New York State
EDUCATION DEPARTMENT
Knowledge ❯ Skill ❯ Opportunity

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

Released Questions

2021

New York State administered the Mathematics Tests in May 2021 and is now making the questions from Session 1 of these tests available for review and use. Only Session 1 was required in 2021.

New York State Testing Program
Grades 3–8 Mathematics

Released Questions from 2021 Tests

Background

In 2013, New York State (NYS) 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 (NYSED) 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 2021 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

In February 2021, with the ongoing COVID-19 pandemic still forcing restrictions on all educational and learning activities statewide, NYSED submitted two federal waiver requests related to state assessment and accountability requirements. The waiver requests addressed the unique circumstances caused by the pandemic that have resulted in many students receiving some or all of their instruction remotely.

Later that month, the United States Department of Education (USDE) informed states that it would not grant a blanket waiver for state assessments. However, the USDE agreed to uncouple state assessments from the Every Student Succeeds Act (ESSA) accountability requirements so that test results will be used solely as a measure of student learning. Additionally, it was decided that NYSED would administer only Session 1 of the Grades 3–8 ELA and Mathematics Tests for the Spring 2021 administration and that the tests would include previously administered questions.

The decision to use previously administered test questions in this extraordinary year was based on guidance from nationally recognized experts in the assessment field and was recommended in a [publication](#) from the Council of Chief State School Officers to state education departments. Reusing test questions provided the benefit of having established scale scores and stable item parameters. Using previously administered test questions also ensured that it will be possible to develop new test forms for 2022 and beyond. Although it was not the driver of the decision, the reuse of previously administered test questions provided an opportunity for cost savings during these unique circumstances where the instructional models used by schools varied throughout the State.

For 2021, the entire Session 1 booklet is being released as this is all that students were required to take. Additionally, NYSED is providing a map that details what learning standards 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 NYSED'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.

New York State P–12 Learning Standards Alignment

The alignment to the New York State P–12 Learning Standards for Mathematics is intended to identify the primary analytic skills necessary to successfully answer each question. 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：_____

纽约州测试项目
数学测试
第 1 部分

4 年级

v202

Released Questions

考试提示

以下是一些建议，可以帮助你做到最好：

- 仔细阅读每一道题目，并在做出选择前思考答案。

- 已向你提供了数学工具（一把尺子和一个量角器）供你在考试中使用。由你决定各工具将在何时有用。你应当在认为数学工具对你答题有帮助时使用它们。

1 塔图姆每天放学后会遛狗 $\frac{2}{3}$ 英里。请问她在 5 天内遛狗多少英里?

    A $\frac{7}{3}$

    B $\frac{10}{3}$

    C $\frac{2}{15}$

    D $\frac{10}{15}$

2 贾登在一项比赛中的得分低于 45 分,同时这个分数是 7 的倍数。请问贾登得了所少分?

    A 17

    B 35

    C 52

    D 70

3 哪个比较是正确的?

    A $\frac{2}{3} = \frac{8}{12}$

    B $\frac{4}{9} = \frac{8}{9}$

    C $\frac{3}{4} > \frac{9}{10}$

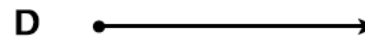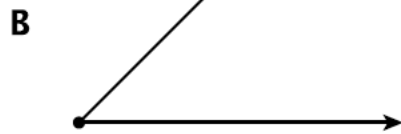   **D** $\frac{2}{4} > \frac{2}{3}$
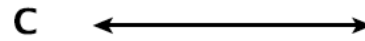
4 一个棒球公园有三个不同的座位区域。每个区域能够容纳的人数如下。

- 红色区域容纳 200 人

- 蓝色区域可容纳的人数比红色区域少 20 人

- 绿色区域可容纳的人数是蓝色区域的 2 倍

该棒球公园可容纳就座的总人数是多少?

A 260

B 380

C 640

D 740

5 以下哪幅图是一条线段的示例?

