



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

**New York State Testing Program
Grade 7
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 7 2025

*Mathematics Test
Session 1*

Spring 2025

紐約州測驗計劃 數學考試 第 1 卷

7 年級

2025 年春季

RELEASED QUESTIONS

Developed and published under contract with the New York State Education Department by NWEA, a division of HMH, 14720 Energy Way, Apple Valley, MN 55124. Copyright © 2025 by the New York State Education Department.

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、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。

哪個表顯示了卡路里數與乳酪片數之間的比例關係？

卡路里資訊

A

乳酪片 數量	卡路 里數
2	226
4	452
5	678
8	904

卡路里資訊

C

乳酪片 數量	卡路 里數
1	106
2	212
3	318
4	424

卡路里資訊

B

乳酪片 數量	卡路 里數
2	208
4	416
5	624
8	832

卡路里資訊

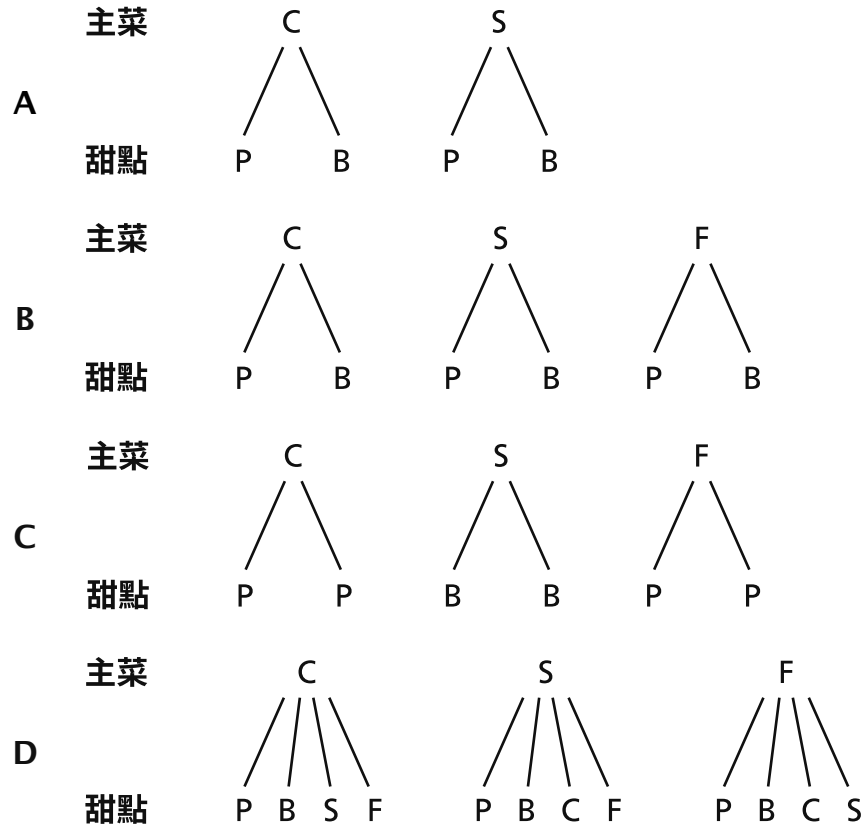
D

乳酪片 數量	卡路 里數
1	103
2	206
3	412
4	824

繼續

3

在一次活動中，每個人一頓飯可以選擇一份主菜和一份甜點。主菜選擇有雞肉 (C)、牛排 (S) 或魚 (F)。甜點的選擇是布丁 (P) 或布朗尼 (B)。哪個樹狀圖表示該活動中正在提供的所有不同的膳食組合？



