New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 4
Mathematics Test
Chinese (Simplified)

Released Questions

2024

New York State administered the Mathematics Tests in May 2024 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 2024 Exams

Background

As in past years, SED is releasing large portions of the 2024 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2024, included in these released materials are at least 75 percent of the test questions that appeared on the 2024 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 http://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 4 2024

Mathematics Test

Session 1

Spring 2024

纽约州测试计划
数学测试
第 1 部分

4 年级

2024 年春季

RELEASED QUESTIONS

第 1 部分

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。
- 已为你提供了尺子和量角器，如果对你答题有帮助，则可在考试中使用。

1 卡特有 9 本漫画书。本的漫画书数量是卡特的 3 倍。本有多少本漫画书?

A 6

B 12

C 24

D 27

2 什么值可使以下所示的方程式成立?

$$\frac{3}{4} = \frac{9}{?}$$

A 3

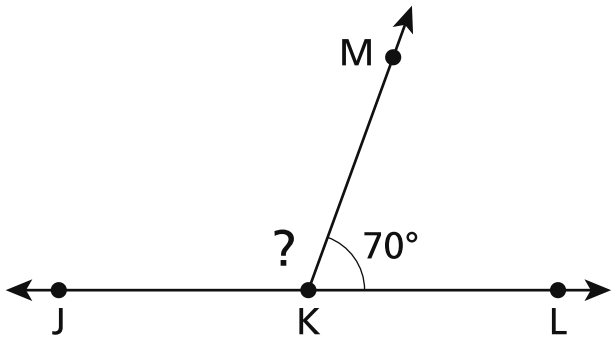
B 9

C 12

D 16

继续

7 射线 KM 将平角 JKL 分成两部分，如下所示。



哪个方程表示如何求出角 JKM 的度数?

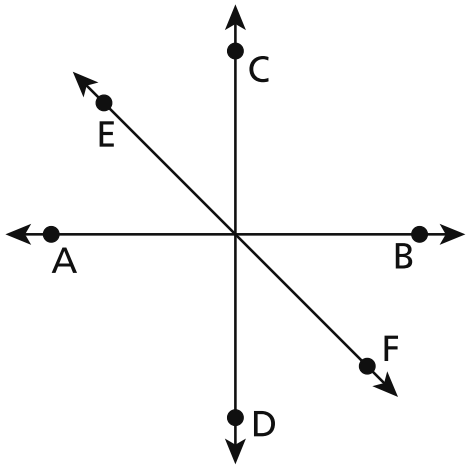
A $90 - 20 = \underline{\ ?\ }$

B $90 - 70 = \underline{\ ?\ }$

C $180 - 70 = \underline{\ ?\ }$

D $180 - 110 = \underline{\ ?\ }$

10 有关下图的哪项陈述**最有可能**是正确的?



A 直线 AB 与直线 CD 垂直。

B 直线 AB 与直线 CD 平行。

C 直线 EF 与直线 CD 垂直。

D 直线 EF 与直线 CD 平行。

继续

11 哪个分数与 $\frac{4}{12}$ 相加等于整数 1？

A $\frac{1}{12}$

B $\frac{4}{12}$

C $\frac{6}{12}$

D $\frac{8}{12}$

12 哪个数字在四舍五入到最接近的千位时为 17,000？

A 16,129

B 16,921

C 17,538

D 17,853

15 艾利森正在为一项赛跑比赛进行训练。她每天跑 $\frac{8}{10}$ 英里。哪个分数等于艾利森在 7 天内跑的英里数?

A $\frac{56}{10}$

B $\frac{15}{10}$

C $\frac{56}{70}$

D $\frac{8}{70}$

16 $102 \div 6$ 的值是多少?

A 16

B 17

C 96

D 108

22 以下所示的表达式的值是多少?

$$4\frac{1}{4} - 2\frac{2}{4}$$

A $1\frac{1}{4}$

B $1\frac{3}{4}$

C $2\frac{1}{4}$

D $2\frac{3}{4}$

23 1,000 中有多少个百?

