New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

# New York State Testing Program
# Grade 7
# 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: _____

# Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 1

## Ane 7

## 26–28 Avril 2022

**RELEASED QUESTIONS**

# Ane 7 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** | $A = \dfrac{1}{2}bh$ |
| **Paralelogram** | $A = bh$ |
| **Sèk** | $A = \pi r^2$ |
| **Sèk** | $C = \pi d$ oswa $C = 2\pi r$ |
| **Prism Jeneral** | $V = Bh$ |

# 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 kalkilatris) 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** Selon yon rapò meteyo, pwobablite pou li fè lapli demen an se 0,13. Ki mo ki dekri chans ki genyen pou fè lapli demen?

    **A**    sèten

    **B**    enposib

    **C**    pwobab

    **D**    enpwobab

**2** De magazen gen yon piblisite sou yon rabè pou menm kalite mont la. Nan toude magazen yo, pri orijinal mont la te $35,00.

- Rabè Magazen A pou mont la se 20%.

- Rabè Magazen B pou mont la se 15%.

Konbyen an mwens pri yo mete rabè sou mont la nan Magazen A ye pase pri yo mete rabè pou mont la nan Magazen B ?

    **A**    $1,75

    **B**    $5,00

    **C**    $5,25

    **D**    $7,00

*KONTINYE*

**4** Yon jiwèt gen senk seksyon menm gwosè ak koulè ble, wouj, oranj, jòn, ak vèt. Yo te tounen flèch jiwèt la 50 fwa pandan yon eksperyans. Nou montre rezilta yo nan tablo ki anba la a.

**REZILTA EKSPERYANS LA**

| Koulè | Frekans |
|-------|---------|
| Ble   | 12      |
| Wouj  | 15      |
| Oranj | 6       |
| Jòn   | 10      |
| Vèt   | 7       |

Selon rezilta yo, ki pwobablite eksperimantal pou nenpòt fwa yo tounen l, flèch la pral tonbe sou seksyon wouj la?

A    $\dfrac{1}{15}$

B    $\dfrac{1}{5}$

C    $\dfrac{3}{7}$

D    $\dfrac{3}{10}$

**5** Ki ekspresyon ki ekivalan ak $-3(2x - 8) + 4x$ ?

A    $-2x - 8$

B    $-2x + 24$

C    $-10x - 8$

D    $-10x + 24$

*KONTINYE*

**9** Ansanm done ki anba la a reprezante distribisyon tanperati wo chak jou nan yon vil pou 8 jou.

79, 73, 72, 70, 72, 66, 81, 75

Konbyen degre Farennay medyàn tanperati wo chak jou a ye nan vil la?

A    71

B    72,5

C    73

D    73,5

**10** Piba a se meni yon boutik ki vann krèm glase.

| MENI KRÈM GLASE | | |
|---|---|---|
| **Gwosè** | **Gou** | **Ganiti** |
| Piti | Vaniy | Tranpèt |
| Mwayèn | Chokola | Soupoudre |
| Gwo | Frèz | Kouch Krakan |

Konbyen chwa diferan nan yon gwosè, yon gou, ak yon ganiti yo ka fè de meni a?

A    3

B    9

C    18

D    27

*KONTINYE*

**11** Pri pou 10 ons mitil òganik se $2,70. Ki ekwasyon ou ka itilize pou detèmine $x$, pri a, an dola, pou 30 ons mitil òganik ?

A $\quad \dfrac{10}{2,7} = \dfrac{x}{30}$

B $\quad \dfrac{2,7}{10} = \dfrac{30}{x}$

C $\quad \dfrac{10}{2,7} = \dfrac{30}{x}$

D $\quad \dfrac{2,7}{30} = \dfrac{x}{10}$

**19** Ki ekspresyon ki gen menm valè ak ekspresyon ki anba la a?

$$-\frac{3}{8} - \frac{7}{8}$$

A $\quad \frac{3}{8} + \frac{7}{8}$

B $\quad -\frac{3}{8} + \frac{7}{8}$

C $\quad \frac{3}{8} + \left(-\frac{7}{8}\right)$

D $\quad -\frac{3}{8} + \left(-\frac{7}{8}\right)$

**20** Yon kizinye fè 150 tas chili epi vann 60% ladan. Yon pòsyon chili a se $1\frac{2}{3}$ tas. Konbyen pòsyon chili li te vann?

