



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

**New York State Testing Program
Grade 6
Mathematics Test
(Chinese Traditional)**

Released Questions

2025

New York State administered the Mathematics Tests in Spring 2025 and is 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 2025 Exams

Background

As in past years, SED is releasing large portions of the 2025 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2025, included in these released materials are at least 75 percent of the test questions that appeared on the 2025 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 Next Generation 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.

One-Credit Constructed-Response Questions

One-credit constructed-response questions require students to complete a task and provide only their final answer. These one-credit questions will often require multiple steps, assessing procedural skills, as well as conceptual understanding and application. While students may show how they arrived at their final answer, only the final answer will be scored.

Two-Credit Constructed-Response Questions

Two-credit constructed-response questions require students to complete tasks and show their work. These two-credit 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.

Three-Credit Constructed-Response Questions

Three-credit constructed-response questions ask students to show their work in completing two or more tasks or a more extensive problem. These three-credit response questions allow students to show their understanding of mathematical procedures, conceptual understanding, and application. Three-credit response questions may also assess student reasoning and the ability to critique the arguments of others. The scoring rubric for all constructed-response questions can be found in the grade-level Educator Guides at <https://www.nysed.gov/state-assessment/grades-3-8-ela-and-math-test-manuals>.

New York State P–12 Next Generation Learning Standards Alignment

The alignment(s) to the New York State P–12 Next Generation 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-credit and three-credit 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 Next Generation 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.

