou orijin nan, apresa yon dilatasyon ki se faktè yon echèl $\frac{1}{2}$ ak yon dilatasyon ki nan mitan orijin nan

24 Ki valè n ye nan ekwasyon ki pi ba a?

$$2^2 \times 2^n = (2^4)^3$$

A 5

B 6

C 10

D 12

25 Ki gwoup pè òdone ki reprezante yon fonksyon?

A {(2, 7), (2, 8), (3, 8)}

B {(3, 2), (3, 3), (3, 4)}

C {(4, 1), (5, 1), (4, 4)}

D {(5, 6), (8, 6), (9, 6)}

26 Yon paralelogram ki gen somè nan (0, 3), (2, 0), (4, 2), ak (2, 5) reflete sou aks y la. Ki somè nan paralelogram nan ki t ap gen menm kowòdone sa a: x- avan ak apre refleksyon an?

A (0, 3)

B (2, 0)

C (4, 2)

D (2, 5)

Ane 8

2017 Common Core
Egzamen Matematik
Liv 1

2–4 Me 2017

Grade 8

2017 Common Core
Mathematics Test
Book 1

May 2–4, 2017

Non: _____

Haitian Creole Edition
Grade 8 Common Core
Mathematics Test
Book 2
May 2–4, 2017

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Liv 2

Ane 8

2–4 Me 2017

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FÒMIL

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Kòn	$V = \frac{1}{3}\pi r^2 h$
Teyorèm Pitagò	$a^2 + b^2 = c^2$

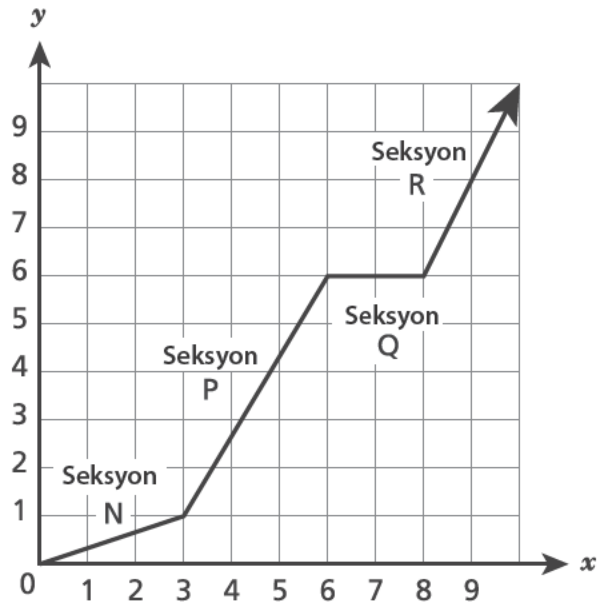
Liv 2

KONSÈY POU PRAN EGZAMEN AN

Men kèk sijesyon pou ede ou bay pi bon rannman:

- Byen li chak kesyon epi reflechi sou chak repons anvan w ekri l.
- Yo ba w enstriman jeometri (yon règ, yon rapòtè ak yon kalkilatris) epi yon papye ki gen fòmil yo ladan pou w sèvi pandan egzamen an. Se ou k pou konnen kilè pou sèvi ak chak grenn nan enstriman jeometri yo avèk papye fòmil la tou. Ou ka sèvi ak enstriman jeometri yo avèk papye fòmil la tou nenpòt ki lè w panse l ap ede w reponn yon kesyon.

27 Gen graf yon fonksyon pi ba a.



Ki deklarasyon ki **kòrèk** sou yon seksyon nan graf la?

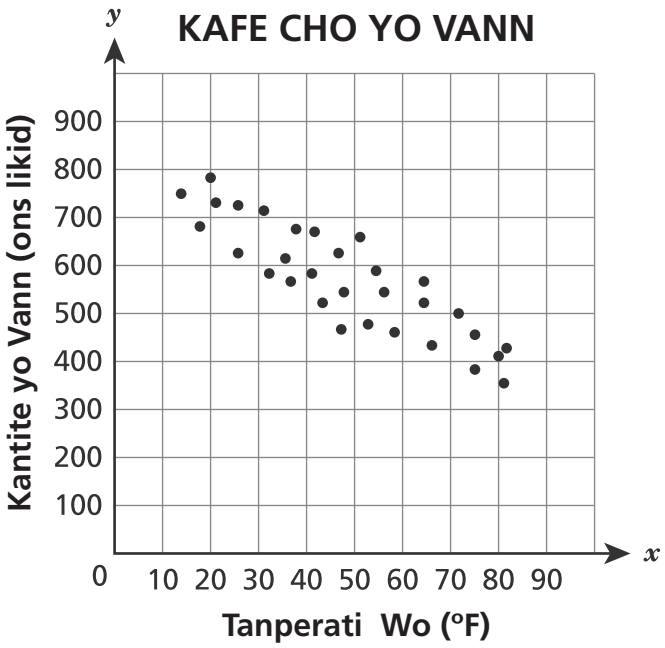
A Nan Seksyon N, fonksyon an lineyè epi l ap bese.

B Nan Seksyon P, fonksyon an lineyè epi l ap ogmante.

C Nan Seksyon Q, fonksyon an pa lineyè epi l ap bese.

D Nan Seksyon R, fonksyon an pa lineyè epi l ap ogmante.

28 Pwopriyetè yon boutik kafe konpare kantite ons likid kafe cho li vann pa jou, ak konbyen degre Farennay li fè chak jou. Done li a nan dyagram ki pi ba a.