A $\quad$ 36

B $\quad$ 54

C $\quad$ 90

D $\quad$ 100

**21** Lè solèy la t ap kouche, yon tèmomèt te gen yon lekti 4°F. Pandan lannuit, tanperati a te diminye 15°F. Apre li te diminye a, konbyen degre total tanperati a dwe chanje pou tèmomèt la li 0°F ?

A $\quad$ 4°F

B $\quad$ 11°F

C $\quad$ 15°F

D $\quad$ 19°F

*KONTINYE*

**25** Yon jadinye itilize yon total $61{,}5$ galon gazolin nan yon mwa. Nan kantite total gazolin nan, li te itilize $\dfrac{3}{5}$ nan machin pou koupe zèb nan gazon li yo. Konbyen galon gazolin jadinye a itilize nan machin pou koupe gazon li yo nan yon mwa?

    **A**    12,3

    **B**    24,6

    **C**    26,5

    **D**    36,9

**26** Yon aparèy nan yon faktori fè $2\dfrac{1}{4}$ liv klou nan $1\dfrac{1}{2}$ èdtan. Nan ki to, an liv pa èdtan, aparèy la fè klou yo?

    **A**    $\dfrac{2}{3}$

    **B**    $\dfrac{3}{4}$

    **C**    $1\dfrac{1}{2}$

    **D**    $3\dfrac{3}{4}$

*KONTINYE*

**28** Tablo ki anba la a montre yon relasyon pwopòsyonèl ant $x$ ak $y$.

| $x$ | $y$ |
|------|--------|
| 0,50 | 0,750 |
| 1,25 | 1,875 |
| 3,00 | 4,500 |
| 6,75 | 10,125 |

Kisa ki konstan de pwopòsyonalite pou relasyon ant $x$ ak $y$ ?

**A**   0,25

**B**   0,50

**C**   1,50

**D**   1,75

**31** Mesye Jensen te achte yon biyè avyon sou yon sitwèb. Pri orijinal biyè avyon an te $473,00. Li te itilize yon kòd koupon pou l te gen yon rabè 20%. Yo te mete yon taks 12% apre rabè a. Konbyen acha total la te ye pou pri biyè avyon an apre rabè a, ak taks ladan?

    **A**    $105,92

    **B**    $332,99

    **C**    $423,81

    **D**    $529,76

**32** Ki valè $12,5 - \dfrac{31}{2} + 1\dfrac{1}{4}$ ye?

    **A**    $-20,25$

    **B**    $-17,25$

    **C**    $-\dfrac{17}{4}$

    **D**    $-\dfrac{7}{4}$

**33** Sou yon kat, de vil gen yon distans 2,8 pous ant yo. Kat la gen yon echèl 1 pous pou 25 mil. Ki distans, an pous, menm de vil yo t ap ye sou yon kat ki gen yon echèl 1 pous pou 40 mil?

    **A**    1,20

    **B**    1,60

    **C**    1,75

    **D**    1,80

**KANPE LA**

# Ane 7

**2022**
**Egzamen Matematik**
**Seyans 1**
26–28 Avril 2022

# Grade 7

**2022**
**Mathematics Test**
**Session 1**
April 26–28, 2022

**Non:** _____

# Pwogram Egzamen Eta Nouyòk Egzamen Matematik Seyans 2

# Ane 7

## 26–28 Avril 2022

## RELEASED QUESTIONS

# Ane 7 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** | $A = \dfrac{1}{2}bh$ |
| **Paralelogram** | $A = bh$ |
| **Sèk** | $A = \pi r^2$ |
| **Sèk** | $C = \pi d$  oswa $C = 2\pi r$ |
| **Prism Jeneral** | $V = Bh$ |

**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  oswa ou ekri repons ou an.

- Yo ba w enstriman matematik (yon règ, yon rapòtè ak yon kalkilatris) 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.