A •————————•

C ←—————————→

B

D •—————————→

6 伊兹家的院子里种了桔子树。他们采摘了 126 个桔子。他们给自家留下了 10 个，并将剩余部分平均分给了其他 4 个家庭。下面哪个方程式能够用来确定 n，即其他每个家庭收到的桔子数量？
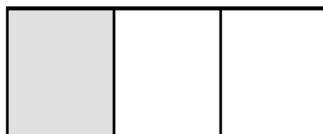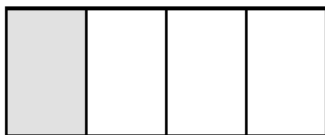
A $(126 - 4) \div 10 = n$

B $(126 - 10) \div 4 = n$

C $(126 + 10) \div 4 = n$

D $(126 + 4) \div 10 = n$

7 以下哪个分数模型的阴影面积等于 $\frac{3}{12}$？

A

C

B

D

8 角 EFG 的角度是 106 度，如下图所示。
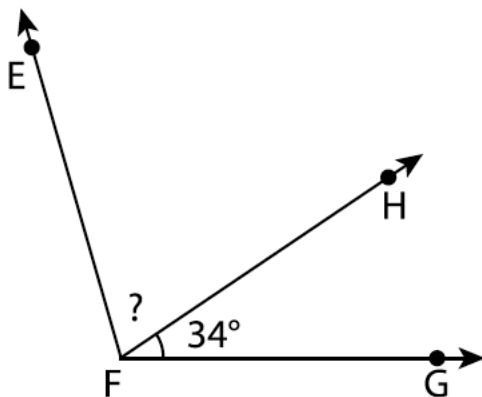
角 EFH 的角度是多少度?

A 34

B 56

C 72

D 140

9 以下哪组分数是按数值从小到大排列的?

A $\frac{1}{2},\frac{1}{4},\frac{3}{4}$

B $\frac{1}{4},\frac{1}{2},\frac{3}{4}$

C $\frac{1}{4},\frac{3}{4},\frac{1}{2}$

D $\frac{1}{2},\frac{3}{4},\frac{1}{4}$

10 贝齐的水罐中有 $4\frac{1}{3}$ 杯柠檬水。她将 $1\frac{2}{3}$ 杯倒入玻璃杯中。水罐中还剩多少柠檬水？

A $2\frac{2}{3}$ 杯

B $3\frac{1}{3}$ 杯

C $5\frac{3}{3}$ 杯

D $5\frac{3}{6}$ 杯

11 下列表达式的数值是多少？

$$2{,}816 \times 7$$

A 14,572

B 14,672

C 19,612

D 19,712

12 $2{,}314 \div 4$ 的商是多少？

A 508

B 508 余 2

C 578

D 578 余 2

13 一位老师购买了下述文件夹。

- 5 盒红色文件夹，每盒有 36 个文件夹

- 6 盒蓝色文件夹，每盒有 32 个文件夹

哪个数字**最接近**老师购买的红色和蓝色文件夹的总数?

A 275

B 380

C 440

D 550

14 什么数字是 400 的 9 倍?

A 391

B 409

C 3,600

D 3,609
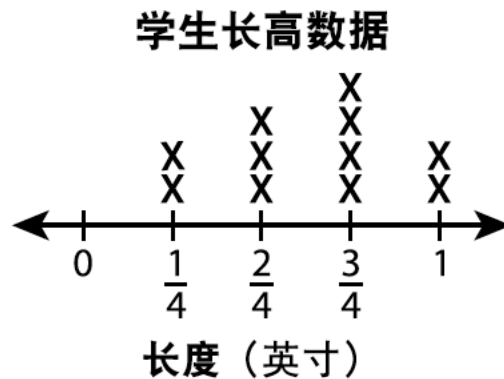
15 哪两个数字四舍五入到最近的百分位都是 1,500?

A 1,399 和 1,599

B 1,449 和 1,549

C 1,457 和 1,547

D 1,489 和 1,589

16 福勒先生想在他的长方形院子四周安装栅栏。院子的宽是 55 英尺，长是 75 英尺。福勒先生需要多少英尺的栅栏？

A   130

B   260

C   3,905

D   4,125

17 贝克老师班里的一些学生记录了四个月以来他们的身高。以下折线图显示了每个学生在四个月结束时长高了多少。

学生长高数据

长度（英寸）

长的最多和最少的学生之间的差异是多少英寸？

A $\frac{1}{4}$

B $\frac{2}{4}$

C $\frac{3}{4}$

D   1

18 29,461 中数位 9 的数值是下述哪个数字中数位 9 的数值的 10 倍?

A　46,195

B　53,982

C　89,354

D　93,610

19 以下数列遵守一个规则来排列。

　　2, 8, 32, 128, . . .