Si nou kreye yon modèl done sa yo ak liy $y = -5{,}9x + 850$, ki fraz matematik ki **pi byen** dekri yon prediksyon valid pwopriyetè a te kapab fè?

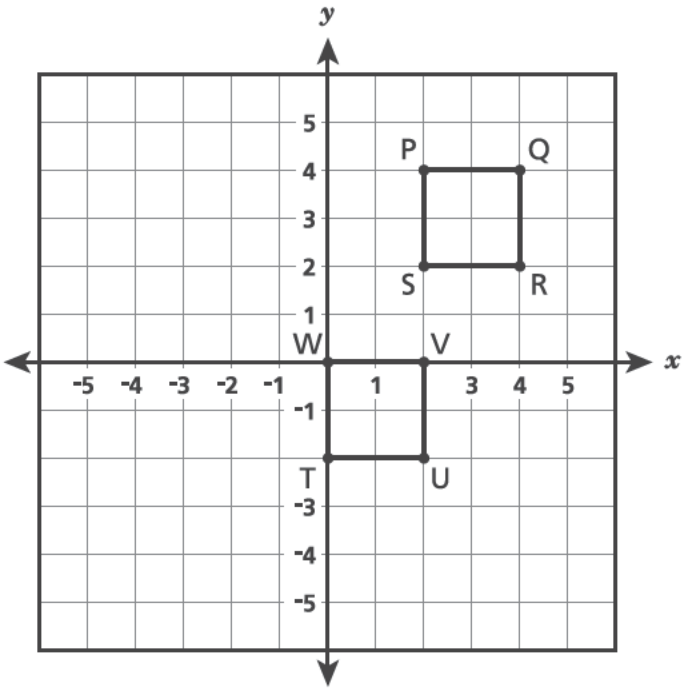
A Chak fwa tanperati a ogmante a 10°F, pwopriyetè a ka vann yon 60 ons likid kafe cho anplis konsa.

B Chak fwa tanperati a bese a 10°F, pwopriyetè a ka vann yon 6 ons likid kafe cho anplis konsa.

C Yon jou tanperati a a 0°F, pwopriyetè a ka vann yon 145 ons likid kafe cho konsa.

D Yon jou tanperati a a 0°F, pwopriyetè a ka vann yon 850 ons likid kafe cho konsa.

29 Pi ba a gen kare PQRS ak TUVW.



Ki sekans transfòmasyon sou PQRS kare ki montre PQRS menm ak kare TUVW?

A yon translasyon ki gen 2 inite anwo ak 2 inite adwat, avèk yon refleksyon sou aks *x* la

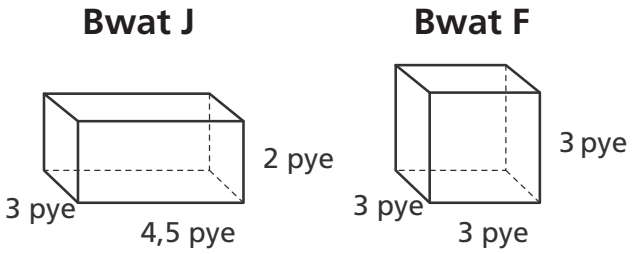
B yon translasyon ki gen 2 inite anwo ak 2 inite adwat, avèk yon refleksyon sou aks *y* la

C yon translasyon ki gen 2 inite anba ak 2 inite agoch, avèk yon refleksyon sou aks *x* la

D yon translasyon ki gen 2 inite anba ak 2 inite agoch, avèk yon refleksyon sou aks *y* la

KONTINYE

30 Gen de kalite bwat livrezon pi ba a.



Konbyen pye kare diferans ki genyen ant sipèfisi de bwat yo?

A 2

B 3

C 21

D 30

31 Ki ekspresyon ki ekivalan ak $2^2 : \frac{2}{2^4}$?

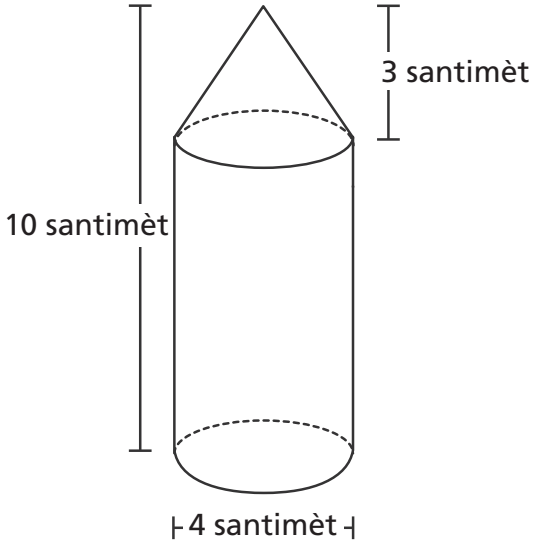
A 2^{-2}

B 2^{-1}

C 2^6

D 2^7

32 Yo te met yon kòn sou tèt yon silenn pou yo te rive kreye fòm ki pi ba a. Baz kòn nan menm ak baz silenn nan.



Konbyen santimèt kib volim fòm sa a genyen?

