New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 4
Mathematics Test
(Korean)

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.

이름: _____

Korean Edition
Grade 4
Mathematics Test
Session 1
v202

뉴욕주 시험 프로그램
수학 시험
세션 1

4학년

v202

Released Questions

세션 1

시험 관련 도움말

다음은 자신의 실력을 최고로 발휘하는 데 도움이 되는 사항들입니다.

- 각 문제를 자세히 읽고 답을 선택하기 전에 한 번 더 생각해 보십시오.
- 시험 중에 사용하도록 수학 도구(자와 각도기)를 받았습니다. 각 도구가 언제 유용할지는 본인이 판단해야 합니다. 문제를 푸는 데 도움이 될 것이라고 생각될 때마다 이 수학 도구를 사용하십시오.

1 테이텀은 방과 후 매일 자신의 개와 $\frac{2}{3}$마일을 산책합니다. 그녀가 5일간 개와 걷는 거리는 몇 마일입니까?

A $\frac{7}{3}$

B $\frac{10}{3}$

C $\frac{2}{15}$

D $\frac{10}{15}$

2 제이든이 게임에서 얻은 점수는 45점 이하이며 7의 배수입니다. 제이든이 획득한 점수는 몇 점입니까?

A 17

B 35

C 52

D 70

3 다음의 비교 중 맞는 것은?

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

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

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

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

계속

4 야구장에는 세 개의 좌석 구간이 있습니다. 각 구간에 앉을 수 있는 사람 수는 아래와 같습니다.

- 빨간색 구간에는 200석이 있습니다.
- 파란색 구간에는 빨간색 구간보다 좌석이 20개 적습니다.
- 녹색 구간에는 파란색 구간 보다 좌석이 2배입니다.

야구장에는 좌석이 총 몇 개 있습니까?

A 260

B 380

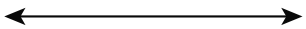
C 640

D 740

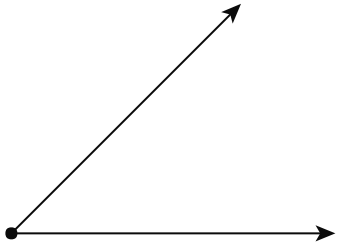
5 다음 그림 중 선분의 예는?

A

C



B



D

계속

6 이지의 가족은 마당에 오렌지 나무를 심었습니다. 그들은 126개의 오렌지를 땄습니다. 그들은 10개는 자기들이 먹으려고 남겨두었고 나머지는 여러 4가족들과 골고루 나누었습니다. 다음 중 다른 가족들이 각각 받은 오렌지 수량 n을 구하는 데 사용할 수 있는 방정식은?

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

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

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

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

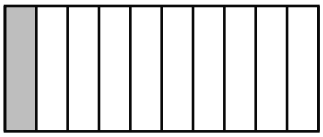
7 다음 중 $\frac{3}{12}$ 과 동등한 음영 부분을 나타내는 분수 모델은?

A

C

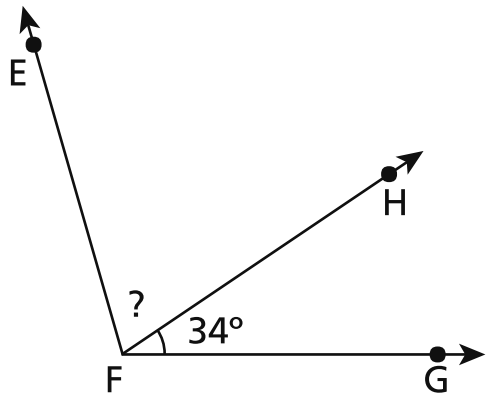
B

D



계속

8 아래에 나타난 각도 EFG의 측정값은 106도입니다.



각도 EFH의 측정값은 몇 도입니까?

A 34

B 56

C 72

D 140

9 다음 분수 목록 중 작은 값에서 큰 값의 순서대로 나열된 목록은 어느 것입니까?

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

계속

10 벳씨는 $4\frac{1}{3}$컵의 레모네이드가 담긴 피처를 가지고 있습니다. 벳씨가 $1\frac{2}{3}$컵의 레모네이드를 잔에 붓습니다. 피처에 남은 레모네이드는 몇 컵입니까?

