



Our Students. Their Moment.

**New York State Testing Program
Grade 3 Common Core
Mathematics Test
(Chinese)**

Released Questions

June 2018

New York State administered the Mathematics Tests in May 2018 and is now 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 2018 Exams

Background

In 2013, New York State began administering tests designed to assess student performance in accordance with the instructional shifts and rigor demanded by the new New York State P-12 Learning Standards in Mathematics. To help in this transition to new assessments, the New York State Education Department (SED) has been releasing an increasing number of test questions from the tests that were administered to students across the State in the spring. This year, SED is again releasing large portions of the 2018 NYS Grades 3-8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2018, included in these released materials are at least 75 percent of the test questions that appeared on the 2018 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 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.

Short-Response Questions

Short-response questions require students to complete tasks and show their work. Like multiple-choice questions, short-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 of the standards.

Extended-Response Questions

Extended-response questions ask students to show their work in completing two or more tasks or a more extensive problem. Extended-response questions allow students to show their understanding of mathematical procedures, conceptual understanding, and application. Extended-response questions may also assess student reasoning and the ability to critique the arguments of others.

The scoring rubric for short and extended constructed-response questions can be found in the grade-level Educator Guides at <https://www.engageny.org/resource/test-guides-english-language-arts-and-mathematics>.

New York State P-12 Learning Standards Alignment

The alignment(s) to the New York State P-12 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-point and three-point 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 future valid and reliable tests, some content must remain secure for possible use on future exams. As such, 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 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. Specific criteria for writing test questions, as well as additional assessment information, are available at <http://www.engageny.org/common-core-assessments>.