**34** Katelyn vle achte yon esketbòd ki koute $75,00. Li ekonomize $25,00 deja. Li koupe zèb gazon pou fè plis lajan epi li touche $20,00 pou chak gazon li koupe. Ki inegalite ou te ka itilize pou detèmine kantite gazon, $x$, li pral bezwen koupe pou l ka gen ase lajan pou achte esketbòd la?

A     $25 + 20x \leq 75$

B     $25 + 20x \geq 75$

C     $20 + 25x \leq 75$

D     $20 + 25x \geq 75$

**35** Yon antrenè konpare wotè jwè yo nan de ekip diferan. Nou montre ansanm done yo nan tablo ki anba la a.

### WOTÈ JWÈ NAN DE EKIP YO

| Ekip A Jwè Wotè (pous) | 76 | 68 | 73 | 65 | 60 | 63 | 69 | 76 |
|---|---|---|---|---|---|---|---|---|
| Ekip B Jwè Wotè (pous) | 63 | 73 | 64 | 70 | 70 | 67 | 75 | 62 |

Selon done sa yo, ki deklarasyon ki vrè?

A     Mwayèn wotè jwè yo nan Ekip B pi gran pase mwayèn wotè jwè yo nan Ekip A.

B     Mwayèn wotè jwè yo nan Ekip A pi gran pase mwayèn wotè jwè yo nan Ekip B.

C     Medyàn wotè jwè yo nan Ekip B pi gran pase medyàn wotè jwè yo nan Ekip A.

D     Medyàn wotè jwè yo nan Ekip A pi gran pase medyàn wotè jwè yo nan Ekip B.

*KONTINYE*

**36** Kisa ki valè ekspresyon ki anba la a?

$$-36 \div 9 + 3(-7) + 2$$

**A**     $-23$

**B**     $-19$

**C**     $9$

**D**     $15$

**37** Yon kizinye itilize $1\frac{3}{4}$ ti kiyè sèl pou fè $3\frac{1}{2}$ liv pat. Kisa ki to inite a, an ti kiyè pa liv, kizinye a te itilize sèl pou fè pat?

**A**     $\dfrac{1}{2}$

**B**     $1$

**C**     $1\dfrac{3}{4}$

**D**     $2$

**38** Ekpresyon $48y - 16$ la reprezante perimèt, an pye, yon kare. Ki ekspresyon ki reprezante longè, an pye, chak kote kare a?

**A**     $12y - 4$

**B**     $12y - 16$

**C**     $24y - 8$

**D**     $48y - 4$

**39** Ou ka itilize ekwasyon $y = 4{,}3x$ pou detèmine pri total la, $y$, an dola, $x$ liv pòm. Kisa nonm $4{,}3$ reprezante nan ekwasyon an?

    **A**    kantite pòm an $1$ liv

    **B**    kantite pòm an $x$ liv

    **C**    pri $1$ liv pòm

    **D**    pri $x$ liv pòm

**40** Ki ekspresyon ki ekivalan ak ekspresyon ki anba la a?

    $2 + 3(2x + 5)$

    **A**    $7 + 6x$

    **B**    $17 + 2x$

    **C**    $17 + 6x$

    **D**    $25 + 10x$

*KONTINYE*

**41** Yon pwofesè ap fè yon sondaj ak yon gwoup elèv owaza konsènan preferans yo pou fè travay klas la sou entènèt oswa sou papye. Nou montre rezilta yo nan tablo ki anba la a.

**PREFERANS**
**TRAVAY ELÈV NAN KLAS**

| Preferans | Kantite Elèv yo |
|---|---|
| Sou entènèt | 17 |
| Papye | 8 |

Selon rezilta yo, konbyen elèv sou 350 ki pral **gen plis chans** pou prefere fè travay klas yo sou entènèt?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* _____ elèv

*KONTINYE*

**42** Marcy ap achte prim pou fè kado nan yon aktivite pou sanble lajan, jan li dekri anba a.

- Li gen $250,00 pou depanse.