A 32π

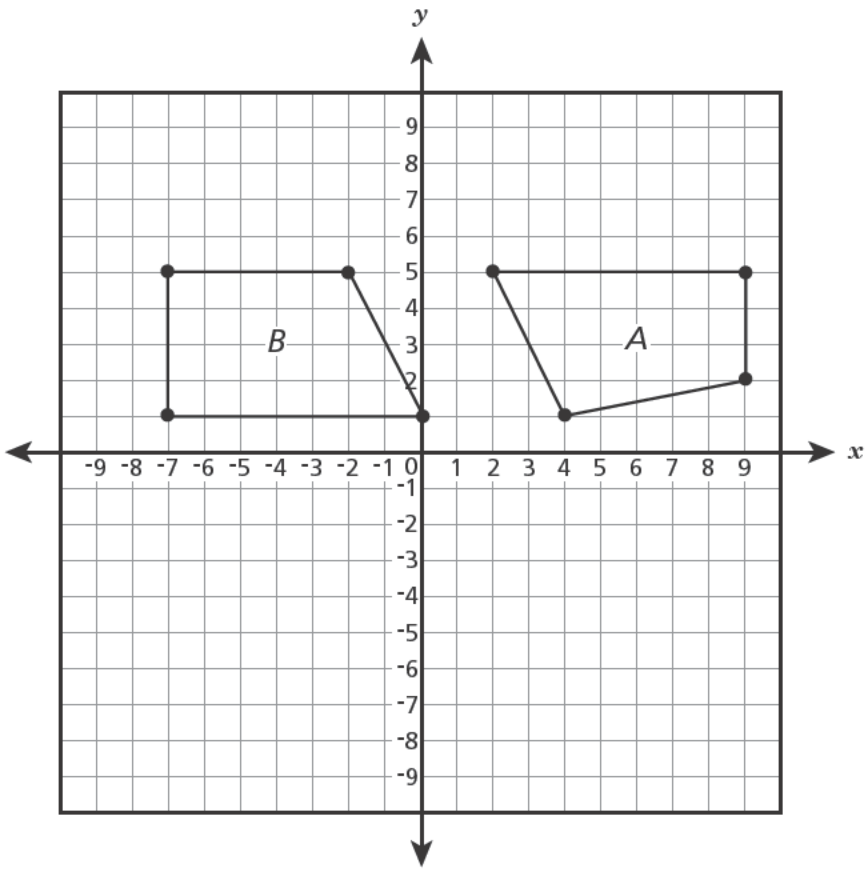
B 40π

C 44π

D 128π

KONTINYE

34 Lily vle defini yon transfòmasyon (oswa plizyè transfòmasyon) kote l ap sèvi sèlman ak wotasyon, refleksyon, oswa translation k ap soti nan Figi jeyometri *A* rive nan Figi jeyometri *B*.



Ki operasyon sou transfòmasyon Lily vle defini an ki kòrèk?

A Ou ka defini sa a ak de refleksyon.

B Ou ka defini sa a ak yon wotasyon ak yon translasyon.

C Ou pa ka defini sa a paske Figi jeyometri *A* ak *B* pa menm.

D Ou pa ka defini sa a paske kote ki pi long nan Figi jeyometri *B* a pa anba.

KONTINYE

35 Ki solisyon ki koresponn ak sistèm ekwasyon ki pi ba yo?

$$2x + 3y = 6$$
$$x - 3y = 9$$

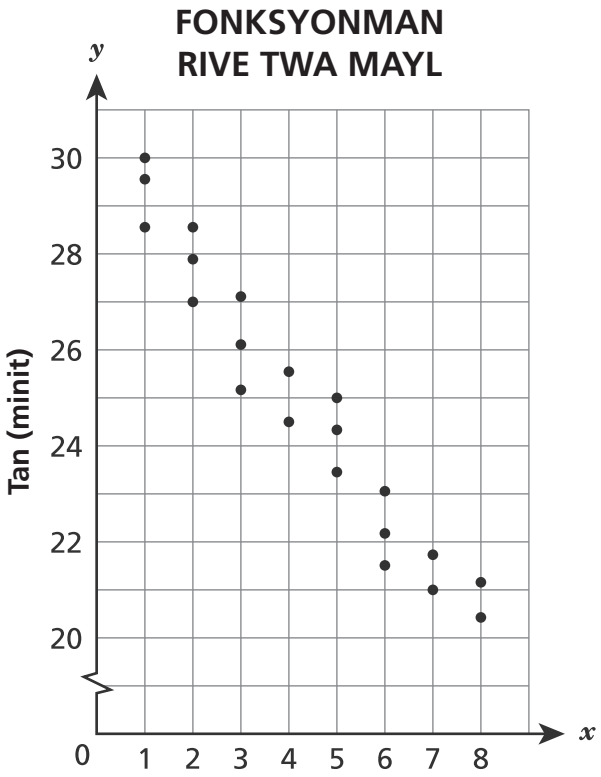
A $\left(-1, \frac{8}{3}\right)$

B $(-3, -4)$

C $\left(5, -\frac{4}{3}\right)$

D $\left(8, -\frac{1}{3}\right)$

36 Pou yon pwogram fòmasyon pou yon triyatlon, Marci kouri twa mil kèlke fwa pa semèn. Dyagram ki pi ba a montre kantite fwa Marcie kouri chak semèn li te nan pwogram fòmasyon an.



Plizè semèn nan Pwogram Fòmasyon an

Daprè done sa yo, ki fraz matematik ki **pi byen** dekri relasyon ant kantite semèn Marcie gen nan pwogram fòmasyon an ak kantite fwa l kouri?

A Gen yon asosyasyon lineyè negatif ki pa gen okenn valè abnòmal.

B Gen yon asosyasyon lineyè negatif ki gen yon valè abnòmal.

C Gen yon asosyasyon lineyè pozitif ki pa gen okenn valè abnòmal.

D Gen yon asosyasyon lineyè pozitif ki gen yon valè abnòmal.