姓名：_____



Chinese Edition
Grade 3 2018
Mathematics Test
Session 1
May 1–3, 2018

紐約州考試計劃 數學考試 第 1 卷

3 年級

2018 年 5 月 1 至 3 日

Released Questions

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第 1 卷



考試建議

以下建議可協助你獲得好成績：

- 在作出選擇之前，請仔細閱讀每一試題，好好思考後再作答。
- 本次考試提供一把尺子讓你使用。考試中如有需要使用，可以使用尺子。

1

請問哪個表達式是 8×6 的另一種表示方式？

A $(2 + 4) + 6$

B $(2 + 4) \times 6$

C $(2 \times 4) + 6$

D $(2 \times 4) \times 6$

2

從芝加哥到紐約市的距離為 794 英里。794 四捨五入到最接近的百位數等於多少？

A 700

B 794

C 800

D 894

3

哪個數字可以使以下方程式成立？

$$4 = \underline{\quad ? \quad} \div 7$$

A 11

B 21

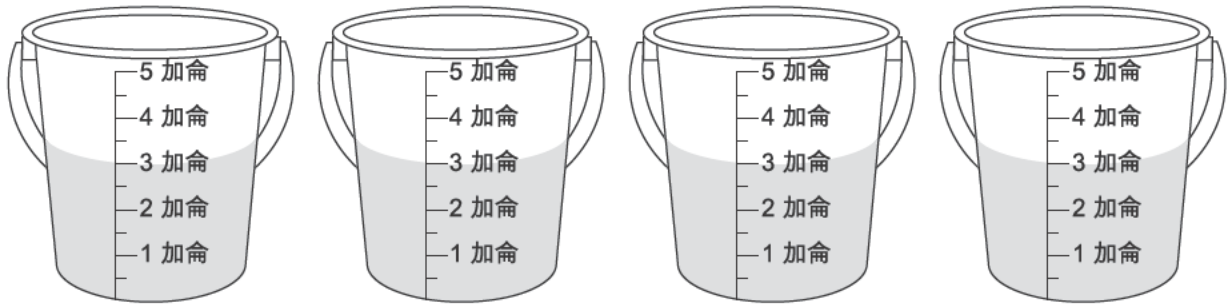
C 28

D 32

繼續

6

三年級有個班要洗車。他們在每個桶中放入了相同數量的水，如下所示。



請問哪個表達式可用來計算所有水桶中一共有多少加侖水？

- A 4×3
- B 5×3
- C 4×4
- D 5×4

7

一個公告欄可用 30 張正方形的紙完全覆蓋，沒有任何空隙或重疊。如果每張紙的邊長為 1 英尺，請問該公告欄的總面積是多少？

- A 1 英尺
- B 30 英尺
- C 1 平方英尺
- D 30 平方英尺

繼續

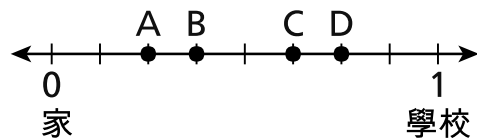
17

喬和麥克跑步的距離相同。喬跑完的時間比麥克早 4 分鐘。如果麥克在下午 4:02 跑完，那麼喬在什麼時間跑完？

- A 下午 3:58
- B 下午 4:06
- C 下午 8:02
- D 下午 12:02

18

連姆家與學校的準確距離為 1 英里，如以下數軸中所示。

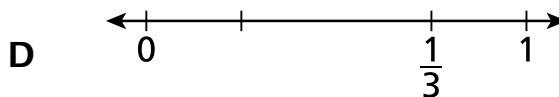
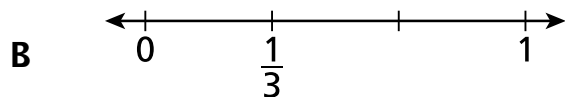
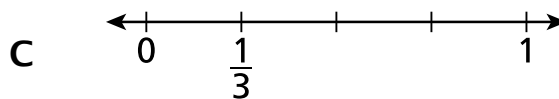
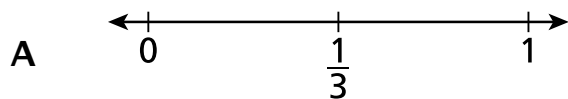


連姆在離家 $\frac{3}{8}$ 英里的商店裡買了一份零食。請問數軸上的哪個點表示商店的位置？

- A 點 A
- B 點 B
- C 點 C
- D 點 D

繼續

- 22 請問以下哪個數軸能夠正確地表示分數 $\frac{1}{3}$?



- 23 某家商店有 8 個魚缸，每個魚缸有 40 升水。請問所有魚缸中共有多少升水?

- A 5
- B 48
- C 280
- D 320

- 24 上個星期，保羅每天吃 2 塊餅乾，共吃了 5 天。這個星期，他每天吃 2 塊餅乾，共吃了 4 天。請問哪個表達式可用來表示保羅在這兩個星期所吃的餅乾總數?

- A $2 \times (5 \times 4)$
- B $2 \times (5 + 4)$
- C $(2 \times 5) \times (2 \times 4)$
- D $(2 + 5) \times (2 + 4)$

繼續

凱和朱莉塔的花園大小、形狀相同。

- 凱用花園的 $\frac{1}{6}$ 來種花。
- 朱莉塔用花園的 $\frac{1}{3}$ 來種花。

請問以下哪個陳述能夠正確地比較凱和朱莉塔在花園中的種花部分？

- A** $\frac{1}{6} > \frac{1}{3}$
- B** $\frac{1}{6} < \frac{1}{3}$
- C** $\frac{1}{3} = \frac{1}{6}$
- D** $\frac{1}{3} + \frac{1}{6}$

停止作答

3 年級

2018

數學考試

第 1 卷

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Grade 3

2018

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Session 1

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Chinese Edition
Grade 3 2018
Mathematics Test
Session 2
May 1–3, 2018