姓名: _____



Chinese (Traditional) Edition

Grade 6 2025

Mathematics Test

Session 1

Spring 2025

紐約州測驗計劃 數學考試 第 1 卷

6 年級

2025 年春季

RELEASED QUESTIONS

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第 1 卷



應考建議

以下是一些建議，可以幫助你做到最好：

- 仔細閱讀每道題目。慢慢來，別著急。
- 你已獲得了一把尺子、一個量角器和一張參考表，如果它們對你答題有幫助，你可以在測試中使用。

1

一份食譜要求每 8 盎司麵條加 2 杯乳酪。哪個表代表了這個食譜中乳酪與麵條的比例？

食譜

A

乳酪 (杯)	麵條 (盎司)
2	8
3	9
4	10
5	11

食譜

C

乳酪 (杯)	麵條 (盎司)
8	2
9	3
10	4
11	5

食譜

B

乳酪 (杯)	麵條 (盎司)
2	8
4	16
6	24
8	32

食譜

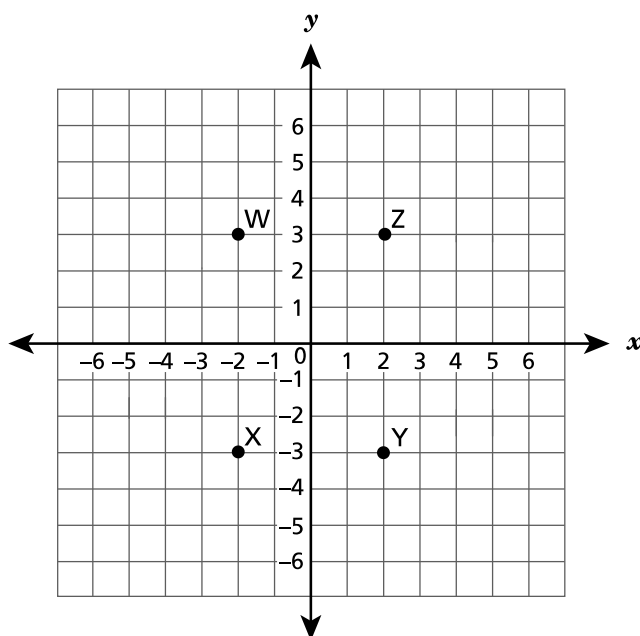
D

乳酪 (杯)	麵條 (盎司)
8	2
16	4
24	6
32	8

繼續

3

在以下所示的座標平面上繪製了點 W、X、Y 和 Z。



哪個點位於 $(-2, 3)$ ？

- A 點 W
- B 點 X
- C 點 Y
- D 點 Z

繼續

- 5 當 $c = 2$ 且 $h = 3$ 時，以下所示的表達式的值是多少？

$$c^3 + 4h - 7$$

- A 11
- B 13
- C 42
- D 44

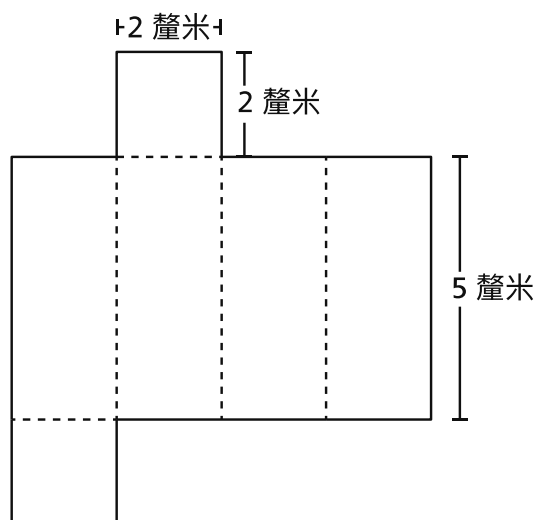
- 6 一個紙箱中有 $4\frac{1}{2}$ 杯冰淇淋。一整份冰淇淋是 $\frac{3}{4}$ 杯。該紙箱中整份冰淇淋的總數是多少？

- A $3\frac{3}{4}$
- B $5\frac{1}{4}$
- C 6
- D 12

繼續

13

以下顯示一個直立矩形稜柱的展開圖。



這個稜柱的表面積是多少平方釐米？

- A 20
- B 34
- C 40
- D 48

繼續

16

一間辦公室有兩台影印機。影印機 A 在 7 分鐘內列印 350 頁。影印機 B 在 3 分鐘內列印 210 頁。在 1 分鐘內影印機 B 可比影印機 A 多列印多少頁？

A 20

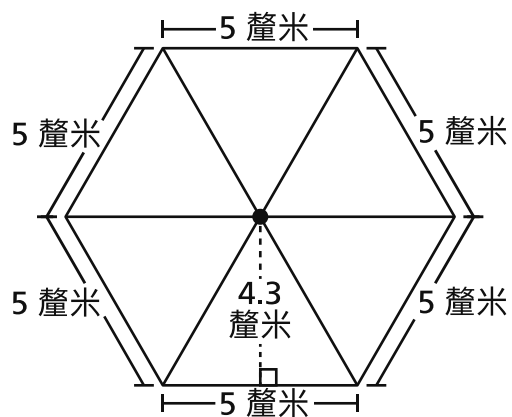
B 35

C 50

D 70

繼續

一個正六邊形由一些個等邊三角形組成，如下所示。



該正六邊形的面積是多少平方釐米？

- A 10.75
- B 21.5
- C 34.3
- D 64.5

繼續

19

以下所示表達式的值是多少？

$$\frac{(3^2 + 5 \cdot 3)}{2^3}$$

A 3

B $3\frac{1}{2}$

C 4

D $5\frac{1}{4}$

繼續

一位教師要求 50 名六年級學生投票選出他們喜歡的愛好。下表顯示了結果。

喜歡的愛好

愛好	學生人數
閱讀	12
演奏樂器	11
看電影	9
參加體育運動	18

百分之多少的學生投票選擇將演奏樂器或閱讀作為他們喜歡的愛好？

- A 12%
- B 23%
- C 46%
- D 54%

繼續

23 表達式 $2x^3$ 中的係數是多少？

A 2

B 3

C x

D $2x$

繼續

27 哪個數字不是以下所示不等式的解？

$$3w \geq 12$$

A 3

B 4

C 5

D 8

繼續

一個學校俱樂部有來自四個年級的學生。以下清單中顯示了來自每個年級的學生人數。

- 12 名 5 年級學生
- 6 名 6 年級學生
- 2 名 7 年級學生
- 8 名 8 年級學生

該俱樂部中 5 年級和 6 年級的學生總數與該俱樂部中 7 年級和 8 年級學生總數的比例是多少？

- A 2:1
- B 3:1
- C 5:9
- D 9:5

30

哪個表達式表示片語「十五與數字 n 的兩倍小五之數的和」？

A $15(5 - 2n)$

B $15(2n - 5)$

C $15 + (5 - 2n)$

D $15 + (2n - 5)$

停止作答

**6年級
數學測驗
第 1 卷
2025 年春季**

**Grade 6
Mathematics Test
Session 1
Spring 2025**

姓名：_____



Chinese (Traditional) Edition

Grade 6 2025

Mathematics Test

Session 2

Spring 2025

紐約州測驗計劃

數學考試

第 2 卷


6 年級

2025 年春季

RELEASED QUESTIONS

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第 2 卷



應考建議

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- 你已獲得了一把尺子、一個量角器、一張參考表和一個計算器，如果它們對你答題有幫助，你可以在測試中使用。
- 如果有相關要求，請寫出你的計算過程。
- 如果有相關要求，回答時務必解釋你的答案。

