New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 7
Mathematics Test
(Chinese Simplified)

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.

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

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 (Simplified) Edition

Grade 7 2025

Mathematics Test

Session 1

Spring 2025

纽约州测试计划
数学测试
第 1 部分

7 年级

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.

第1部分

参加本次考试的提示

以下是一些可以帮助你做到最好的建议：

- 仔细阅读每道题目。慢慢来，别着急。
- 你已获得一把尺子、一个量角器、一张参考表和一个计算器，如果它们对你答题有帮助，则可在测试中使用。

2 哪个表显示了卡路里数与奶酪片数之间的比例关系？

A

卡路里信息

奶酪片数	卡路里数
2	226
4	452
5	678
8	904

C

卡路里信息

奶酪片数	卡路里数
1	106
2	212
3	318
4	424

B

卡路里信息

奶酪片数	卡路里数
2	208
4	416
5	624
8	832

D

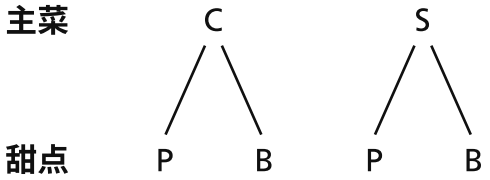
卡路里信息

奶酪片数	卡路里数
1	103
2	206
3	412
4	824

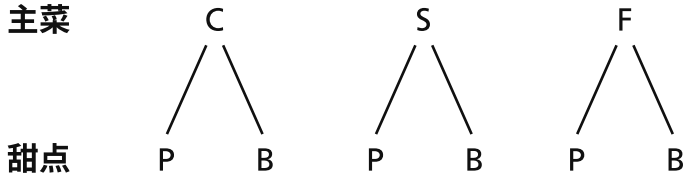
继续

3 在一次活动中，每人可以选择一道主菜和一道甜点用餐。主菜选择有鸡肉 (C)、牛排 (S) 或鱼 (F)。甜点的选择是布丁 (P) 或布朗尼 (B)。哪个树形图表示该活动中提供的所有不同膳食组合？

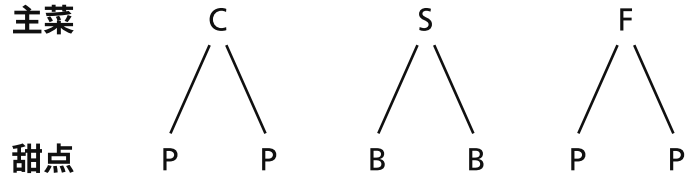
A



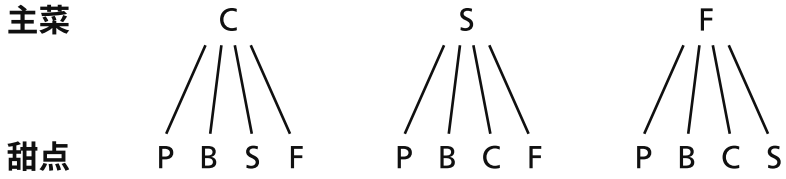
B



C



D



8 下表显示了购买的音乐会门票数量 t 与门票总费用 c 之间的比例关系。

门票费用

购买的门票数量, t	总费用, c (美元)
3	81.00
5	135.00
10	270.00

哪个方程式表示 t 与 c 之间的关系?