KONTINYE

37 Ki solisyon ki koresponn ak ekwasyon sa a?

$$5c + 4 = 2(c - 5)$$

A $c = -4\frac{2}{3}$

B $c = -3$

C $c = -2$

D $c = -\frac{1}{3}$

38 Ki fraz matematik ki **pi byen** eksplike si pè òdone sa yo reprezante yon fonksyon?

$$(-4, 2), (6, 7), (-8, 3), (9, 10), (12, 14), (6, 9)$$

A Pè òdone yo reprezante yon fonksyon paske pa gen plizyè valè soti.

B Pè òdone yo reprezante yon fonskyon paske chak valè soti pi gwo pase chak valè antre.

C Pè òdone yo pa reprezante yon fonskyon paske yon valè antre gen de diferan valè sòti.

D Pè òdone yo pa reprezante yon fonksyon paske diferans ant antre ak sòti chak pè òdone pa menm nan.

39 Avèk ekwasyon ki pi ba a, nou montre kantite revni an dola, *y*, Jason vin genyen nan vann *x* postè $y = 4x$. Ekwasyon an bay pri pou kreye *x* postè yo $y = \frac{1}{2}x + 280$. Konbyen postè Jason ap gen pou l vann pou pri a ak revni an vin egal?

A 40

B 80

C 140

D 320

40 Yon machin te vwayaje 36 mil nan 45 minit. Machin nan te vwayaje ak menm vitès la alè nèt. Si machin nan kontinye vwayaje ak vitès sa a, ki ekwasyon nou kapab itilize pou n rive jwenn *y*, total kantite mil machin nan pral vwayaje nan *x* èdtan?

A $y = 48x$

B $y = x + 48$

C $48y = x$

D $48 + y = x$

42 Kantite mas yon patikil pousyè ka apeprè $7{,}5 \times 10^{-10}$ kilogram epi kantite mas yon elektwon ka apeprè $9{,}1 \times 10^{-31}$ kilogram. Konbyen elektwon konsa ki gen menm mas ak yon patikil pousyè?

A $1{,}21 \times 10^{20}$

B $1{,}21 \times 10^{21}$

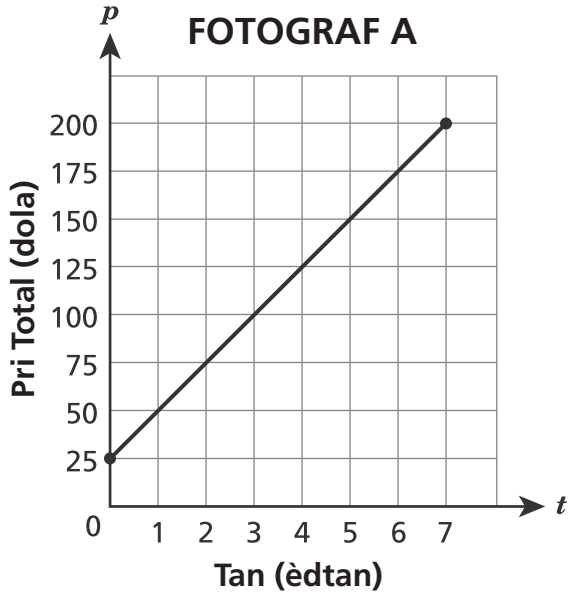
C $8{,}24 \times 10^{20}$

D $8{,}24 \times 10^{21}$

KONTINYE

43 De fotograf ofri yon plan pri diferan pou sèvis yo. Graf ki pi ba a reprezante pri Fotograf A a. Tablo ki pi ba reprezante pri Fotograf B a. Chak fotograf mande yon frè ekipman yon sèl fwa ak yon frè pa èdtan.

FOTOGRAF A



FOTOGRAF B

Tan (èdtan)	2	4
Pri Total	$80	$110

Ki fraz matematik sou de plan pri sa yo ki kòrèk?

A Fotograf A mande $15 pa èdtan anplis pase Fotograf B.

B Fotograf B mande $15 pa èdtan anplis pase Fotograf A.

C Frè ekipman Fotograf A a gen $25 an mwens frè ekipman Fotograf B a.

D Frè ekipman Fotograf B a gen $25 an mwens frè ekipman Fotograf A a.

44 Ang △ egi ABC a tounen alantou yon pwen epi yon faktè echèl dilate l $\frac{1}{2}$ pou l kreye △A'B'C'. Ki fraz matematik ki pi byen konpare △A'B'C' ak △ABC?

A Mezi ang ak longè kote △A'B'C' mezire mwatye gwosè sa △ABC a.

B Mezi ang △A'B'C' menm ak sa △ABC a, men longè kote △A'B'C' mezire mwatye gwosè sa △ABC a.

C Mezi ang △A'B'C' menm ak sa △ABC a, men longè kote △A'B'C' mezire de fwa gwosè sa △ABC a.

D Mezi ang △A'B'C' depann de ang wotasyon an, men longè kote △A'B'C' mezire mwatye gwosè sa △ABC a.