紐約州考試計劃 數學考試 第 2 卷


3 年級

2018 年 5 月 1 至 3 日

Released Questions

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第 2 卷



考試建議

以下建議可協助你獲得好成績：

- 在作出選擇或回答問題之前，請仔細閱讀每一試題，好好思考後再作答。
- 本次考試提供一把尺子讓你使用。考試中如有需要使用，可以使用尺子。
- 如果有相關要求，請寫出你的計算過程。

26

哪個數字可以使以下兩個方程式成立？

$$6 \times \underline{\quad ? \quad} = 48$$

$$48 \div 6 = \underline{\quad ? \quad}$$

- A** 7
- B** 8
- C** 42
- D** 54

27

一位教師向櫃子中放入 5 包牛皮紙。每包有 80 張紙。請問該教師一共向櫃子中放入了多少張牛皮紙？

- A** 40
- B** 85
- C** 400
- D** 450

繼續

28

傑米有一個小號容器，準確容納 $\frac{1}{4}$ 杯狗糧。要讓狗準確得到 $\frac{1}{2}$ 杯狗糧，傑米應該向容器中放多少次狗糧，並倒入狗的碗中？

A $\frac{1}{4}$

B $\frac{1}{2}$

C 2

D 4

29

以下哪種情況可使用表達式 $21 \div 3$ 求解？

A 有 3 組襯衫，每組有 21 件襯衫時計算襯衫的數量

B 掛衣架上再掛 21 件連衣裙（如果原掛衣架上有 3 件連衣裙）時計算連衣裙的數量

C 21 件夾克售出 3 件時，計算剩餘的夾克數量

D 將總共 21 件短裙平均放到 3 個掛衣架上，計算每個掛衣架上的短裙數量

繼續

30

下面顯示了一種數字模式。

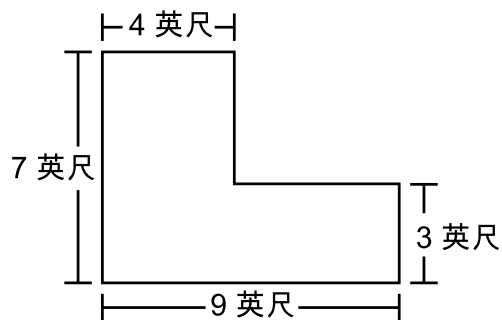
5, 9, 13, 17, 21, 25, 29

請問該模式的規律是什麼？

- A 從 0 開始。每次加 4 得到下一個數字。
- B 從 0 開始。每次加 5 得到下一個數字。
- C 從 5 開始。每次加 4 得到下一個數字。
- D 從 5 開始。每次加 5 得到下一個數字。

31

辛迪的花園形狀如下所示。



請問辛迪的花園面積是多少平方英尺？

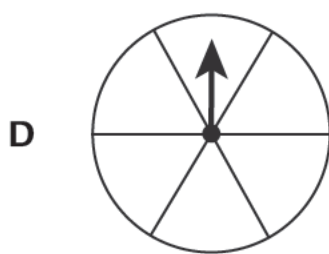
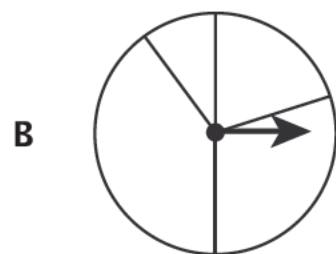
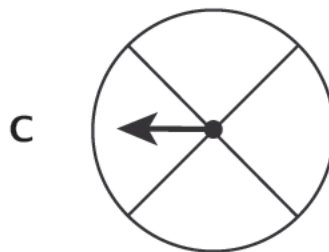
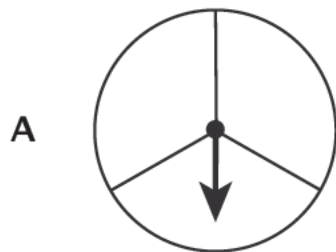
- A 23
- B 32
- C 43
- D 47