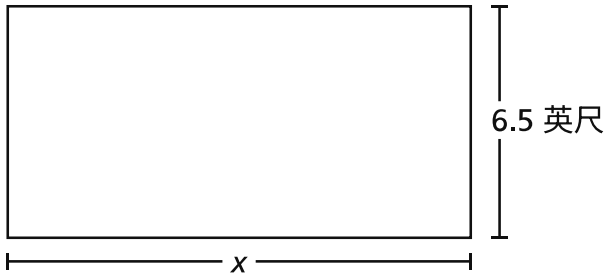
A $c = 27t$

B $c = 54t$

C $c = 78t$

D $c = 81t$

10 下图显示了一个矩形花园。花园的周长为 47 英尺。



可使用哪个方程式来求出花园的长度 x（英尺）？

A $x + 13 = 47$

B $x + 6.5 = 47$

C $2x + 13 = 47$

D $2x + 6.5 = 47$

13 下面是一个不完整的方程式。

$$-6.8 + 6.4 + \_\_\_\_\_ = 0$$

将哪个表达式放入空白处后可使这个方程式成立？

A $-4.3 + 4.7$

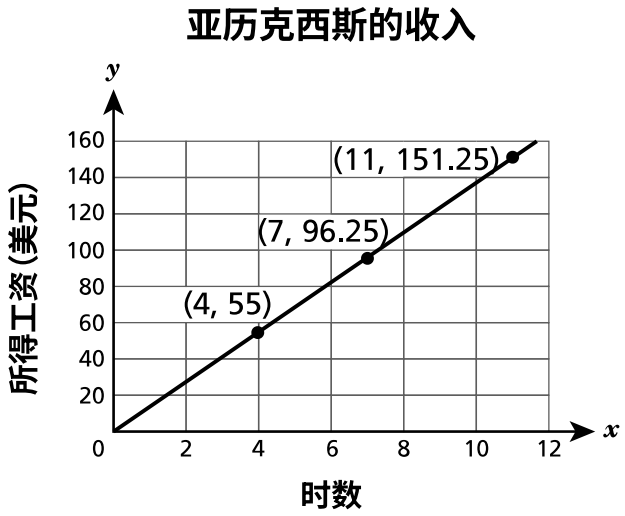
B $-6.5 + 6.7$

C $-4.3 + (-4.7)$

D $-6.5 + (-6.7)$

继续

14 亚历克西斯有一份兼职工作。下图显示了工作时数 x 与她赚到的工资 y 之间的关系。



亚历克西斯每小时赚到的工资是多少?

A $0.07

B $1.57

C $10.00

D $13.75

17 哪个表达式等于 $(-0.3) + 1.5$？

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

B $(-1.5) + (0.3)$

C $1.5 - 0.3$

D $0.3 - 1.5$

20 哪个表达式等于 $4(3x - 1.25) - 2(3.5x + 2)$？

A $-4x$

B $-2x$

C $5x - 1$

D $5x - 9$

21 一件运动衫的原价为 t 美元。可使用表达式 $t - 0.10t$ 来确定该运动衫的售价（美元）。还可使用哪个表达式来确定该运动衫的售价（美元）？

A $0.10t$

B $0.90t$

C $0.10t – t$

D $0.90t – t$

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

A -9

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

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

D 9

25 一把椅子以 $49.00 的折扣价出售。该椅子的正常价比折扣价的 2 倍少 $10.00。3 把正常价椅子与 3 把折扣价椅子的总费用之差是多少？

A $39.00

B $88.00

C $117.00

D $147.00

27 一辆汽车行驶了 30 英里，使用了 $1\frac{2}{3}$ 加仑的燃油。该汽车的单位油耗率是多少（英里/加仑）？

A $\frac{1}{50}$

B $\frac{1}{18}$

C 18

D 50

继续

28 一所学校以每人 $8.95 的价格出售一部音乐剧的门票。该音乐剧有两场演出，如下所述。

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

这两个晚上售出的门票总共赚了多少钱?

A $1,700.50

B $2,723.04

C $2,944.55

D $3,060.90

29 香农的银行账户中有 $500.00。每周，她都会从该账户中提取 $40.00。如果她不存入或提取任何额外的钱，她可以提取相同数额的钱并保持至少 $200.00 余额的最大周数是多少?

A 5

B 7

C 8

D 12

32 位于海平面上的潜艇以恒定的速度下降。下降 $1\frac{1}{3}$ 小时后，潜艇的深度为海平面以下 2,700 英尺。按照此速度，哪个值表示潜艇在总共下降 $2\frac{1}{4}$ 小时后将到达的深度（英尺）？