31 蒂龍將 \$65 存入他的銀行帳戶。第二天他取出了 \$20。哪兩個整數表示蒂龍銀行帳戶中的活動？

A -65 和 -20

B -65 和 20

C 65 和 -20

D 65 和 20

32 瑪麗以 1 小時 12 英里的平均速度騎自行車。按照這個速度騎行，瑪麗 1 分鐘騎行了多少英尺？

A 1,056

B 26,400

C 63,360

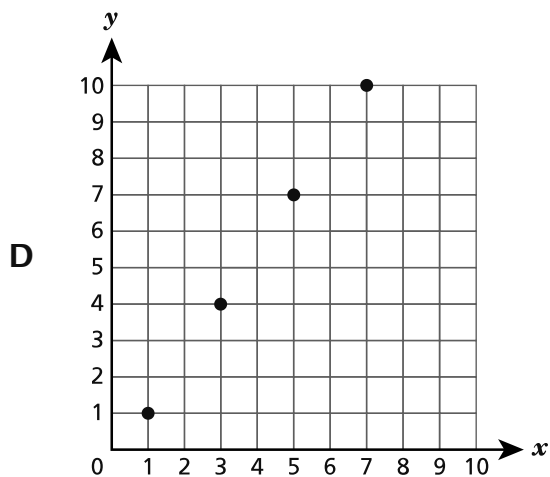
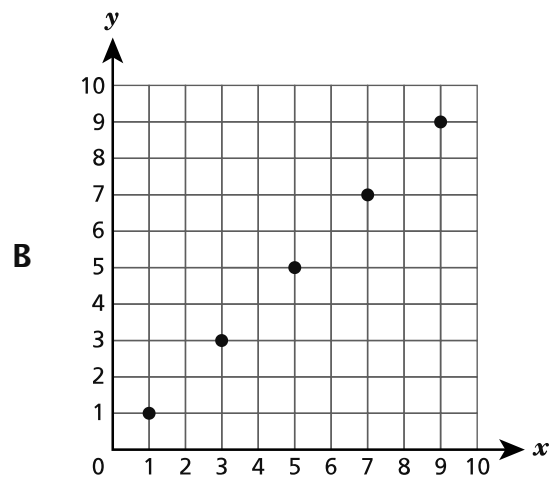
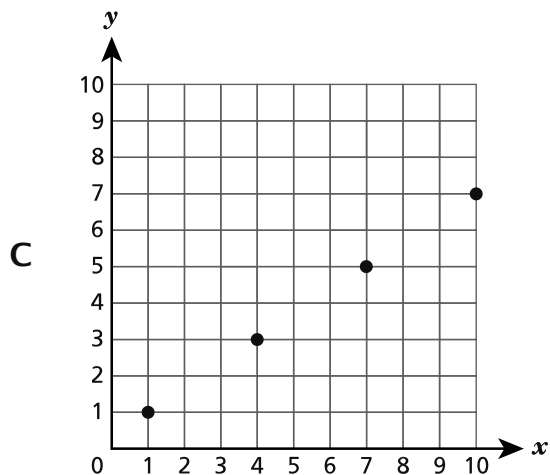
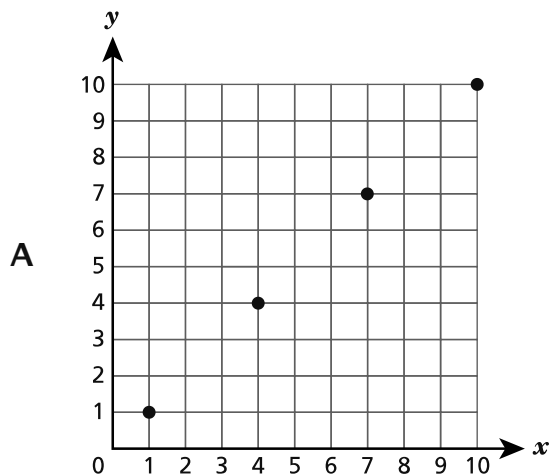
D 3,801,600

繼續

下面顯示的兩條規則用於生成幾組有序對。起點是 $(1, 1)$ 。然後將這些有序對繪製在一個座標平面上。

- x 座標的規則：每個值都比前一個值大 3。
- y 座標的規則：每個值都比前一個值大 2。

哪個圖形顯示了這組有序對？



- 34 一個禮品盒的形狀為直立矩形稜柱。該禮品盒長 $7\frac{3}{5}$ 釐米，寬 $5\frac{4}{5}$ 釐米，高 $2\frac{1}{2}$ 釐米。禮品盒的體積是多少立方釐米？

- A $15\frac{9}{10}$
- B $70\frac{6}{25}$
- C $110\frac{1}{5}$
- D $155\frac{8}{50}$