A 1

B 10

C 100

D 1,000

24 哪个方程式**不**正确?

A $5 \times \frac{3}{4} = \frac{15}{20}$

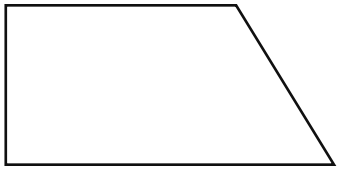
B $4 \times \frac{2}{5} = 8 \times \frac{1}{5}$

C $3 \times \frac{5}{6} = \frac{15}{6}$

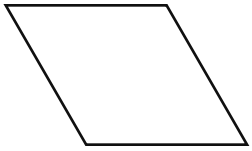
D $2 \times \frac{4}{8} = 8 \times \frac{1}{8}$

26 哪个图形看上去是矩形?

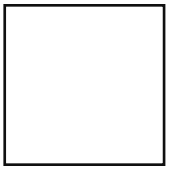
A



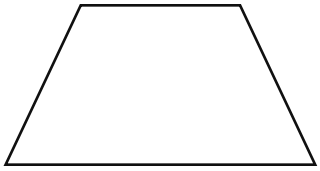
C



B



D



29 3 和 2,470 的乘积是多少?

A 6,210

B 6,213

C 7,410

D 7,413

继续

30 一个正方形地板的周长为 120 英尺。这个地板每条边的长度是多少英尺?

A 20

B 30

C 40

D 60

停止

4 年级
数学测试
第 1 部分
2024 年春季

Grade 4
Mathematics Test
Session 1
Spring 2024

姓名：_____

Chinese (Simplified) Edition

Grade 4 2024

Mathematics Test

Session 2

Spring 2024

纽约州测试计划
数学测试
第 2 部分
4 年级

2024 年春季

RELEASED QUESTIONS

第 2 部分

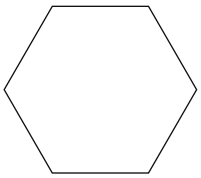
第 2 部分

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。
- 已为你提供了尺子和量角器，如果对你答题有帮助，则可在考试中使用。
- 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 以下显示了一个所有边均相等的图形。



该图形有多少条对称线?

A 1

B 2

C 5

D 6

32 有 80 名学生去动物园。每名学生乘坐公共汽车去动物园的费用为 $3。每名学生进入动物园的费用为 $2。所有这些学生乘坐公共汽车并进入动物园的总费用是多少?

A $160

B $240

C $400

D $480

33 哪个数字句型显示了正确的比较?

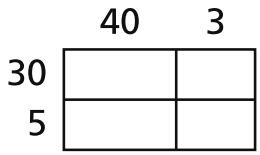
A $\frac{1}{3} > \frac{3}{4}$

B $\frac{4}{5} < \frac{1}{3}$

C $\frac{1}{3} = \frac{3}{4}$

D $\frac{3}{4} < \frac{4}{5}$

34 以下显示了一个不完整的面积模型。可使用该面积模型来表示 35 和 43 的乘积。



哪个方程式显示了如何计算完整面积模型的值?

A $1{,}200 + 200 + 90 + 15 = 1{,}505$

B $1{,}200 + 20 + 90 + 15 = 1{,}325$

C $120 + 200 + 90 + 15 = 425$

D $120 + 20 + 90 + 15 = 245$

35 哪个表达式等于 $2\frac{4}{6}$？

A $1+1+\frac{2}{3}+\frac{2}{3}$

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

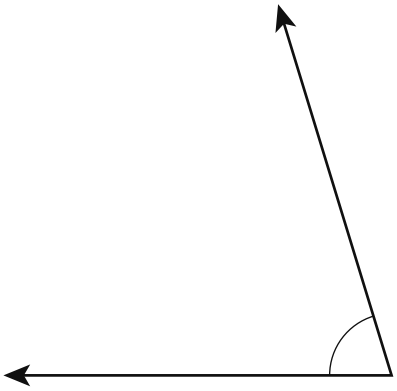
C $1+1+\frac{3}{3}+\frac{1}{3}$

D $\frac{6}{6}+\frac{6}{6}+\frac{1}{6}+\frac{1}{6}+\frac{1}{6}$

继续

36 **这道题值 1 个学分。**

下图中的角的度数是多少?



