New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 6
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 6 2025

Mathematics Test

Session 1

Spring 2025

纽约州测试计划
数学测试
第 1 部分

6 年级

2025 年春季

RELEASED QUESTIONS

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、一个量角器和一张参考表，如果它们对你答题有帮助，则可在测试中使用。

1 一份食谱要求每 8 盎司面条配 2 杯奶酪。哪个表格代表了这份食谱中奶酪与面条的比例?

A

食谱

奶酪（杯）	面条（盎司）
2	8
3	9
4	10
5	11

B

食谱

奶酪（杯）	面条（盎司）
2	8
4	16
6	24
8	32

C

食谱

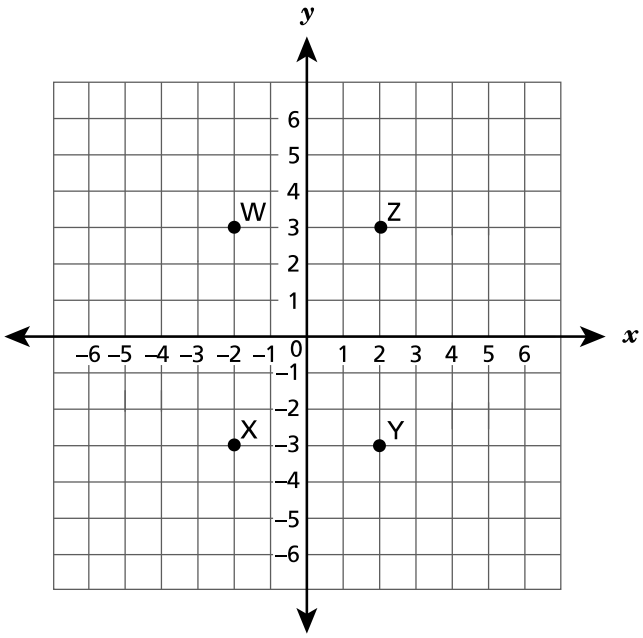
奶酪（杯）	面条（盎司）
8	2
9	3
10	4
11	5

D

食谱

奶酪（杯）	面条（盎司）
8	2
16	4
24	6
32	8

3 点 W、X、Y 和 Z 绘制在下图所示的坐标平面上。



哪个点位于 $(-2, 3)$?

A 点 W

B 点 X

C 点 Y

D 点 Z

5 当 $c = 2$ 且 $h = 3$ 时，以下所示的表达式的值是多少？

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

A 11

B 13

C 42

D 44

6 一个纸箱中有 $4\frac{1}{2}$ 杯冰淇淋。一整份冰淇淋是 $\frac{3}{4}$ 杯。该纸箱中整份冰淇淋的总数是多少？

A $3\frac{3}{4}$

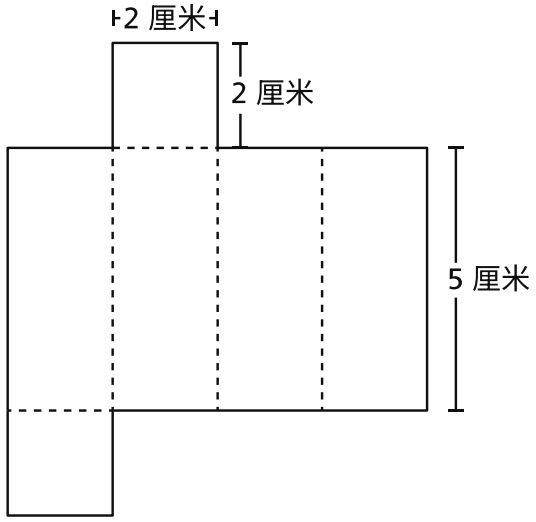
B $5\frac{1}{4}$

C 6

D 12

继续

13 下面显示了一个直角矩形棱柱的展开图。



这个棱柱的表面积是多少平方厘米?

A 20

B 34

C 40

D 48

继续

16 一个办公室有两台复印机。复印机 A 在 7 分钟内打印 350 页。复印机 B 在 3 分钟内打印 210 页。在 1 分钟内复印机 B 可比复印机 A 多打印多少页?

