New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

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

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 (Traditional) Edition

Grade 4 2024

Mathematics Test

Session 1

Spring 2024

紐約州測驗計劃
數學考試
第 1 卷

4年級

2024 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 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。
- 已向你提供了一把尺子和一個量角器，如果對你答題有幫助，你可以在測試中使用。

1 卡特有 9 本漫畫書。本的漫畫書數量是卡特的 3 倍。本有多少本漫畫書？

A 6

B 12

C 24

D 27

2 請問哪個數值可以使下列所示方程式成立？

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

A 3

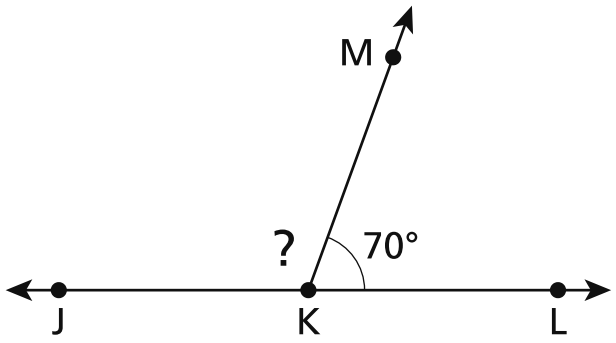
B 9

C 12

D 16

繼續

7 射線 KM 將平角 JKL 分成了兩部分，如下所示。



哪個方程表示確定角 JKM 測量值（單位為度）的方式？

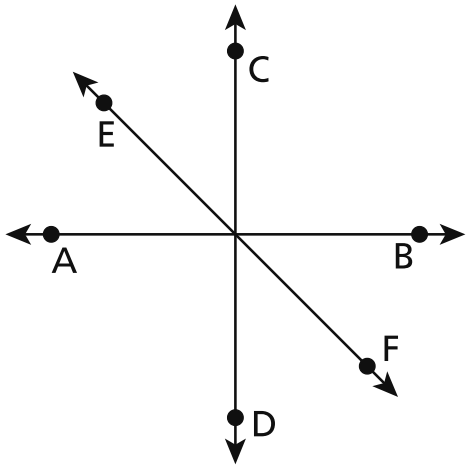
A $90 - 20 = \underline{\ ?\ }$

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

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

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

10 有關下圖的哪項陳述**最有可能**是正確的？



A 直線 AB 垂直於直線 CD。

B 直線 AB 平行於直線 CD。

C 直線 EF 垂直於直線 CD。

D 直線 EF 平行於直線 CD。

繼續

11 可將哪個分數與 $\frac{4}{12}$ 相加等於整數 1？

A $\frac{1}{12}$

B $\frac{4}{12}$

C $\frac{6}{12}$

D $\frac{8}{12}$

12 哪個數字在四捨五入到最接近的千位時為 17,000？

A 16,129

B 16,921

C 17,538

D 17,853

15 艾利森正在為一項賽跑比賽進行訓練。她每天跑 $\frac{8}{10}$ 英里。哪個分數等於艾利森在 7 天內跑的英里數？

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 請問以下所示運算式的值是多少？

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

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

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

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

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

23 1,000 中有多少個百？

A 1

B 10

C 100

D 1,000

24 哪個方程式**不**正確？

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

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

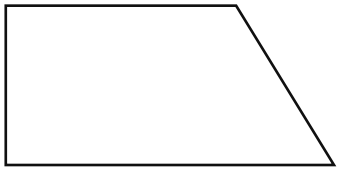
C $3 \times \frac{5}{6} = \frac{15}{6}$

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

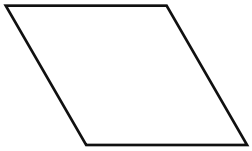
繼續

26 哪個圖形看上去是矩形？

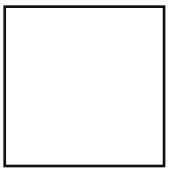
A



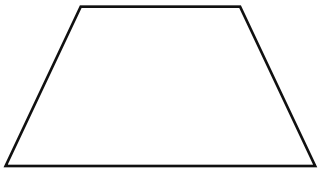
C



B



D



29 3 和 2,470 的乘積是多少？

A 6,210

B 6,213

C 7,410

D 7,413

繼續

30 一塊正方形地板的周長是 120 英尺。這個地板每條邊的長度是多少英尺？

A 20

B 30

C 40

D 60

停止作答

4年級
數學測驗
第 1 卷
2024 年春季

Grade 4
Mathematics Test
Session 1
Spring 2024

姓名：_____

Chinese (Traditional) Edition

Grade 4 2024
Mathematics Test
Session 2
Spring 2024

紐約州測驗計劃
數學考試
第 2 卷

4年級

2024 年春季

RELEASED QUESTIONS

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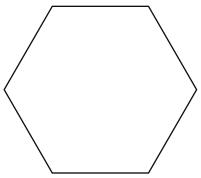
第 2 卷