繼續

下表顯示了購買的音樂會門票數量 t 與門票總費用 c 之間的比例關係。

門票費用

購買的門票數量, t	總費用, c (美元)
3	81.00
5	135.00
10	270.00

哪個方程式表示 t 與 c 之間的關係？

A $c = 27t$

B $c = 54t$

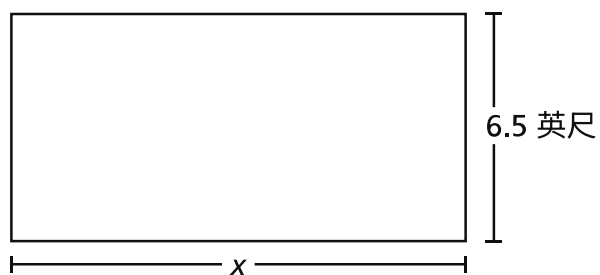
C $c = 78t$

D $c = 81t$

繼續

10

下圖顯示了一個矩形花園。花園的周長為 47 英尺。



可使用哪個方程式來確定花園的長度 x （單位為英尺）？

- A $x + 13 = 47$
- B $x + 6.5 = 47$
- C $2x + 13 = 47$
- D $2x + 6.5 = 47$

繼續

13

下面是一個不完整的方程式。

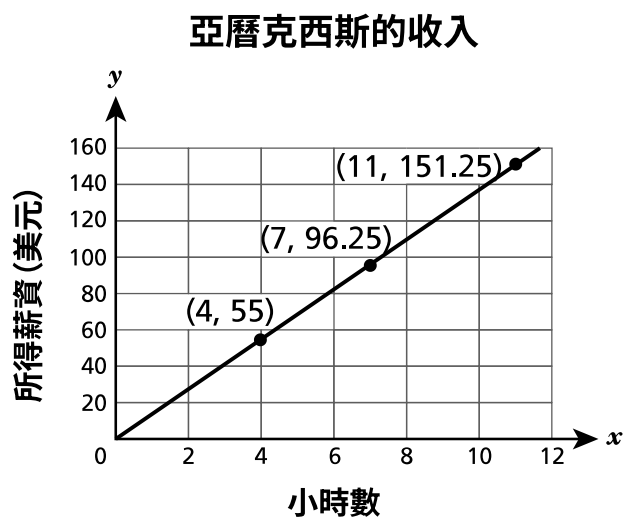
$$-6.8 + 6.4 + \underline{\hspace{1cm}} = 0$$

將哪個表達式放入空白處後可使這個方程式成立？

- A $-4.3 + 4.7$
- B $-6.5 + 6.7$
- C $-4.3 + (-4.7)$
- D $-6.5 + (-6.7)$

繼續

亞曆克西斯有一份兼職工作。下圖顯示了工作時數 x 與她賺到的薪資 y 之間的關係。



亞曆克西斯每小時賺到的薪資是多少？

- A \$0.07
- B \$1.57
- C \$10.00
- D \$13.75

17

哪個表達式等於 $(-0.3) + 1.5$?

A $(-0.3) + (-1.5)$

B $(-1.5) + (0.3)$

C $1.5 - 0.3$

D $0.3 - 1.5$

繼續

20

哪個表達式等於 $4(3x - 1.25) - 2(3.5x + 2)$ ？

A $-4x$

B $-2x$

C $5x - 1$

D $5x - 9$

21

一件毛衫的原價為 t 美元。可使用表達式 $t - 0.10t$ 來確定該毛衫的售價（單位為美元）。還可使用哪個表達式來確定該毛衫的售價（單位為美元）？

A $0.10t$

B $0.90t$

C $0.10t - t$

D $0.90t - t$

繼續

23 $(-6)\left(-1\frac{1}{2}\right)$ 的乘積是多少？

A -9

B $-6\frac{1}{2}$

C $6\frac{1}{2}$

D 9

繼續

25

一把椅子以 \$49.00 的折扣價出售。該椅子的原價為折扣價的 2 倍少 \$10.00。3 把原價椅子與 3 把折扣價椅子的總費用之差是多少？

- A \$39.00
- B \$88.00
- C \$117.00
- D \$147.00

27

一輛汽車行駛了 30 英里，使用了 $1\frac{2}{3}$ 加侖的燃油。該汽車的單位比率是多少（英里/加侖）？

- A $\frac{1}{50}$
- B $\frac{1}{18}$
- C 18
- D 50

繼續

28

一所學校以每人 \$8.95 的價格出售一部音樂劇的門票。該音樂劇有兩場演出，如下所述。

- 星期五晚上，有 152 人 參加。
- 星期六晚上，參加的人比星期五晚上多 25%。

這兩個晚上售出的門票總共賺了多少錢？

- A \$1,700.50
- B \$2,723.04
- C \$2,944.55
- D \$3,060.90

29

香農的銀行帳戶中有 \$500.00。每週，她都會從該帳戶中提取 \$40.00。如果她不存入或提取任何額外的錢，要使餘額至少保持 \$200.00，她能夠提取此相同金額的錢的最大週數是多少？

- A 5
- B 7
- C 8
- D 12

繼續

32 位於海平面上的潛艇以恒定的速率下降。下降 $1\frac{1}{3}$ 小時後，潛艇的深度為海平面以下 2,700 英尺。在此速率下，哪個值表示潛艇在總共下降 $2\frac{1}{4}$ 小時後將到達的深度（單位為英尺）？

- A 5,805.00
- B 5,400.00
- C 4,837.50
- D 4,556.25

停止作答

**7年級
數學測驗
第 1 卷
2025 年春季**

**Grade 7
Mathematics Test
Session 1
Spring 2025**

姓名：_____



Chinese (Traditional) Edition

Grade 7 2025

Mathematics Test

Session 2

Spring 2025

紐約州測驗計劃 數學考試 第 2 卷

7 年級

2025 年春季

RELEASED QUESTIONS

Developed and published under contract with the New York State Education Department by NWEA, a division of HMH, 14720 Energy Way, Apple Valley, MN 55124. Copyright © 2025 by the New York State Education Department.