45 Ki ekspresyon ki ekri an notasyon syantifik ki ekivalan ak $(4{,}5 \times 10^2) + (6{,}0 \times 10^3)$?

A $1{,}05 \times 10^6$

B $2{,}7 \times 10^6$

C $6{,}45 \times 10^3$

D $10{,}5 \times 10^5$

KONTINYE

46 W ap jwenn pwen $(2, -2)$ ak $(-4, 13)$ sou graf yon fonksyon lineyè x. Ki lòt pwen ki sou graf fonksyon sa a tou?

A $(-6, 18)$

B $(-1, 5)$

C $(7, 14{,}5)$

D $(13, -4)$

47 Ki valè pou konstan, h, nan ekwasyon ki pi ba a ki pral gen anpil solisyon?

$$6x + 18 = h(3x + 9)$$

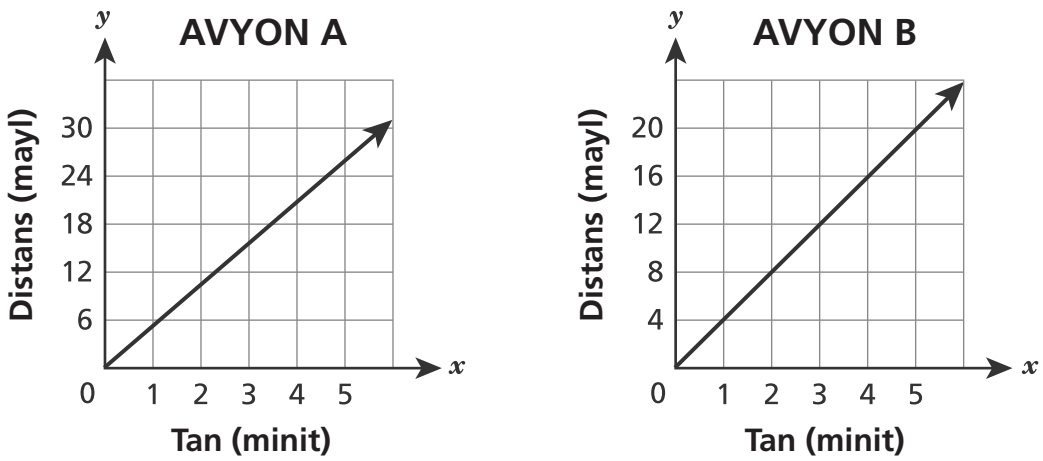
A -2

B -3

C 2

D 3

50 Graf ki pi ba yo montre relasyon ant tan ki pase ak distans avyon A ak avyon B fè aprè yo chak rive nan vitès kwazyè yo a.



Avyon C ap vwayaje ak yon vitès kwazyè ki diferan. Nou kapab itilize ekwasyon $y = \frac{27}{6}x$ pou n rive jwenn *y*, kantite mil avyon C a te vwayaje an *x* minit. Ki fraz matematik ki pi byen konpare vitès kwazyè avyon C a ni ak sa avyon A a ak B a?

A Vitès kwazyè avyon C a mwens pase vitès kwazyè avyon A a ak B a.

B Vitès kwazyè avyon C a plis pase vitès kwazyè avyon A a ak B a.

C Vitès kwazyè avyon C a plis pase vitès kwazyè avyon A a epi li mwens pase vitès kwazyè avyon B a.

D Vitès kwazyè avyon C a mwens pase vitès kwazyè avyon A a epi li plis pase vitès kwazyè avyon B a.

51 Gen de transfòmasyon ki fèt sou yon figi jeyometri ki nan yon graf. Premye transfòmasyon an se yon translasyon ki al 8 inite agoch. Ki dezyèm transfòmasyon ki pral bay yon imaj ki sanble ak figi jeyometri orijinal la, men ki pa menm avè l?

A yon wotasyon nan sans zegwi yon mont a 90° alantou mitan an

B yon wotasyon nan sans zegwi yon mont a 180° alantou mitan an

C yon dilatasyon ki se faktè yon echèl ki a 1 ak orijin nan nan mitan

D yon dilatasyon ki se faktè yon echèl ki a $\frac{1}{2}$ ak orijin li nan mitan dilatasyon an

KANPE LA

Ane 8

2017 Common Core
Egzamen Matematik
Liv 2

2–4 Me 2017

Grade 8

2017 Common Core
Mathematics Test
Book 2

May 2–4, 2017

Non: _____

Haitian Creole Edition

Grade 8 Common Core
Mathematics Test
Book 3
May 2–4, 2017

Pwogram Egzamen Eta Nouyòk Egzamen Matematik Liv 3

Ane 8

2–4 Me 2017

Released Questions

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Ane 8 Fèy Referans Matematik

KONVÈSYON

1 pous = 2,54 santimèt
1 mèt = 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	$C = \pi d$ 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	$a^2 + b^2 = c^2$

Liv 3

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 ekri repons ou.
- Yo ba w enstriman jeometri (yon règ, yon rapòtè ak yon kalkilatris) epi yon papye ki gen fòmil yo ladan pou w sèvi pandan egzamen an. Se ou k pou konnen kilè pou sèvi ak chak grenn nan enstriman jeometri yo avèk papye fòmil la tou. Ou ka sèvi ak enstriman jeometri yo avèk papye fòmil la tou nenpòt ki lè w panse l ap ede w reponn yon kesyon.
- Pa bliye kijan w fè jwenn repons lan lè yo mande ou sa.

52 Jwenn solisyon pou ekwasyon ki pi ba a.

$$-3{,}1x + 7 - 7{,}4x = 1{,}5x - 6\left(x - \frac{3}{2}\right)$$

Montre kijan ou fè pou jwenn repons la.

Repons _____

KONTINYE

53 Yon silenn ak yon kòn gen menm volim nan. Yon silenn gen yon reyon ki a 2 pous ak yon wotè ki a 3 pous. Kòn nan gen yon reyon ki a 3 pous. Konbyen wotè kòn nan mezire?

Montre kijan ou fè pou jwenn repons la.