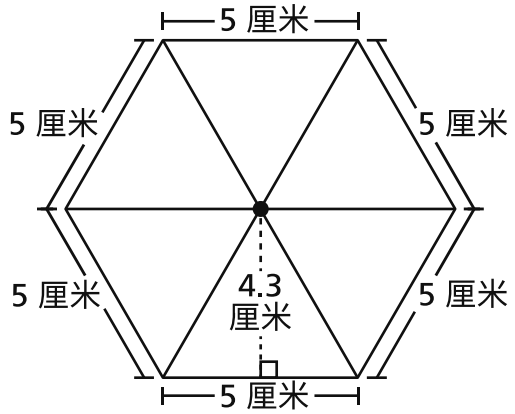
A 20

B 35

C 50

D 70

17 一个正六边形由若干个等边三角形组成，如下所示。



该正六边形的面积是多少平方厘米?

A 10.75

B 21.5

C 34.3

D 64.5

继续

19 以下表达式的值是多少?

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

A 3

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

C 4

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

21 一位老师要求 50 名六年级学生投票选出他们喜欢的爱好。下表显示了结果。

喜欢的爱好

爱好	学生人数
阅读	12
演奏乐器	11
看电影	9
参加体育运动	18

百分之多少的学生投票选择将演奏乐器或阅读作为他们喜欢的爱好?

A 12%

B 23%

C 46%

D 54%

23 表达式 $2x^3$ 中的系数是多少?

A 2

B 3

C x

D $2x$

27 哪个数字**不是**以下所示不等式的解?

$$3w \geq 12$$

A 3

B 4

C 5

D 8

继续

28 一个学校俱乐部包括来自四个年级的学生。以下列表中显示了来自每个年级的学生人数。

- 12 名 5 年级学生
- 6 名 6 年级学生
- 2 名 7 年级学生
- 8 名 8 年级学生

该俱乐部中 5 年级和 6 年级的学生总数与该俱乐部中 7 年级和 8 年级学生总数的比例是多少?

A 2 : 1

B 3 : 1

C 5 : 9

D 9 : 5

30 哪个表达式表示短语“十五与比数字 n 的两倍小五之和”？

A $15(5-2n)$

B $15(2n-5)$

C $15+(5-2n)$

D $15+(2n-5)$

停止

6 年级
数学测试
第 1 部分
2025 年春季

Grade 6
Mathematics Test
Session 1
Spring 2025

姓名：_____

Chinese (Simplified) Edition

Grade 6 2025

Mathematics Test

Session 2

Spring 2025

纽约州测试计划
数学测试
第 2 部分

6 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

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。
- 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。

31 蒂龙将 $65 存入他的银行账户。第二天他取出了 $20。哪两个整数表示蒂龙银行账户中的活动?

A -65 和 -20

B -65 和 20

C 65 和 -20

D 65 和 20

32 玛丽以 1 小时 12 英里的平均速度骑自行车。按照这个速度骑行，玛丽 1 分钟骑行多少英尺?