繼續

32

迪亞茲家人玩轉盤遊戲。轉盤的形狀為圓形。轉盤的每個格子占整個圓形的 $\frac{1}{4}$ 。請問

以下哪張圖片顯示的是迪亞茲家人使用的轉盤？



33

哪個分數等於 4？

A $\frac{1}{4}$

B $\frac{8}{4}$

C $\frac{4}{4}$

D $\frac{4}{1}$

繼續

34

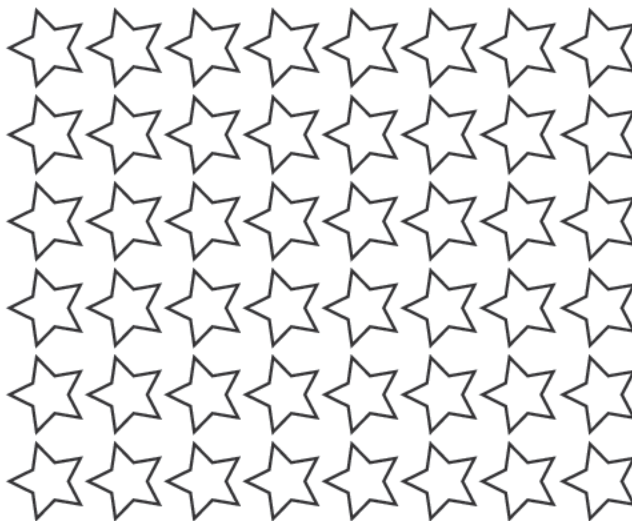
貝絲下午 4:30 在圖書館與朋友見面。她從家走到圖書館用了 24 分鐘。請問貝絲幾點從家出發，才能在下午 4:30 準時到達圖書館？