第 2 卷

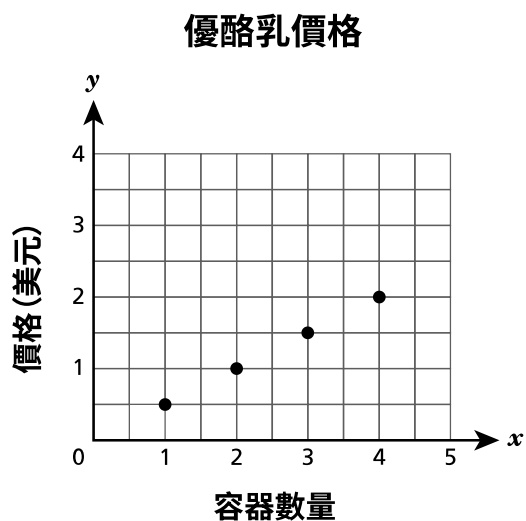


應考建議

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、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。

下圖顯示了一種優酪乳一些容器的價格。



哪個陳述描述了每個容器優酪乳的單價？

- A 單價為 \$0.50。
- B 單價為 \$1.00。
- C 單價為 \$1.50。
- D 單價為 \$2.00。

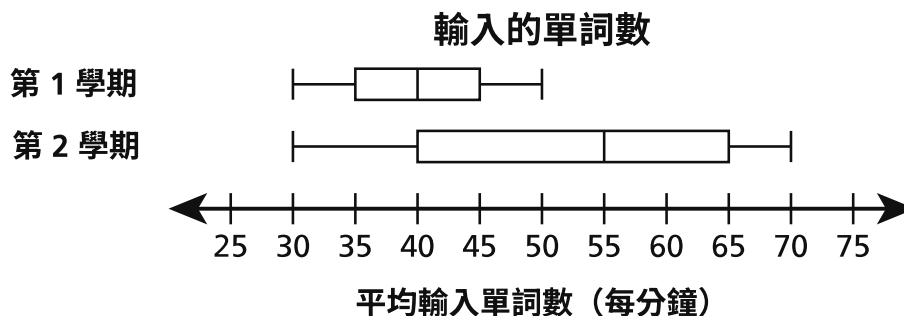
一名學生參加展會。展會的門票為 \$12.00，每張遊樂票費用為 \$5.50。該學生最多可花費 \$46.00 購買門票和遊樂票。可使用哪個不等式來確定該學生能夠購買的遊樂票數量 x ？

- A $12x + 5.5 \leq 46$
- B $5.5x + 12 \leq 46$
- C $5.5x + 12 \geq 46$
- D $12x + 5.5 \geq 46$