Repons _____ pous

54 Si genyen, jwenn solisyon pou sistèm ekwasyon ki pi ba a.

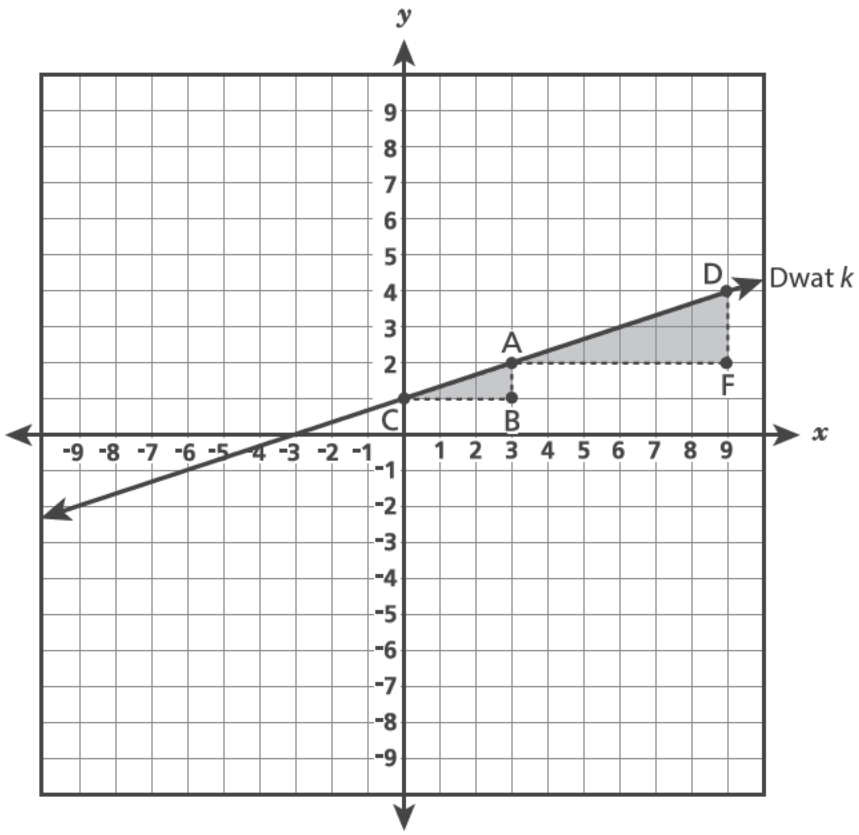
$$8x - 2y = 1$$
$$-4x + y = 3$$

Montre kijan ou fè pou jwenn repons la.

Repons _____

KONTINYE

55 Ipoteniz triyang ABC ak DFA ki menm yo chita sou dwat *k*, jan nou montre anba la a.



Demontre si pant dwat *k* a konstan ant pwen C ak D. Itilize long pye triyang ABC ak DFA nan repons ou a.

56 Valè ki nan tablo ki pi ba a reprezante Fonksyon B, ki se yon fonksyon lineyè.

x	y
-3	-7
-1	-1
1	5
3	11

Fonksyon L reprezante ak ekwasyon $y = 6x + 4$. Pou konpare Fonksyon B ak L, detèmine kiyès ki gen pi gwo to chanjman epi kiyès ki gen pi gwo òdone alorijin. Eksplike poukisa repons ou yo kòrèk.

Montre kijan ou fè pou jwenn repons la.

KONTINYE

57 Valè nou bay nan tablo ki anba la a chita sou graf yon fonksyon lineyè.

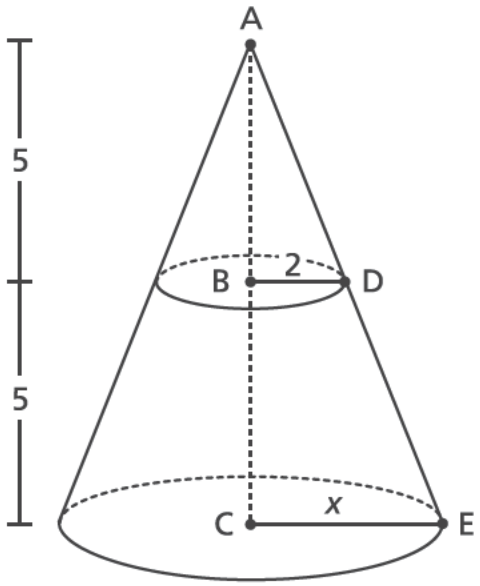
x	y
0,25	1,00
0,50	1,75
0,75	2,50

Ki ekwasyon ki reprezante fonksyon lineyè sa a?

Montre kijan ou fè pou jwenn repons la.

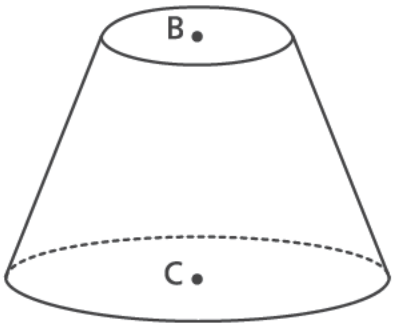
Repons _____

58 Baz sikilè kòn ki pi ba a gen C kòm mitan. Yon lòt sèk ki gen B kòm mitan, paralèl ak baz la. Sèk sa a se baz yon pi piti kòn ki gen AB kòm wotè. Nou bay mezi dyagram nan an pous.



Triyang ABD menm ak triyang ACE.

Nou retire kòn ki pi piti a pou n te rive kreye yon nouvo fòm, jan ou wè l pi ba a.



Ki volim nouvo fòm sa a? Awondi repons ou nan dizyèm ki pi pre a.

Montre kijan ou fè pou jwenn repons la.