答案 _____ 度

37 **这道题值 1 个学分。**

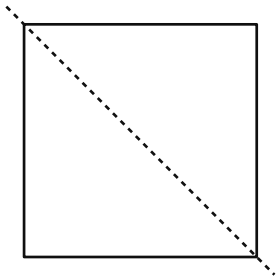
列出 21 的所有因子。

答案 _____

继续

38 **这道题值 1 个学分。**

一个正方形被分成两个相等的三角形，如下所示。



将正方形分成两个相等的三角形时，会产生哪种类型的三角形?

答案 _____ 三角形

39 **这道题值 2 个学分。**

某个足球队卖水瓶来赚钱购买新足球。该球队总共赚了 $170。如果该球队为每个足球支付 $9，那么他们用赚到的钱最多可以买多少个足球?

解释你的答案。

40 **这道题值 2 个学分。**

以下显示了两个数字。

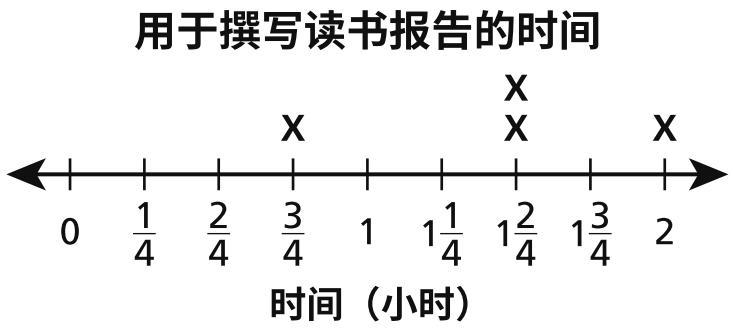
4,699 和 4,780

使用展开式写出这两个数字，然后使用 >、< 或 = 符号比较它们。务必在你的答案中包含你对位值的了解。

解释你如何知道你的答案是正确的。

41 **这道题值 2 个学分。**

以下折线图显示了杰米四天内每天花在做读书报告上的时间量。



杰米这四天花在做读书报告上的总时间量是多少小时?

写出你的演算过程。

答案 _____ 小时

继续

42 **这道题值 2 个学分。**

以下显示了两个表达式。

表达式 A：$\frac{1}{4} \times 2$

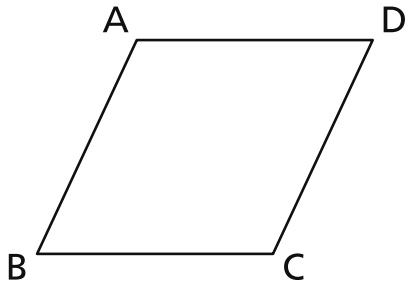
表达式 B：$\frac{1}{2} \times 5$

表达式 A 还是表达式 B 的值大于 1？ 务必在你的答案中包含每个表达式的值。

解释你如何知道你的答案是正确的。

43 **这道题值 2 个学分。**

以下显示了一个菱形。



运用你对平行、垂直或相交边的了解来描述所示菱形中的一对边。

解释你如何知道你的答案是正确的。

继续

44 **这道题值 3 个学分。**

为一场活动准备的椅子已经摆放好了。有 11 排椅子，每排 12 把椅子。活动结束时，这些椅子被收放在椅架上。如果每个椅架正好可容纳 9 把椅子，那么容纳所有这些椅子所需的椅架数量**最少**是多少?