- Li achte 13 pas pou ale nan sinema pou $9,50 yo chak.

- Li achte 3 kat kado ki vo $25,00 yo chak.

- Li pral itilize rès lajan an pou achte ba bonbon ki koute $1,75 yo chak.

Ki pi gran kantite ba bonbon l ap ka achte ak rès lajan an?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* _____ ba bonbon

*KONTINYE*

Seyans 2

**43**  Nan yon konpayi, yon enprimant enprime 175 paj nan 5 minit. Si kantite paj yo enprime a pwopòsyonèl selon lè a, an minit, kisa to inite a ye?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* _____ paj pa minit

**44** Yon kizinye retire yon pake manje nan yon frizè epi li kòmanse dekonjele pake a.

- Tanperati inisyal pake manje a se $-15°\text{F}$.

- A midi, tanperati pake manje a te ogmante a $35°\text{F}$.

Konbyen degre Farennay chanjman total nan tanperati pake manje a ye?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* _____ $°\text{F}$

**KONTINYE**

**45** Manm yon klèb lekòl ap vann biyè pou yon aktivite pou sanble lajan. Objektif aktivite pou sanble lajan an se pou fè $50,00 chak jou nan vann biyè. Lis ki anba la a montre pousantaj objektif la yo te reyalize chak jou.

- Nan premye jou a, manm yo te reyalize 90% objektif yo pou jounen an.

- Nan dezyèm jou a, manm yo te reyalize 6% an plis objektif yo pou jounen an.

- Nan twazyèm jou a, manm yo te reyalize 14% mwens objektif yo pou jounen an.

Konbyen lajan, an dola, manm yo te fè nan vann biyè pandan tout twa jou yo?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* $ _____

*KONTINYE*

**46** Yon elèv senplifye yon ekspresyon yon fason ki pa kòrèk. W ap jwenn ekspresyon an ak travay elèv la anba la a.

$$5 - \left(\frac{40}{5}\right)$$

Etap A: $5 + \left(\frac{-40}{-5}\right)$

Etap B: $5 + 8$

Etap C: $13$

Nan ki etap elèv la te fè premye fot la? Pa bliye mete valè ekspresyon ki kòrèk la nan fòm ki pi senp lan nan repons ou an.

*Eksplike repons ou an.*

_____

_____

_____

**47** Madmwazèl Boi depanse yon total $175,00$ pou $4$ biyè admisyon ak pou pakin nan yon match bezbòl. Pri chak biyè admisyon se te menm kantite a, ak taks ladan. Pri pou pakin nan te $25,00$. Ekri yon ekwasyon ou ka itilize pou detèmine $t$, pri a, an dola, pou chak biyè admisyon, ak taks ladan.

*Ekwasyon* _____

Kisa pri a te ye, an dola, pou chak biyè admisyon, ak taks ladan?

**Montre kijan ou fè pou jwenn repons lan.**

*Repons* $ _____

**48** Yon konpayi fabrike bidon dlo. Lis ki anba la a dekri kantite bidon dlo yo fabrike nan twa mwa.

- Fevriye: 4.100 bidon dlo

- Mas: 7% plis bidon dlo pase an fevriye

- Avril: 500 plis bidon dlo pase an mas

Kisa ogmantasyon pousantaj la ye, lè ou awondi nan pousantaj ki pi pre a, nan kantite bidon dlo konpayi a te fabrike ant fevriye ak avril?