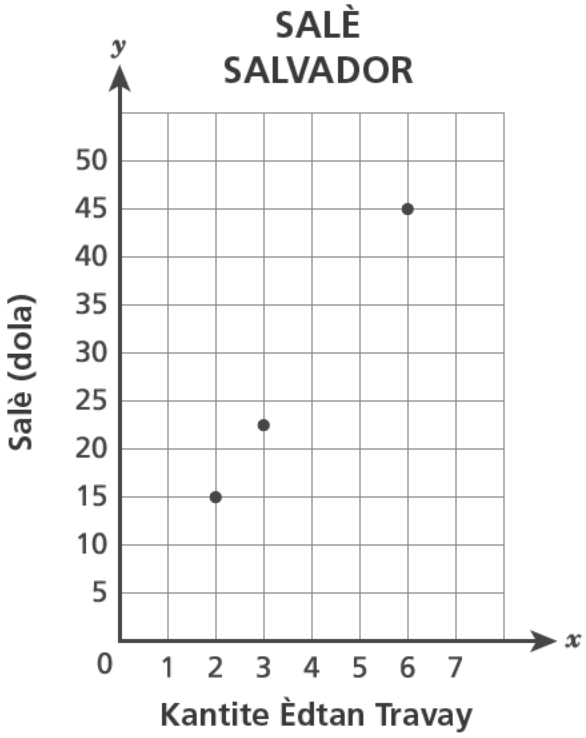
Repons _____ pous kib

KONTINYE

59 Tablo ak graf ki pi ba a montre salè Josie ak salè Salvador, daprè kantite èdtan yo travay.

SALÈ JOSIE

Kantite Èdtan Travay	Salè (dola)
3	26,25
5	43,75
7	61,25

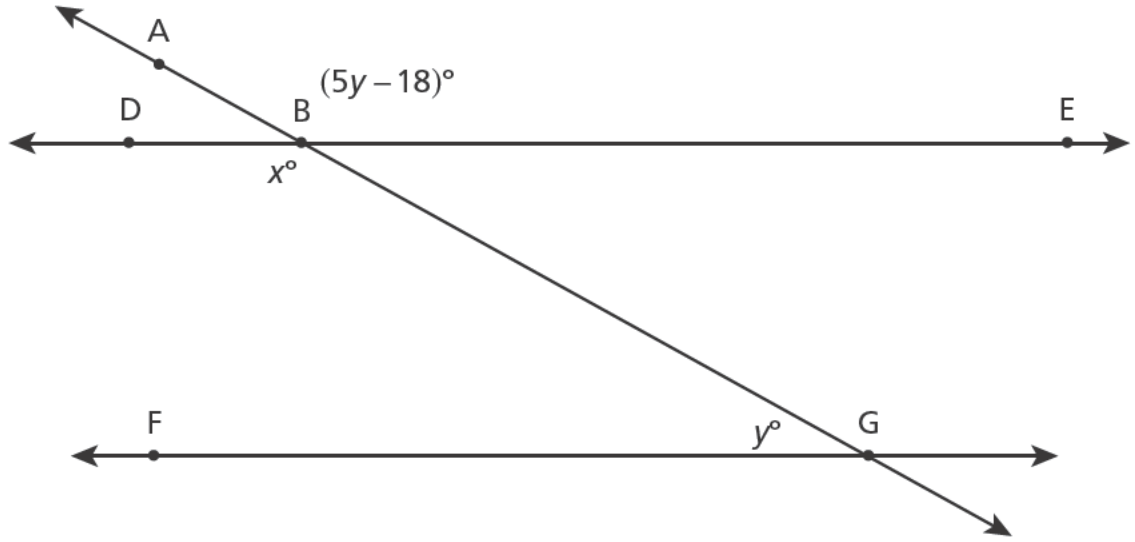


Nan ane 2010, Josie ak Salvador yo chak te travay wit èdtan pa jou pou senk jou chak semèn. Konbyen semèn li te pran Josie pou li touche $1.000 plis pase Salvador?

Montre kijan ou fè pou jwenn repons la.

Repons _____ semèn

60 Nan figi jeyometri ki pi ba a, liy DE a paralèl ak liy FG a, avèk transvèsal AG a.



Ekri epi rezoud yon ekwasyon sistèm lineyè pou rive jwenn valè x ak y.

Montre kijan ou fè pou jwenn repons la.

Repons $x =$ _____ ak $y =$ _____

KONTINYE

61 Gen kat ekwasyon pi ba a.

Ekwasyon 1: $y = 2^x$

Ekwasyon 2: $y = 2x - 5$

Ekwasyon 3: $y = x^2 + 6$

Ekwasyon 4: $y = \frac{x}{2}$

Idantifye yon ekwasyon lineyè ak yon ekwasyon non-lineyè nan lis la. Di poukisa chak ekwasyon ou te idantifye lineyè oswa non-lineyè.

Ekwasyon lineyè _____

_____

_____

_____

Ekwasyon non-lineyè _____

_____

_____

_____

Ane 8

2017 Common Core
Egzamen Matematik
Liv 3

2–4 Me 2017

Grade 8

2017 Common Core
Mathematics Test
Book 3

May 2–4, 2017

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2017 Mathematics Tests Map to the Standards
Released Questions on EngageNY