請寫出你的計算過程。

答案 下午 _____

繼續

伊桑繪製了以下陣列來表示 6×7 。



請問伊桑的模型表示的是 6×7 的乘積嗎？請解釋為什麼是或為什麼不是。

答案

兩位教師分別為聚會購買披薩。所有披薩的大小都相同。

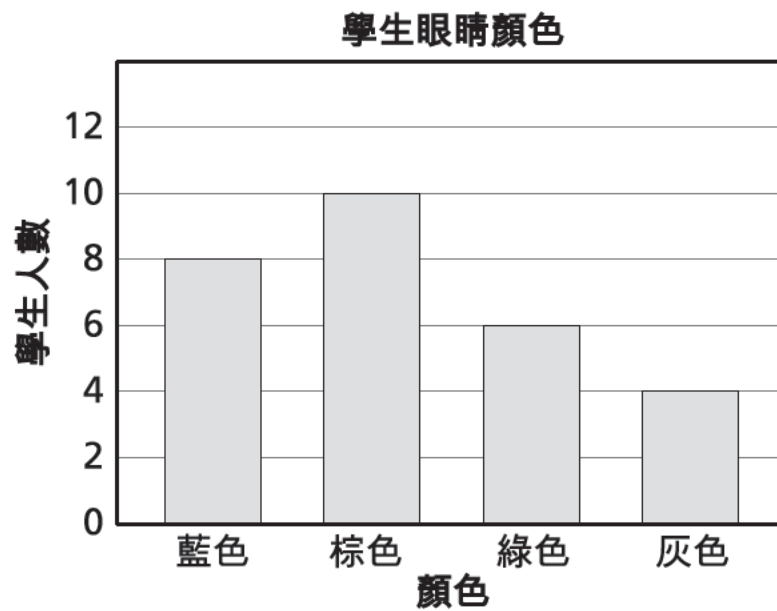
- A 教師的披薩被切成 6 等份。
- B 教師的披薩被切成 8 等份。

請問哪位教師切出的每塊披薩更大？請使用你所瞭解的分數知識來解釋你的答案。

答案

繼續

以下條形顯示三年級學生收集的班上學生眼睛顏色的資訊。



請問綠色眼睛的學生數量 比藍色眼睛和棕色眼睛的學生總數少多少？

請寫出你的計算過程。

答案 少_____名學生

38

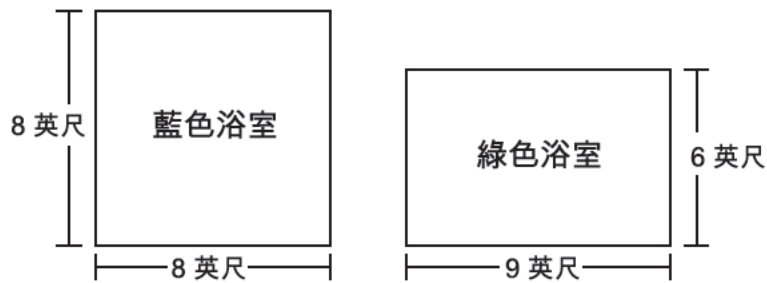
某位網球教練購買了 8 罐網球。每罐有 3 個網球。所有網球要平分給 6 名隊員。請問每名隊員能得到多少個網球？

請寫出你的計算過程。

答案 _____ 個網球

繼續

貝絲家裡兩間浴室的地板大小如下所示。



貝絲說綠色浴室的地板面積大於藍色浴室的地板面積。請問貝絲說得對嗎？為什麼對或者為什麼不對？

請解釋你的答案。

愛德文用 4 卷綠色緞帶和 8 卷紫色緞帶來完成某個項目。

- 每卷綠色緞帶的長度為 90 英尺。
- 每卷紫色緞帶的長度為 60 英尺。

請問愛德文使用的綠色緞帶總長與紫色緞帶總長之間的差是多少英尺？

請寫出你的計算過程。

答案 _____ 英尺

停止作答

3 年級

2018

數學考試

第 2 卷

2018 年 5 月 1 至 3 日

Grade 3

2018

Mathematics Test

Session 2

May 1–3, 2018

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2018 Mathematics Tests Map to the Standards
Grade 3 Released Questions on EngageNY

Question	Type	Key	Points	Standard	Cluster	Subscore
Session 1						
1	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking
2	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.1	Numbers and Operations in Base Ten	
3	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking
6	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking
7	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data	Measurement and Data
17	Multiple Choice	A	1	CCSS.Math.Content.3.MD.A.1	Measurement and Data	Measurement and Data
18	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations— Fractions	Number and Operations— Fractions
22	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2a	Number and Operations— Fractions	Number and Operations— Fractions
23	Multiple Choice	D	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data	Measurement and Data
24	Multiple Choice	B	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking
25	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3d	Number and Operations— Fractions	Number and Operations— Fractions
Session 2						
26	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking
27	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.3	Numbers and Operations in Base Ten	
28	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.3a	Number and Operations— Fractions	Number and Operations— Fractions
29	Multiple Choice	D	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking
30	Multiple Choice	C	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking	Operations and Algebraic Thinking
31	Multiple Choice	C	1	CCSS.Math.Content.3.MD.C.7d	Measurement and Data	Measurement and Data
32	Multiple Choice	C	1	CCSS.Math.Content.3.G.A.2	Geometry	
33	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3c	Number and Operations— Fractions	Number and Operations— Fractions
34	Constructed Response		2	CCSS.Math.Content.3.MD.A.1	Measurement and Data	Measurement and Data
35	Constructed Response		2	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking
36	Constructed Response		2	CCSS.Math.Content.3.NF.A.1	Number and Operations— Fractions	Number and Operations— Fractions
37	Constructed Response		2	CCSS.Math.Content.3.MD.B.3	Measurement and Data	Measurement and Data
38	Constructed Response		2	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking
39	Constructed Response		2	CCSS.Math.Content.3.MD.C.7b	Measurement and Data	Measurement and Data
40	Constructed Response		3	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking	Operations and Algebraic Thinking

*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.