解释你如何知道你的答案是正确的。

停止

4 年级
数学测试
第 2 部分
2024 年春季

Grade 4
Mathematics Test
Session 2
Spring 2024

THE STATE EDUCATION DEPARTMENT

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

2024 Mathematics Tests Map to the Standards

Grade 4

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	D	1	NGLS.Math.Content.NY-4.OA.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
2	Multiple Choice	C	1	NGLS.Math.Content.NY-4.NF.1	Number and Operations - Fractions	Number and Operations - Fractions	
7	Multiple Choice	C	1	NGLS.Math.Content.NY-4.MD.7	Measurement and Data		
10	Multiple Choice	A	1	NGLS.Math.Content.NY-4.G.1	Geometry		
11	Multiple Choice	D	1	NGLS.Math.Content.NY-4.NF.3a	Number and Operations - Fractions	Number and Operations - Fractions	
12	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NBT.3	Number and Operations in Base Ten	Number and Operations in Base Ten	
15	Multiple Choice	A	1	NGLS.Math.Content.NY-4.NF.4c	Number and Operations - Fractions	Number and Operations - Fractions	
16	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NBT.6	Number and Operations in Base Ten	Number and Operations in Base Ten	
22	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NF.3c	Number and Operations - Fractions	Number and Operations - Fractions	
23	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NBT.1	Number and Operations in Base Ten	Number and Operations in Base Ten	
24	Multiple Choice	A	1	NGLS.Math.Content.NY-4.NF.4b	Number and Operations - Fractions	Number and Operations - Fractions	
26	Multiple Choice	B	1	NGLS.Math.Content.NY-4.G.2c	Geometry		
29	Multiple Choice	C	1	NGLS.Math.Content.NY-4.NBT.5	Number and Operations in Base Ten	Number and Operations in Base Ten	
30	Multiple Choice	B	1	NGLS.Math.Content.NY-4.MD.3	Measurement and Data		
Session 2							
31	Multiple Choice	D	1	NGLS.Math.Content.NY-4.G.3	Geometry		
32	Multiple Choice	C	1	NGLS.Math.Content.NY-4.OA.3a	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
33	Multiple Choice	D	1	NGLS.Math.Content.NY-4.NF.2	Number and Operations - Fractions	Number and Operations - Fractions	
34	Multiple Choice	A	1	NGLS.Math.Content.NY-4.NBT.5	Number and Operations in Base Ten	Number and Operations in Base Ten	
35	Multiple Choice	B	1	NGLS.Math.Content.NY-4.NF.3b	Number and Operations - Fractions	Number and Operations - Fractions	
36	Constructed Response	n/a	1	NGLS.Math.Content.NY-4.MD.6	Measurement and Data		
37	Constructed Response	n/a	1	NGLS.Math.Content.NY-4.OA.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
38	Constructed Response	n/a	1	NGLS.Math.Content.NY-4.G.2a	Geometry		
39	Constructed Response	n/a	2	NGLS.Math.Content.NY-4.NBT.6	Number and Operations in Base Ten	Number and Operations in Base Ten	
40	Constructed Response	n/a	2	NGLS.Math.Content.NY-4.NBT.2b	Number and Operations in Base Ten	Number and Operations in Base Ten	NGLS.Math.Content.NY-4.NBT.2a
41	Constructed Response	n/a	2	NGLS.Math.Content.NY-4.MD.4	Measurement and Data		
42	Constructed Response	n/a	2	NGLS.Math.Content.NY-4.NF.4a	Number and Operations - Fractions	Number and Operations - Fractions	
43	Constructed Response	n/a	2	NGLS.Math.Content.NY-4.G.1	Geometry		
44	Constructed Response	n/a	3	NGLS.Math.Content.NY-4.OA.3b	Operations and Algebraic Thinking	Operations and Algebraic Thinking	NGLS.Math.Content.NY-4.OA.3a

*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.