Grade 8

Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions: Percentage of Students Who Answered Correctly (P-Value)	Constructed Response Questions: Average Points Earned	Constructed Response Questions: P-Value (Average Points Earned ÷ Total Possible Points)
Book 1									
1	Multiple Choice	A	1	CCSS.Math.Content.8.EE.A.3	Expressions and Equations		0.62		
2	Multiple Choice	D	1	CCSS.Math.Content.8.F.B.5	Functions		0.46		
3	Multiple Choice	D	1	CCSS.Math.Content.7.G.A.3	Geometry		0.41		
4	Multiple Choice	C	1	CCSS.Math.Content.8.F.B.4	Functions		0.57		
5	Multiple Choice	D	1	CCSS.Math.Content.8.G.A.2	Geometry		0.53		
6	Multiple Choice	D	1	CCSS.Math.Content.8.F.A.3	Functions		0.66		
7	Multiple Choice	B	1	CCSS.Math.Content.8.EE.C.8a	Expressions and Equations		0.22		
8	Multiple Choice	D	1	CCSS.Math.Content.8.F.A.2	Functions		0.48		
9	Multiple Choice	A	1	CCSS.Math.Content.8.EE.C.7b	Expressions and Equations		0.54		
10	Multiple Choice	B	1	CCSS.Math.Content.8.SP.A.3	Statistics and Probability		0.49		
15	Multiple Choice	D	1	CCSS.Math.Content.8.EE.B.5	Expressions and Equations		0.46		
18	Multiple Choice	C	1	CCSS.Math.Content.8.EE.C.8c	Expressions and Equations		0.49		
19	Multiple Choice	B	1	CCSS.Math.Content.8.SP.A.4	Statistics and Probability		0.67		
20	Multiple Choice	D	1	CCSS.Math.Content.8.G.A.4	Geometry		0.36		
24	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.1	Expressions and Equations		0.36		
25	Multiple Choice	D	1	CCSS.Math.Content.8.F.A.1	Functions		0.56		

Released Questions on EngageNY

Grade 8 Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions: Percentage of Students Who Answered Correctly (P-Value)	Constructed Response Questions: Average Points Earned	Constructed Response Questions: P-Value (Average Points Earned ÷ Total Possible Points)
26	Multiple Choice	A	1	CCSS.Math.Content.8.G.A.3	Geometry		0.58		
Book 2									
27	Multiple Choice	B	1	CCSS.Math.Content.8.F.B.5	Functions		0.83		
28	Multiple Choice	D	1	CCSS.Math.Content.8.SP.A.3	Statistics and Probability		0.44		
29	Multiple Choice	C	1	CCSS.Math.Content.8.G.A.2	Geometry		0.70		
30	Multiple Choice	B	1	CCSS.Math.Content.7.G.B.6	Geometry		0.48		
31	Multiple Choice	B	1	CCSS.Math.Content.8.EE.A.1	Expressions and Equations		0.36		
32	Multiple Choice	A	1	CCSS.Math.Content.8.G.C.9	Geometry		0.36		
34	Multiple Choice	C	1	CCSS.Math.Content.8.G.A.1	Geometry		0.58		
35	Multiple Choice	C	1	CCSS.Math.Content.8.EE.C.8b	Expressions and Equations		0.54		
36	Multiple Choice	A	1	CCSS.Math.Content.8.SP.A.1	Statistics and Probability		0.63		
37	Multiple Choice	A	1	CCSS.Math.Content.8.EE.C.7b	Expressions and Equations		0.54		
38	Multiple Choice	C	1	CCSS.Math.Content.8.F.A.1	Functions		0.47		
39	Multiple Choice	B	1	CCSS.Math.Content.8.EE.C.8c	Expressions and Equations		0.58		
40	Multiple Choice	A	1	CCSS.Math.Content.8.F.B.4	Functions		0.59		
42	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.4	Expressions and Equations		0.23		
43	Multiple Choice	C	1	CCSS.Math.Content.8.F.A.2	Functions		0.38		
44	Multiple Choice	B	1	CCSS.Math.Content.8.G.A.4	Geometry		0.39		

Released Questions on EngageNY

Grade 8 Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions: Percentage of Students Who Answered Correctly (P-Value)	Constructed Response Questions: Average Points Earned	Constructed Response Questions: P-Value (Average Points Earned ÷ Total Possible Points)
45	Multiple Choice	C	1	CCSS.Math.Content.8.EE.A.4	Expressions and Equations		0.47		
46	Multiple Choice	A	1	CCSS.Math.Content.8.F.A.3	Functions		0.48		
47	Multiple Choice	C	1	CCSS.Math.Content.8.EE.C.7a	Expressions and Equations		0.57		
50	Multiple Choice	D	1	CCSS.Math.Content.8.EE.B.5	Expressions and Equations		0.45		
51	Multiple Choice	D	1	CCSS.Math.Content.8.G.A.4	Geometry		0.50		
Book 3									
52	Constructed Response		2	CCSS.Math.Content.8.EE.C.7b	Expressions and Equations			0.64	0.32
53	Constructed Response		2	CCSS.Math.Content.8.G.C.9	Geometry			0.81	0.40
54	Constructed Response		2	CCSS.Math.Content.8.EE.C.8b	Expressions and Equations			0.62	0.31
55	Constructed Response		2	CCSS.Math.Content.8.EE.B.6	Expressions and Equations			0.46	0.23
56	Constructed Response		2	CCSS.Math.Content.8.F.A.2	Functions			0.61	0.30
57	Constructed Response		2	CCSS.Math.Content.8.F.B.4	Functions			0.67	0.33
58	Constructed Response		3	CCSS.Math.Content.8.G.C.9	Geometry			0.46	0.15
59	Constructed Response		3	CCSS.Math.Content.8.EE.B.5	Expressions and Equations			0.83	0.28
60	Constructed Response		3	CCSS.Math.Content.8.EE.C.8c	Expressions and Equations			0.51	0.17
61	Constructed Response		3	CCSS.Math.Content.8.F.A.3	Functions			1.60	0.53

*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.