A 1,056

B 26,400

C 63,360

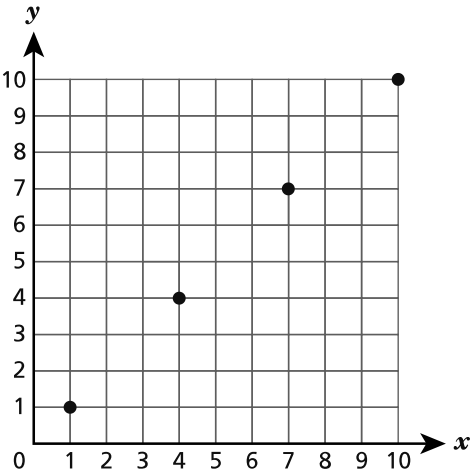
D 3,801,600

33 下面显示的两条规则用于生成几组有序对。起点是 $(1, 1)$。然后将这些有序对绘制在一个坐标平面上。

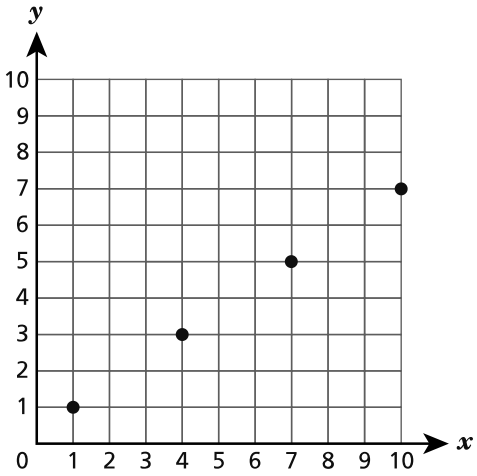
- x 坐标的规则：每个值都比前一个值大 3。
- y 坐标的规则：每个值都比前一个值大 2。

哪个图形显示了这组有序对？

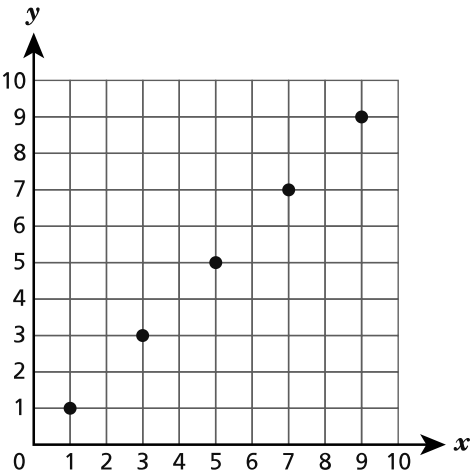
A



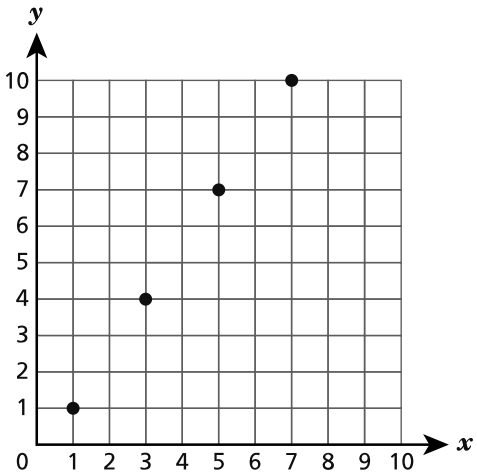
C



B



D



34 一个礼品盒的形状为直角矩形棱柱。该礼品盒长 $7\frac{3}{5}$ 厘米，宽 $5\frac{4}{5}$ 厘米，高 $2\frac{1}{2}$ 厘米。该礼品盒的体积是多少立方厘米?

A $15\frac{9}{10}$

B $70\frac{6}{25}$

C $110\frac{1}{5}$

D $155\frac{8}{50}$

35 汉娜从杂货店买了橙子和苹果。她买 5 磅橙子支付了 $6.25，买 6 磅苹果支付了 $6.90。关于这些水果，哪种说法是正确的?

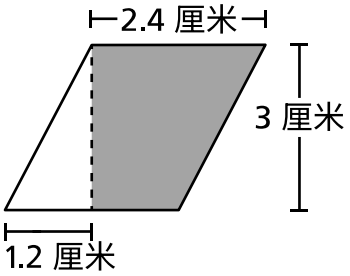
A 苹果的单价更高，为 $1.15。

B 苹果的单价更高，为 $1.25。

C 橙子的单价更高，为 $1.15。

D 橙子的单价更高，为 $1.25。

36 下图显示了一个平行四边形，其中一部分带有阴影。



该平行四边形阴影部分的面积是多少平方厘米?

A 3.6

B 5.4

C 4.32

D 8.64

37 **这道题 1 分。**

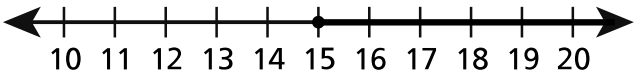
卡姆斯基先生的班上有 6 名演奏乐器的学生。这些学生占他班上学生总数的 24%。他班上的学生总数是多少?