繼續

35

一個班級中的學生正在記錄該學年中每學期每分鐘能夠輸入的單詞數。以下箱線圖顯示了兩個學期的結果。



從第 1 學期到第 2 學期，每分鐘輸入的單詞數中位數之差是多少？

- A 5
- B 10
- C 15
- D 20

36

雅各花了 x 美元買了一部手機。一年後，該手機的價值下降了 20%。哪個表達式表示該手機降價後的價值？

- A $0.2x$
- B $0.8x$
- C $x - 0.2$
- D $x - 0.8$

繼續

37

在上午 8:00，溫度為 -7°F 。在下午 3:00，溫度已升至 8°F 。從上午 8:00 到下午 3:00 的溫度變化是多少華氏度？

- A -15
- B -1
- C 1
- D 15

38

奧黛麗正在計劃舉辦一個 30 人的派對。她想買足夠的果汁，讓每個人正好喝 2 份。

- 每瓶果汁能夠倒出 5 份量。
- 每瓶果汁售價 $\$4.89$ 。

如果奧黛麗購買的瓶裝果汁足夠供客人飲用並且果汁沒有剩餘，則需要花費的總金額將是多少？

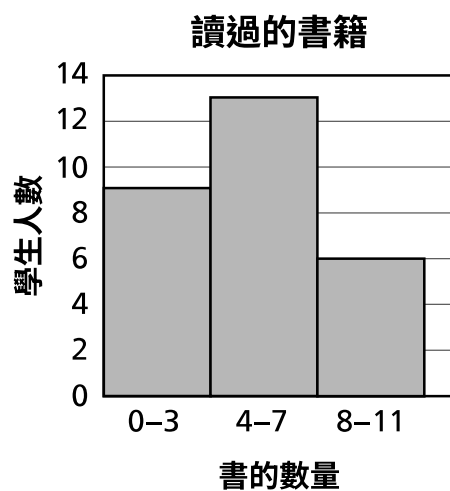
- A $\$29.34$
- B $\$48.90$
- C $\$58.68$
- D $\$73.35$

繼續

39

答對這道題可獲得 1 個積分。

以下直方圖顯示了對一個 6 年級班級中每名學生進行的關於他們暑假閱讀的書籍數量的調查結果。



根據該直方圖，有多少學生接受了調查？

答案 _____ 名學生

繼續

40

答對這道題可獲得 1 個積分。

下面顯示一個表達式。

$$\frac{0.5(4 - 6)}{0.2}$$

確定該表達式的值。

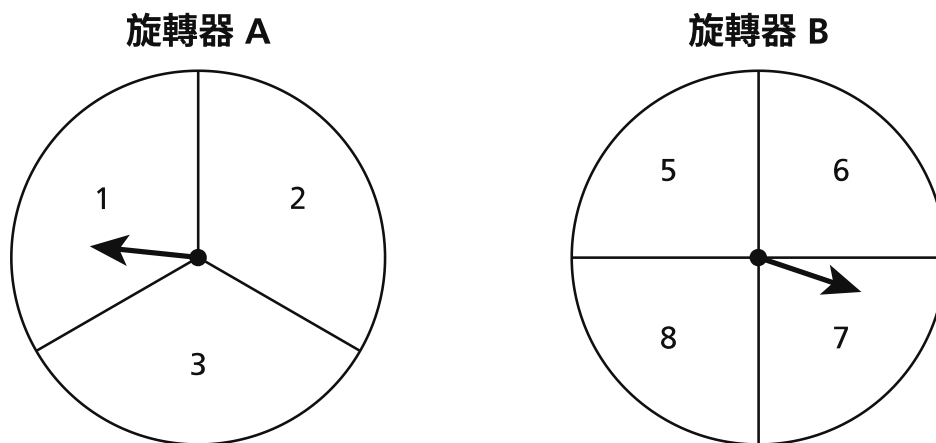
答案 _____

繼續

41

答對這道題可獲得 1 個積分。

達利斯將在兩個旋轉器上旋轉箭頭。旋轉器 A 分為三個相等的部分，旋轉器 B 分為四個相等的部分，如下所示。達利斯將把每個箭頭旋轉一次。



達利斯將箭頭旋轉後，箭頭停在哪兩個數字的乘積為奇數的概率是多少？

答案 _____

繼續

42

答對這道題可獲得 2 個積分。

迭戈、克裡斯和瑪麗在電影院各自支付了相同的費用購買了一張電影票。每人還買了 \$6.50（含稅）的小份爆米花。這 3 個朋友在電影票和爆米花上總共花費了 \$54.00。每張電影票的價格是多少？