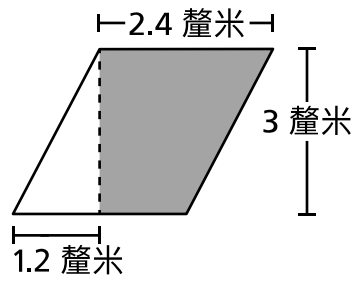
- 35 漢娜從雜貨店買了柳丁和蘋果。她買 5 磅柳丁支付了 \$6.25，買 6 磅蘋果支付了 \$6.90。關於這些水果的說法，哪種是正確的？

- A 蘋果的單價更高，為 \$1.15。
- B 蘋果的單價更高，為 \$1.25。
- C 柳丁的單價更高，為 \$1.15。
- D 柳丁的單價更高，為 \$1.25。

繼續

36

下圖顯示了一個平行四邊形，其中一部分帶有陰影。



該平行四邊形陰影部分的面積是多少平方釐米？

- A 3.6
- B 5.4
- C 4.32
- D 8.64

繼續

37

答對這道題可獲得 1 個積分。

卡姆斯基先生的班上有 6 名演奏樂器的學生。這些學生占他班上學生總數的 24%。他班上的學生總數是多少？

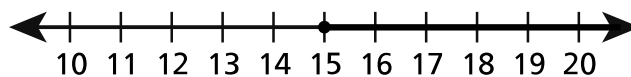
答案 _____ 名學生

繼續

38

答對這道題可獲得 1 個積分。

以下所示的數軸上表示了一個不等式的解集。



使用變數 x 寫一個不等式來描述該數軸上表示的解集。

答案 _____

繼續

39

答對這道題可獲得 1 個積分。

72 和 96 的最大公因數是多少？

答案 _____

繼續

40

答對這道題可獲得 2 個積分。

表達式 $4(3 + 5^2) - 6$ 的值是多少？

請寫出你的計算過程。

答案 _____

繼續

答對這道題可獲得 2 個積分。

一家餐廳購買一些大塊乳酪。下表顯示了他們購買的乳酪塊數 b 與支付的總金額 t （單位為美元）之間的關係。

乳酪價格

乳酪數量， b (塊)	總價， t (美元)
2	112
4	224
6	336
8	448

根據該表中的資料寫一個方程式，用購買的乳酪塊數 b 表示總價 t 。務必在你的解釋中確定自變數和應變數。

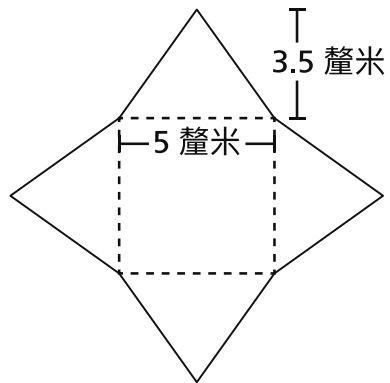
請解釋你的答案。

繼續

42

答對這道題可獲得 2 個積分。

一個正四角錐的展開圖如下圖所示。



該角錐的表面積是多少平方釐米？

請寫出你的計算過程。

答案 _____ 平方釐米

繼續

43

答對這道題可獲得 2 個積分。

一張長方形桌子的桌面寬度為 $3\frac{1}{3}$ 英尺，面積為 $21\frac{2}{3}$ 平方英尺。該桌子桌面的長度是多少英尺？

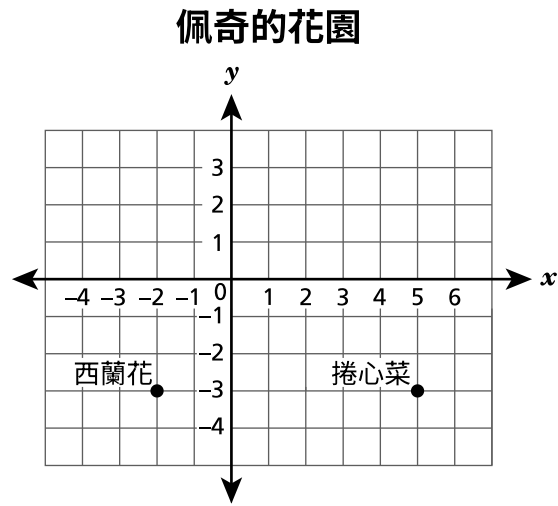
請寫出你的計算過程。

答案 _____ 英尺

繼續

答對這道題可獲得 2 個積分。

佩奇使用以下所示的座標平面表示她花園中菜地的位置。座標平面上的每個單位表示 1 英尺。



從捲心菜地到西蘭花地的最短距離是多少英尺？務必在你的答案中包含表示這兩塊菜地位置的座標。

請解釋你是如何確定自己的答案的。

45

答對這道題可獲得 2 個積分。

一份食譜要求的比例為 2 杯芝麻和 5 杯椒鹽卷餅。按照這個比例，在使用 3 杯芝麻時，需要多少杯椒鹽卷餅？

請寫出你的計算過程。

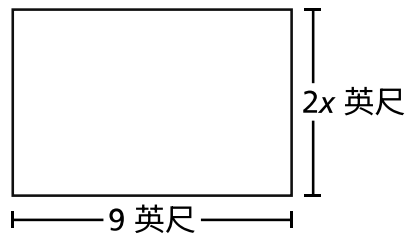
答案 _____ 杯椒鹽卷餅

繼續

46

答對這道題可獲得 3 個積分。

下圖顯示了一個類似矩形的地毯的尺寸。



這塊地毯的面積為 54 平方英尺。寫一個方程式並解答，以確定 x 的值。務必在該方程式中使用未知數 x 。

請寫出你的計算過程。

答案 $x =$ _____

一家公司花費 \$784 購買了 7 塊這樣的地毯。寫一個方程並解答，以確定每塊地毯的價格 p 。務必在該方程式中使用未知數 p 。

請寫出你的計算過程。

答案 \$ _____

停止作答

**6年級
數學測驗
第 2 卷
2025 年春季**

**Grade 6
Mathematics Test
Session 2
Spring 2025**

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2025 Mathematics Tests Map to the Standards
Grade 6

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	B	1	NGLS.Math.Content.NY-6.RP.3a	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
3	Multiple Choice	A	1	NGLS.Math.Content.NY-6.NS.6c	The Number System	The Number System	
5	Multiple Choice	B	1	NGLS.Math.Content.NY-6.EE.2c	Expressions and Equations	Expressions and Equations	
6	Multiple Choice	C	1	NGLS.Math.Content.NY-6.NS.1	The Number System	The Number System	
13	Multiple Choice	D	1	NGLS.Math.Content.NY-6.G.4	Geometry		
16	Multiple Choice	A	1	NGLS.Math.Content.NY-6.RP.3b	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