A 5,805.00

B 5,400.00

C 4,837.50

D 4,556.25

停止

7 年级
数学测试
第 1 部分
2025 年春季

Grade 7
Mathematics Test
Session 1
Spring 2025

姓名：_____

Chinese (Simplified) Edition

Grade 7 2025

Mathematics Test

Session 2

Spring 2025

纽约州测试计划
数学测试
第 2 部分

7 年级

2025 年春季

RELEASED QUESTIONS

第 2 部分

第 2 部分

参加本次考试的提示

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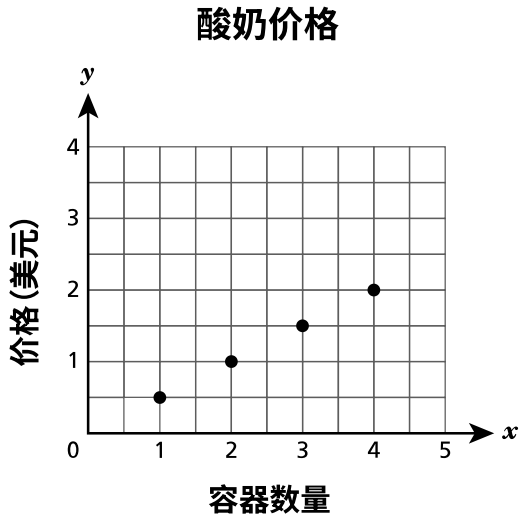
- 你已获得一把尺子、一个量角器、一张参考表和一个计算器，如果它们对你答题有帮助，则可在测试中使用。
- 如果有相关要求，回答时务必写出你的演算过程。
- 如果有相关要求，回答时务必解释你的答案。

33 下图显示了一种酸奶的若干容器的价格。



哪个陈述描述了每个容器的酸奶的单价?

A 单价为 $0.50。

B 单价为 $1.00。

C 单价为 $1.50。

D 单价为 $2.00。

34 一名学生参加游乐会。游乐场门票为 $12.00，每张游乐票价格为 $5.50。该学生最多可花费 $46.00 购买门票和游乐票。可使用哪个不等式来确定该学生能够购买的游乐票数量 x？

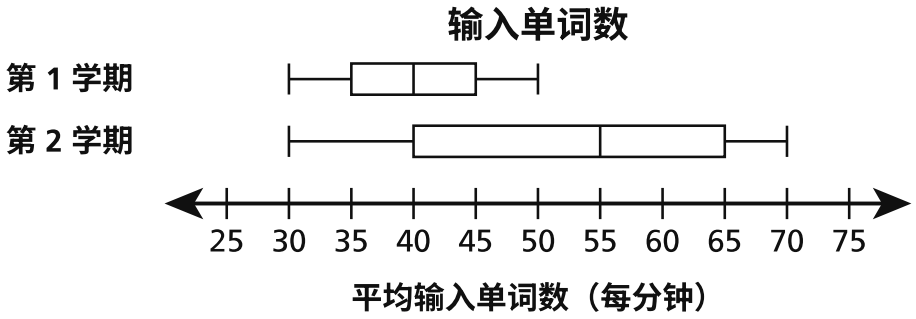
A $12x + 5.5 \leq 46$

B $5.5x + 12 \leq 46$

C $5.5x + 12 \geq 46$

D $12x + 5.5 \geq 46$

35 一个班级的学生正在记录他们在该学年中每学期每分钟能够输入的单词数。以下箱线图显示了两个学期的结果。



从第 1 学期到第 2 学期，每分钟输入单词数的中位数之差是多少?

A 5

B 10

C 15

D 20

36 雅各布花了 x 美元买了一部手机。一年后，该手机的价值下降了 20%。哪个表达式表示该手机贬值后的价值?

A $0.2x$

B $0.8x$

C $x - 0.2$

D $x - 0.8$

37 上午 8:00 的温度为 $-7°\text{F}$。下午 3:00 的温度已升至 $8°\text{F}$。从上午 8:00 到下午 3:00 的温度变化是多少华氏度?

A -15

B -1

C 1

D 15

38 奥黛丽正在计划举办一个 30 人的派对。她想买足够的果汁，让每个人正好喝 2 份。

- 每瓶果汁份量为 5 份。
- 每瓶果汁售价 $4.89。

如果奥黛丽购买的瓶装果汁足够供客人饮用并且果汁没有剩余，则需要花费的总金额将是多少?