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。
- 已向你提供了一把尺子和一個量角器，如果對你答題有幫助，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 以下顯示了一個所有邊均相等的圖形。



該圖形有多少條對稱線？

A 1

B 2

C 5

D 6

32 有 80 名學生去動物園。每名學生乘坐公共汽車去動物園的費用為 $3。每名學生進入動物園的費用為 $2。所有這些學生乘坐公共汽車並進入動物園的總費用是多少？

A $160

B $240

C $400

D $480

繼續

33 哪個數字語句顯示了正確的比較？

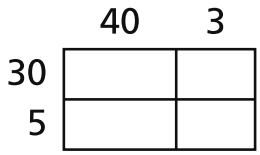
A $\frac{1}{3} > \frac{3}{4}$

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

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

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

34 以下顯示了一個不完整的面積模型。可使用該面積模型來表示 35 和 43 的乘積。



哪個方程式顯示了如何計算完整面積模型的值？

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 哪個運算式等於 $2\frac{4}{6}$？

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

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

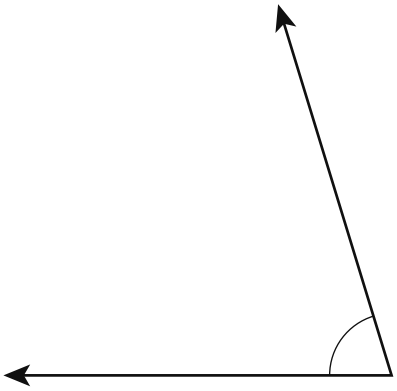
C $1+1+\frac{3}{3}+\frac{1}{3}$

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

繼續

36 **答對這道題可獲得 1 個積分。**

以下所示的角是多少度？



答案 _____ 度

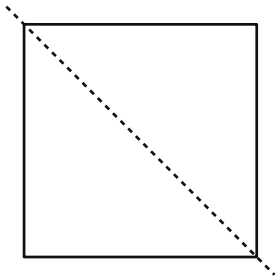
37 **答對這道題可獲得 1 個積分。**

列出 21 的所有因數。

答案 _____

38 **答對這道題可獲得 1 個積分。**

一個正方形被分成兩個相等的三角形，如下所示。



當正方形被分成兩個相等的三角形時，會建立什麼類型的三角形？

答案 _____ 三角形

39 **答對這道題可獲得 2 個積分。**

某個足球隊賣水瓶來賺錢購買新足球。該球隊總共賺了 $170。如果該球隊為每個足球支付 $9，那麼他們用賺到的錢最多可以買多少個足球？

請解釋你的答案。

繼續

40 **答對這道題可獲得 2 個積分。**

以下顯示了兩個數字。

4,699 和 4,780

使用展開式寫出這兩個數字，然後使用 >、< 或 = 符號比較它們。務必在你的答案中包含你對位值的瞭解。

請解釋你如何確認你的答案正確。

41 **答對這道題可獲得 2 個積分。**

以下線圖顯示了傑米四天內每天花在做讀書報告上的時間量。

傑米這四天花在做讀書報告上的總時間量是多少小時？

請寫出你的計算過程。

答案 _____ 小時

繼續

42 **答對這道題可獲得 2 個積分。**

以下顯示了兩個運算式。

表達式 A： $\frac{1}{4} \times 2$

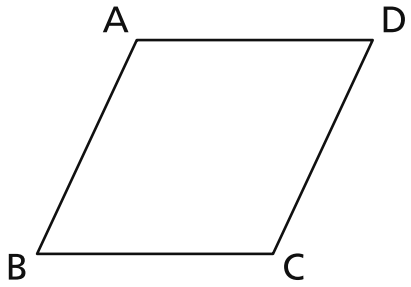
表達式 B： $\frac{1}{2} \times 5$

運算式 A 還是運算式 B 的值大於 1？務必在你的答案中包含每個運算式的值。

請解釋你如何確認你的答案正確。

43 **答對這道題可獲得 2 個積分。**

以下顯示了一個菱形。



運用你對平行、垂直或相交邊的瞭解來描述所示菱形中的一對邊。

請解釋你如何確認你的答案正確。

繼續

44 **答對這道題可獲得 3 個積分。**

為活動準備的椅子已經擺放好了。有 11 排椅子，每排 12 把椅子。活動結束時，這些椅子被收放在椅架上。如果每個椅架正好可容納 9 把椅子，那麼容納所有這些椅子所需的椅架數量**最少**是多少？

請解釋你如何確認你的答案正確。

停止作答

4年級
數學測驗
第 2 卷
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.