17	Multiple Choice	D	1	NGLS.Math.Content.NY-6.G.1	Geometry		
19	Multiple Choice	A	1	NGLS.Math.Content.NY-6.EE.1	Expressions and Equations	Expressions and Equations	
21	Multiple Choice	C	1	NGLS.Math.Content.NY-6.RP.3c	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
23	Multiple Choice	A	1	NGLS.Math.Content.NY-6.EE.2b	Expressions and Equations	Expressions and Equations	
27	Multiple Choice	A	1	NGLS.Math.Content.NY-6.EE.5	Expressions and Equations	Expressions and Equations	
28	Multiple Choice	D	1	NGLS.Math.Content.NY-6.RP.1	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
30	Multiple Choice	D	1	NGLS.Math.Content.NY-6.EE.2a	Expressions and Equations	Expressions and Equations	
Session 2							
31	Multiple Choice	C	1	NGLS.Math.Content.NY-6.NS.5	The Number System	The Number System	
32	Multiple Choice	A	1	NGLS.Math.Content.NY-6.RP.3d	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
33	Multiple Choice	C	1	NGLS.Math.Content.NY-5.OA.3	Expressions and Equations	Expressions and Equations	
34	Multiple Choice	C	1	NGLS.Math.Content.NY-6.G.2	Geometry		
35	Multiple Choice	D	1	NGLS.Math.Content.NY-6.RP.2	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
36	Multiple Choice	B	1	NGLS.Math.Content.NY-6.G.1	Geometry		
37	Constructed Response	n/a	1	NGLS.Math.Content.NY-6.RP.3c	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
38	Constructed Response	n/a	1	NGLS.Math.Content.NY-6.EE.8	Expressions and Equations	Expressions and Equations	
39	Constructed Response	n/a	1	NGLS.Math.Content.NY-6.NS.4	The Number System	The Number System	
40	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.EE.1	Expressions and Equations	Expressions and Equations	
41	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.EE.9	Expressions and Equations	Expressions and Equations	
42	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.G.4	Geometry		
43	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.NS.1	The Number System	The Number System	
44	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.NS.8	The Number System	The Number System	
45	Constructed Response	n/a	2	NGLS.Math.Content.NY-6.RP.3b	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
46	Constructed Response	n/a	3	NGLS.Math.Content.NY-6.EE.7	Expressions and Equations	Expressions and Equations	

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.