請寫出你的計算過程。

答案 \$ _____

繼續

43

答對這道題可獲得 2 個積分。

安德里亞有一張餘額為 \$25.00 的禮品卡。她使用該禮品卡購買 \$25.00 的東西。此交易後該禮品卡的餘額會為零嗎？

請解釋你的答案。

繼續

44

答對這道題可獲得 2 個積分。

瑞恩每鍛煉 $1\frac{1}{2}$ 小時就要喝 $\frac{3}{8}$ 加侖的水。按照這個速率，瑞恩每鍛煉一小時要喝多少加侖的水？

請寫出你的計算過程。

答案 _____ 加侖

繼續

45

答對這道題可獲得 2 個積分。

下表顯示了不同數量罐裝蘇打水的價格（單位為美元）。

蘇打水價格

金屬罐的數量	價格(美元)
2	5.50
4	11.00
8	22.00
10	27.50

該價格（單位為美元）與蘇打水罐數之間是否具有比例關係？

請解釋你是如何確定自己的答案的。

繼續

46

答對這道題可獲得 2 個積分。

下面顯示一個表達式。

$$-5y + 3 - 6y + 10y - 1$$

完全簡化該表達式。

請寫出你的計算過程。

答案 _____

繼續

47

答對這道題可獲得 2 個積分。

傑佛瑞正在他臥室的牆上畫一幅矩形壁畫。他在一張紙上畫他的設計草圖，如下所述。

- 他使用了整張紙來畫他的設計。
- 該紙的長度為 8 英寸，寬度為 6 英寸。
- 比例因數為 1 英寸比 1.75 英尺。

傑佛瑞將在牆上畫的壁畫的實際面積是多少平方英尺？

請寫出你的計算過程。

答案 _____ 平方英尺

繼續

48

答對這道題可獲得 3 個積分。

一家商店對兩種類型的襯衫提供折扣。

- 原價 \$40.00 的短袖襯衫可享受 10% 的折扣
- 原價 \$50.00 的長袖襯衫可享受 25% 的折扣

如果每種類型的襯衫顧客各購買一件，他們將花多少錢（不含稅）？

請寫出你的計算過程。

答案 \$ _____

停止作答

**7年級
數學測驗
第 2 卷
2025 年春季**

**Grade 7
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 7

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)	Multiple Choice Questions	Constructed-Response Questions	
								Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
Session 1										
2	Multiple Choice	C	1	NGLS.Math.Content.NY-7.RP.2a	Ratios and Proportional Relationships	Ratios and Proportional Relationships		0.81		
3	Multiple Choice	B	1	NGLS.Math.Content.NY-7.SP.8b	Statistics and Probability			0.82		
8	Multiple Choice	A	1	NGLS.Math.Content.NY-7.RP.2c	Ratios and Proportional Relationships	Ratios and Proportional Relationships		0.81		
10	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.4a	Expressions and Equations	Expressions and Equations	NGLS.Math.Content.NY-7.EE.1	0.50		
13	Multiple Choice	A	1	NGLS.Math.Content.NY-7.NS.1b	The Number System	The Number System	NGLS.Math.Content.NY-7.NS.1a	0.74		
14	Multiple Choice	D	1	NGLS.Math.Content.NY-7.RP.2b	Ratios and Proportional Relationships	Ratios and Proportional Relationships		0.71		
17	Multiple Choice	C	1	NGLS.Math.Content.NY-7.NS.1d	The Number System	The Number System		0.69		
20	Multiple Choice	D	1	NGLS.Math.Content.NY-7.EE.1	Expressions and Equations	Expressions and Equations		0.50		
21	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.2	Expressions and Equations	Expressions and Equations		0.34		
23	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.2a	The Number System	The Number System		0.76		
25	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations		0.54		
27	Multiple Choice	C	1	NGLS.Math.Content.NY-7.RP.1	Ratios and Proportional Relationships	Ratios and Proportional Relationships		0.53		
28	Multiple Choice	D	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations		0.49		
29	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.4b	Expressions and Equations	Expressions and Equations		0.56		
32	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.3	The Number System	The Number System	NGLS.Math.Content.NY-7.RP.3	0.45		
Session 2										
33	Multiple Choice	A	1	NGLS.Math.Content.NY-7.RP.2d	Ratios and Proportional Relationships	Ratios and Proportional Relationships		0.80		
34	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.4b	Expressions and Equations	Expressions and Equations		0.63		
35	Multiple Choice	C	1	NGLS.Math.Content.NY-7.SP.3	Statistics and Probability			0.70		
36	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.2	Expressions and Equations	Expressions and Equations		0.32		
37	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.1c	The Number System	The Number System		0.67		
38	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations		0.49		
39	Constructed Response	n/a	1	NGLS.Math.Content.NY-6.SP.5a	Statistics and Probability				0.59	0.59
40	Constructed Response	n/a	1	NGLS.Math.Content.NY-7.NS.2c	The Number System	The Number System			0.70	0.70
41	Constructed Response	n/a	1	NGLS.Math.Content.NY-7.SP.8a	Statistics and Probability		NGLS.Math.Content.NY-7.SP.8b		0.21	0.21
42	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.EE.4a	Expressions and Equations	Expressions and Equations			1.28	0.64
43	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.NS.1a	The Number System	The Number System			1.58	0.79
44	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.RP.1	Ratios and Proportional Relationships	Ratios and Proportional Relationships			1.06	0.53
45	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.RP.2a	Ratios and Proportional Relationships	Ratios and Proportional Relationships			1.14	0.57
46	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.EE.1	Expressions and Equations	Expressions and Equations			1.02	0.51
47	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.G.1	Geometry				0.96	0.48
48	Constructed Response	n/a	3	NGLS.Math.Content.NY-7.RP.3	Ratios and Proportional Relationships	Ratios and Proportional Relationships			1.62	0.54

*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.