A $29.34

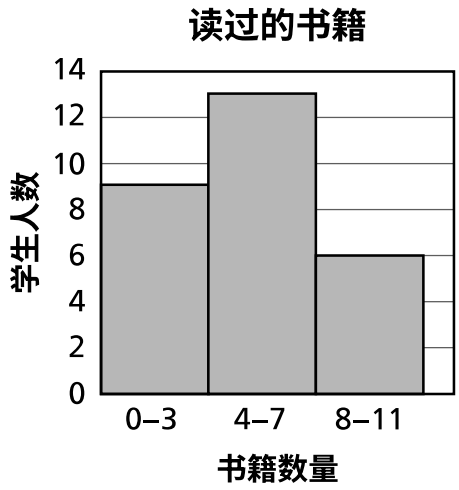
B $48.90

C $58.68

D $73.35

39 **这道题 1 分。**

以下柱状图显示了对一个 6 年级班级中每名学生在暑假阅读的书籍数量的调查结果。



根据该柱状图，有多少名学生接受了调查?

答案 _____ 名学生

40 **这道题 1 分。**

以下显示了一个表达式。

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

确定该表达式的值。

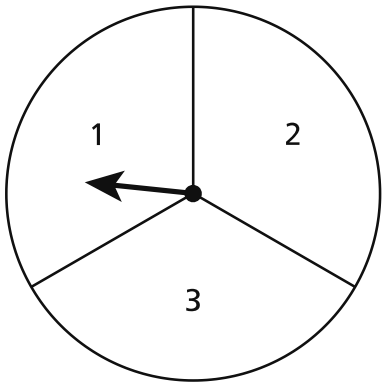
答案 _____

继续

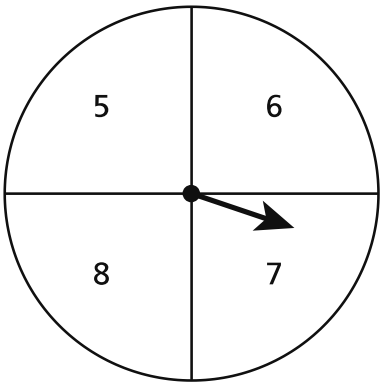
41 **这道题 1 分。**

达利斯将在两个转盘上旋转箭头。转盘 A 分为三个相等的部分，转盘 B 分为四个相等的部分，如下所示。达利斯会将每个箭头旋转一次。

转盘 A



转盘 B



达利斯将箭头旋转后，箭头停在的两个数字的乘积为奇数的概率是多少？

答案 _____

42 **这道题 2 分。**

迭戈、克里斯和玛丽每人在电影院购买了一张电影票，花费了相同金额。每人还买了 $6.50（含税）的小份爆米花。这 3 个朋友在电影票和爆米花上总共花费了 $54.00。每张电影票的价格是多少？

写出你的演算过程。

答案 $_____

继续

43 **这道题 2 分。**

安德里亚有一张余额为 $25.00 的礼品卡。她使用该礼品卡购买了 $25.00 的商品。此交易后该礼品卡的余额是否为零?

解释你的答案。

44 **这道题 2 分。**

瑞恩每锻炼 $1\frac{1}{2}$ 小时就要喝 $\frac{3}{8}$ 加仑的水。按照这个速率，瑞恩每锻炼一小时要喝多少加仑的水？

写出你的演算过程。

答案 _____ 加仑

继续

45 **这道题 2 分。**

下表显示了不同数量罐装苏打水的价格（美元）。

苏打水价格

罐数	价格（美元）
2	5.50
4	11.00
8	22.00
10	27.50

该价格（美元）与苏打水罐数之间是否具有比例关系？

解释你是如何确定答案的。

46 **这道题 2 分。**

以下显示了一个表达式。

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

将该表达式完全简化。

写出你的演算过程。

答案 _____

继续

47 **这道题 2 分。**

杰弗里正在卧室的墙上绘制一幅矩形壁画。他在一张纸上画出了设计草图，如下所述。

- 他的设计用了整张纸。
- 该纸的长度为 8 英寸，宽度为 6 英寸。
- 比例系数为 1 英寸比 1.75 英尺。

杰弗里将在墙上绘制的壁画的实际面积是多少平方英尺?

写出你的演算过程。

答案 _____ 平方英尺

48 **这道题 3 分。**

一家商店对两种类型的衬衫提供折扣。

- 原价 $40.00 的短袖衬衫可享受 10% 的折扣
- 原价 $50.00 的长袖衬衫可享受 25% 的折扣

如果顾客每种类型的衬衫各买一件，他们将花多少钱（不含税）？

写出你的演算过程。

答案 $ _____

停止

7 年级
数学测试
第 2 部分
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.