A $2\frac{2}{3}$ 컵

B $3\frac{1}{3}$ 컵

C $5\frac{3}{3}$ 컵

D $5\frac{3}{6}$ 컵

11 아래 수식을 계산한 값은?

$2{,}816 \times 7$

A 14,572

B 14,672

C 19,612

D 19,712

12 $2{,}314 \div 4$ 식의 몫은?

A 508

B 508 r2

C 578

D 578 r2

계속

13 선생님은 아래와 같이 폴더를 삽니다.

- 빨간색 폴더는 상자 당 36개씩 5상자가 있고,
- 파랑색 폴더는 상자 당 32개씩 6상자가 있습니다.

선생님이 산 빨간색 폴더와 파란색 폴더의 총 수에 **가장 가까운** 수는?

A 275

B 380

C 440

D 550

14 다음 중 400 의 9 배에 해당하는 수는?

A 391

B 409

C 3,600

D 3,609

15 가장 가까운 백 단위로 반올림할 때 1,500으로 반올림되는 두 숫자는?

A 1,399 및 1,599

B 1,449 및 1,549

C 1,457 및 1,547

D 1,489 및 1,589

계속

16 풀러 씨는 직사각형 모양의 마당에 울타리를 치려고 합니다. 마당 가로는 55피트이고 세로는 75피트입니다. 풀러 씨에게 필요한 울타리 길이는 몇 피트입니까?

A 130

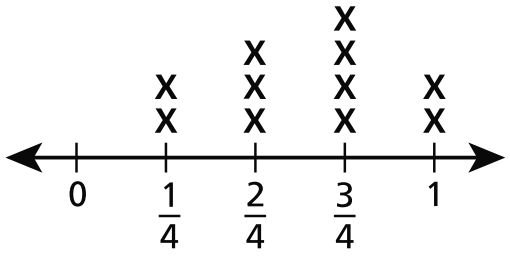
B 260

C 3,905

D 4,125

17 베이커 선생님의 수업을 듣는 일부 학생이 4개월 동안 키를 쟀습니다. 아래 선작도는 4개월이 끝날 때 각 학생이 성장한 양을 나타냅니다.

학생의 발달 성장



길이(인치)

가장 많이 자란 학생과 가장 조금 자란 학생의 키의 차이는 얼마입니까(인치)?

A $\frac{1}{4}$

B $\frac{2}{4}$

C $\frac{3}{4}$

D 1

계속

18 수 29,461에서 숫자 9의 값이 보기의 수에 있는 숫자 9 값의 10배가 되는 숫자는?

A 46,195

B 53,982

C 89,354

D 93,610

19 아래의 숫자 패턴은 특정한 규칙을 따릅니다.

2, 8, 32, 128, . . .

다음 중 어느 숫자 패턴이 같은 규칙을 따릅니까?

A 4, 8, 12, 16, . . .

B 1, 4, 16, 64, . . .

C 3, 7, 11, 15, . . .

D 6, 12, 24, 48, . . .

계속

20 아래 3개 모델의 음영 표시는 각각 다른 분수를 상징합니다.

모델의 음영 부분들을 상징하는 분수의 도합은?

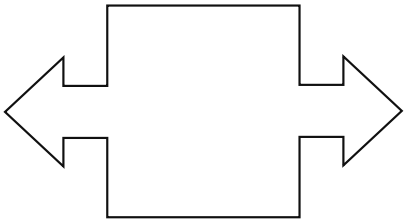
A $\frac{10}{18}$

B $\frac{8}{10}$

C $\frac{10}{8}$

D $\frac{10}{6}$

21 아래 그림에 그릴 수 있는 최다수의 대칭 선은?



A 0

B 1

C 2

D 4

계속

22 다음 중 원의 $\frac{1}{360}$의 값과 동등한 각은 몇 도입니까?

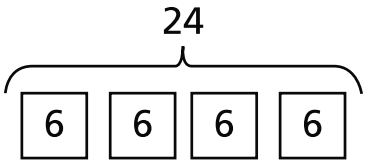
A 1

B 90

C 180

D 360

23 아래 모델을 설명하는 비교문은 어느 것입니까?



A 6은 4의 24배입니다.

B 24는 6의 4배입니다.

C 24의 4배는 6입니다.

D 6의 6배는 24입니다.

정지

4학년
수학 시험
세션 1
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.