下列哪个数列依据的是同一个规则?

A　4, 8, 12, 16, . . .

B　1, 4, 16, 64, . . .

C　3, 7, 11, 15, . . .

D　6, 12, 24, 48, . . .

20 下面三个模型的阴影部分各代表了一个不同的分数。

这些模型的阴影部分代表的分数总和是多少?

A $\dfrac{10}{18}$

B $\dfrac{8}{10}$

C $\dfrac{10}{8}$

D $\dfrac{10}{6}$

21 在下图中，最多能画出多少条对称轴?

A 0

B 1

C 2

D 4
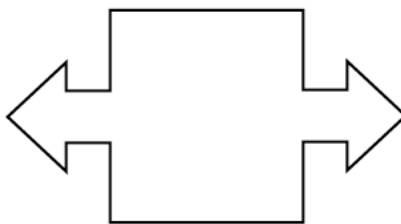
22 多少度的一个角等于圆的 $\frac{1}{360}$？

    A   1

    B   90

    C   180

    D   360

23 哪个比较陈述描述了下述模型？
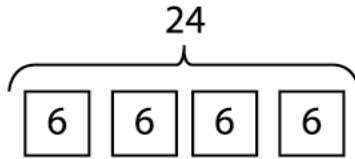
    A   6 是 4 的 24 倍

    B   24 是 6 的 4 倍

    C   4 的 24 倍是 6

    D   6 的 6 倍是 24

4 年级
数学测试
第 1 部分
v202

Grade 4
Mathematics Test
Session 1
v202

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2021 Mathematics Tests Map to the Standards
Grade 4 Released Questions

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
1	Multiple Choice	B	1	CCSS.Math.Content.4.NF.B.4c	Number and Operations - Fractions	Number and Operations - Fractions	
2	Multiple Choice	B	1	CCSS.Math.Content.4.OA.B.4	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
3	Multiple Choice	A	1	CCSS.Math.Content.4.NF.A.2	Number and Operations - Fractions	Number and Operations - Fractions	
4	Multiple Choice	D	1	CCSS.Math.Content.4.OA.A.2	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
5	Multiple Choice	A	1	CCSS.Math.Content.4.G.A.1	Geometry		
6	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
7	Multiple Choice	B	1	CCSS.Math.Content.4.NF.A.1	Number and Operations - Fractions	Number and Operations - Fractions	
8	Multiple Choice	C	1	CCSS.Math.Content.4.MD.C.7	Measurement and Data		
9	Multiple Choice	B	1	CCSS.Math.Content.4.NF.A.2	Number and Operations - Fractions	Number and Operations - Fractions	
10	Multiple Choice	A	1	CCSS.Math.Content.4.NF.B.3c	Number and Operations - Fractions	Number and Operations - Fractions	
11	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.5	Number and Operations in Base Ten	Number and Operations in Base Ten	
12	Multiple Choice	D	1	CCSS.Math.Content.4.NBT.B.6	Number and Operations in Base Ten	Number and Operations in Base Ten	
13	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.3	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
14	Multiple Choice	C	1	CCSS.Math.Content.4.OA.A.1	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
15	Multiple Choice	C	1	CCSS.Math.Content.4.NBT.A.3	Number and Operations in Base Ten	Number and Operations in Base Ten	
16	Multiple Choice	B	1	CCSS.Math.Content.4.MD.A.3	Measurement and Data		
17	Multiple Choice	C	1	CCSS.Math.Content.4.MD.B.4	Measurement and Data		
18	Multiple Choice	B	1	CCSS.Math.Content.4.NBT.A.1	Number and Operations in Base Ten	Number and Operations in Base Ten	
19	Multiple Choice	B	1	CCSS.Math.Content.4.OA.C.5	Operations and Algebraic Thinking	Operations and Algebraic Thinking	
20	Multiple Choice	D	1	CCSS.Math.Content.4.NF.B.3a	Number and Operations - Fractions	Number and Operations - Fractions	
21	Multiple Choice	C	1	CCSS.Math.Content.4.G.A.3	Geometry		
22	Multiple Choice	A	1	CCSS.Math.Content.4.MD.C.5a	Measurement and Data		
23	Multiple Choice	B	1	CCSS.Math.Content.4.OA.A.1	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.