*Montre kijan ou fè pou jwenn repons lan.*

*Repons* _____ %

**KANPE LA**

# Ane 7

**2022**
**Egzamen Matematik**
**Seyans 2**
26–28 Avril 2022

# Grade 7

**2022**
**Mathematics Test**
**Session 2**
April 26–28, 2022

| Question | Type | Key | Points | Standard | Cluster |
|---|---|---|---|---|---|
| **Session 1** | | | | | |
| 1 | Multiple Choice | D | 1 | CCSS.Math.Content.7.SP.C.5 | Statistics and Probability |
| 2 | Multiple Choice | A | 1 | CCSS.Math.Content.7.RP.A.3 | Ratios and Proportional Relationships |
| 4 | Multiple Choice | D | 1 | CCSS.Math.Content.7.SP.C.7b | Statistics and Probability |
| 5 | Multiple Choice | B | 1 | CCSS.Math.Content.7.EE.A.1 | Expressions and Equations |
| 9 | Multiple Choice | B | 1 | CCSS.Math.Content.6.SP.A.3 | Statistics and Probability |
| 10 | Multiple Choice | D | 1 | CCSS.Math.Content.7.SP.C.8b | Statistics and Probability |
| 11 | Multiple Choice | C | 1 | CCSS.Math.Content.7.RP.A.2c | Ratios and Proportional Relationships |
| 19 | Multiple Choice | D | 1 | CCSS.Math.Content.7.NS.A.1c | The Number System |
| 20 | Multiple Choice | B | 1 | CCSS.Math.Content.7.EE.B.3 | Expressions and Equations |
| 21 | Multiple Choice | B | 1 | CCSS.Math.Content.7.NS.A.1b | The Number System |
| 25 | Multiple Choice | D | 1 | CCSS.Math.Content.7.NS.A.3 | The Number System |
| 26 | Multiple Choice | C | 1 | CCSS.Math.Content.7.RP.A.1 | Ratios and Proportional Relationships |
| 28 | Multiple Choice | C | 1 | CCSS.Math.Content.7.RP.A.2b | Ratios and Proportional Relationships |
| 31 | Multiple Choice | C | 1 | CCSS.Math.Content.7.RP.A.3 | Ratios and Proportional Relationships |
| 32 | Multiple Choice | D | 1 | CCSS.Math.Content.7.EE.B.3 | Expressions and Equations |
| 33 | Multiple Choice | C | 1 | CCSS.Math.Content.7.G.A.1 | Geometry |
| **Session 2** | | | | | |
| 34 | Multiple Choice | B | 1 | CCSS.Math.Content.7.EE.B.4b | Expressions and Equations |
| 35 | Multiple Choice | B | 1 | CCSS.Math.Content.7.SP.B.4 | Statistics and Probability |
| 36 | Multiple Choice | A | 1 | CCSS.Math.Content.7.EE.B.3 | Expressions and Equations |
| 37 | Multiple Choice | A | 1 | CCSS.Math.Content.7.RP.A.1 | Ratios and Proportional Relationships |
| 38 | Multiple Choice | A | 1 | CCSS.Math.Content.7.EE.A.1 | Expressions and Equations |
| 39 | Multiple Choice | C | 1 | CCSS.Math.Content.7.RP.A.2b | Ratios and Proportional Relationships |
| 40 | Multiple Choice | C | 1 | CCSS.Math.Content.7.EE.A.1 | Expressions and Equations |
| 41 | Constructed Response | | 2 | CCSS.Math.Content.7.SP.A.2 | Statistics and Probability |
| 42 | Constructed Response | | 2 | CCSS.Math.Content.7.NS.A.3 | The Number System |
| 43 | Constructed Response | | 2 | CCSS.Math.Content.7.RP.A.2b | Ratios and Proportional Relationships |
| 44 | Constructed Response | | 2 | CCSS.Math.Content.7.NS.A.1c | The Number System |
| 45 | Constructed Response | | 2 | CCSS.Math.Content.7.EE.B.3 | Expressions and Equations |
| 46 | Constructed Response | | 2 | CCSS.Math.Content.7.NS.A.2b | The Number System |
| 47 | Constructed Response | | 2 | CCSS.Math.Content.7.EE.B.4a | Expressions and Equations |
| 48 | Constructed Response | | 3 | CCSS.Math.Content.7.RP.A.3 | Ratios and Proportional Relationships |

*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.