答案 _____ 名学生

继续

38 **这道题 1 分。**

在以下所示的数轴上表示了一个不等式的解集。



使用变量 x 写一个不等式来描述该数轴上表示的解集。

答案 _____

39 **这道题 1 分。**

72 和 96 的最大公因数是多少?

答案 _____

继续

40 **这道题 2 分。**

表达式 $4\left(3+5^2\right)-6$ 的值是多少?

写出你的演算过程。

答案 _____

41 **这道题 2 分。**

一家餐厅购买了一些大块奶酪。下表显示了他们购买的奶酪块数 b 与支付的总金额 t（美元）之间的关系。

奶酪价格

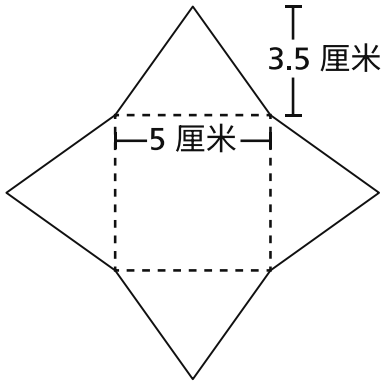
奶酪数量， b（块）	总价， t（美元）
2	112
4	224
6	336
8	448

根据该表中的数据写一个方程式，用购买的奶酪块数 b 来表示总价 t。务必在你的解释中确定自变量和因变量。

解释你的答案。

42 **这道题 2 分。**

一个正四棱锥的展开图如下图所示。



该棱锥的表面积是多少平方厘米?

写出你的演算过程。

答案 _____ 平方厘米

43 **这道题 2 分。**

一张矩形桌子的桌面宽度为 $3\frac{1}{3}$ 英尺，面积为 $21\frac{2}{3}$ 平方英尺。该桌子桌面的长度是多少英尺?

写出你的演算过程。

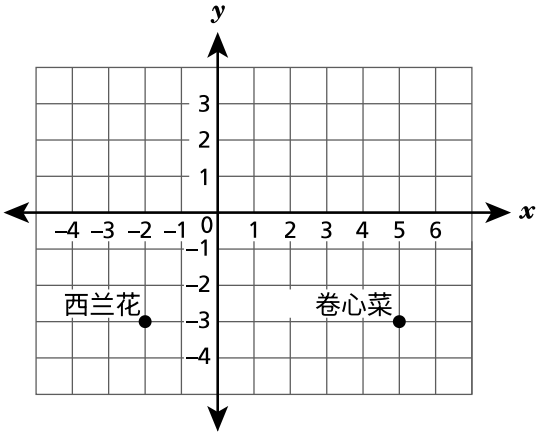
答案 _____ 英尺

继续

44 **这道题 2 分。**

佩奇使用下面所示的坐标平面表示她花园中菜地的位置。坐标平面上的每个单位表示 1 英尺。

佩奇的花园



从卷心菜地到西兰花地的最短距离是多少英尺？务必在你的答案中包含表示这两个菜地位置的坐标。

解释你是如何确定答案的。

45 **这道题 2 分。**

一份食谱要求的比例为 2 杯芝麻对 5 杯椒盐卷饼。按照这个比例，在使用 3 杯芝麻时，需要多少杯椒盐卷饼？

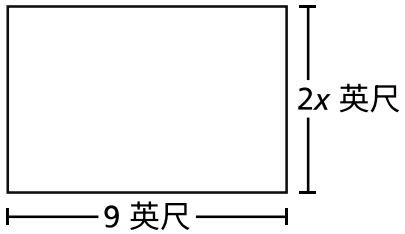
写出你的演算过程。

答案 _____ 杯椒盐卷饼

继续

46 **这道题 3 分。**

下图显示了一个形状像矩形的地毯的尺寸。



这个矩形地毯的面积为 54 平方英尺。写一个方程式并求解，以确定 x 的值。务必在该方程式中使用未知数 x。

写出你的演算过程。

答案 $x =$ _____

一家公司花费 $784 购买了 7 块这样的地毯。写一个方程并求解，以确定每块地毯的价格 p。务必在该方程式中使用未知数 p。

写出你的演算过程。

答案 $ _____

停止

6 年级
数学测试
第 2 部分
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.