New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

New York State Testing Program
Grade 7
Mathematics Test

Released Questions

2025

New York State administered the Mathematics Tests in Spring 2025 and is 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 2025 Exams

Background

As in past years, SED is releasing large portions of the 2025 NYS Grades 3–8 English Language Arts and Mathematics test materials for review, discussion, and use.

For 2025, included in these released materials are at least 75 percent of the test questions that appeared on the 2025 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 https://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.

Name: _____

New York State Testing Program

Mathematics Test
Session 1

Grade 7

Spring 2025

RELEASED QUESTIONS

Session 1

TIPS FOR TAKING THE TEST

Here are some ideas to help you do your best:

- Read each question carefully. Take your time.
- You have a ruler, a protractor, a reference sheet, and a calculator that you can use on the test if they help you answer the question.

2 Which table shows a proportional relationship between the number of calories and the number of cheese slices?

A

CALORIE INFORMATION

Number of Cheese Slices	Number of Calories
2	226
4	452
5	678
8	904

C

CALORIE INFORMATION

Number of Cheese Slices	Number of Calories
1	106
2	212
3	318
4	424

B

CALORIE INFORMATION

Number of Cheese Slices	Number of Calories
2	208
4	416
5	624
8	832

D

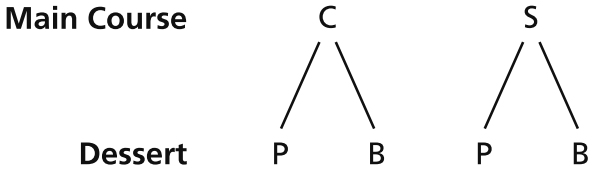
CALORIE INFORMATION

Number of Cheese Slices	Number of Calories
1	103
2	206
3	412
4	824

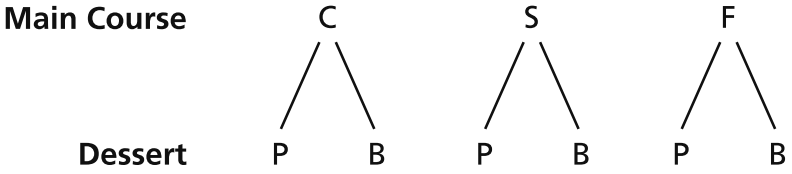
GO ON

3 At an event, each person can choose one main course and one dessert for a meal. The main course choices are chicken (C), steak (S), or fish (F). The choices for dessert are pudding (P) or a brownie (B). Which tree diagram represents all the different meal combinations being offered at the event?

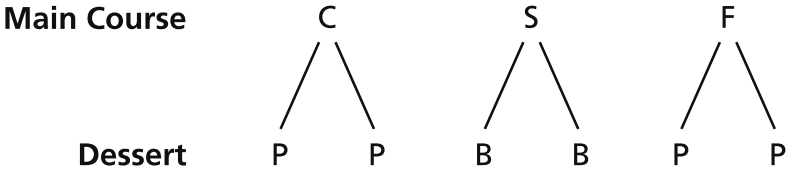
A



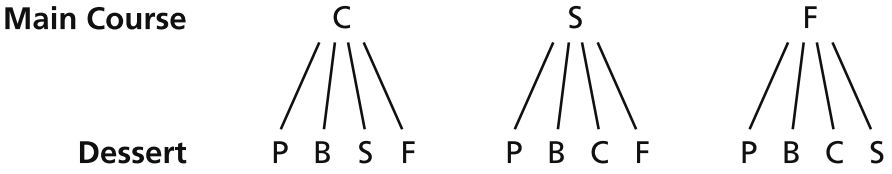
B



C



D



8 The table below shows the proportional relationship between the number of concert tickets purchased, t, and the total cost, c, of the tickets.

TICKET COSTS

Number of Tickets Purchased, *t*	Total Cost, *c* (dollars)
3	81.00
5	135.00
10	270.00

Which equation represents the relationship between t and c ?

A $c = 27t$

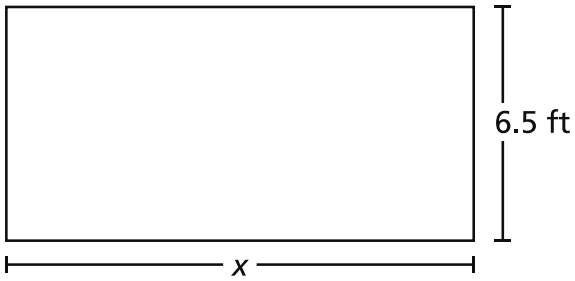
B $c = 54t$

C $c = 78t$

D $c = 81t$

GO ON

10 The diagram below shows a rectangular garden. The perimeter of the garden is 47 feet.



Which equation can be used to find the length, x, in feet, of the garden?

A $x + 13 = 47$

B $x + 6.5 = 47$

C $2x + 13 = 47$

D $2x + 6.5 = 47$

13 An incomplete equation is shown below.

$$-6.8 + 6.4 + \_\_\_\_\_ = 0$$

Which expression, when placed in the blank, makes this equation true?

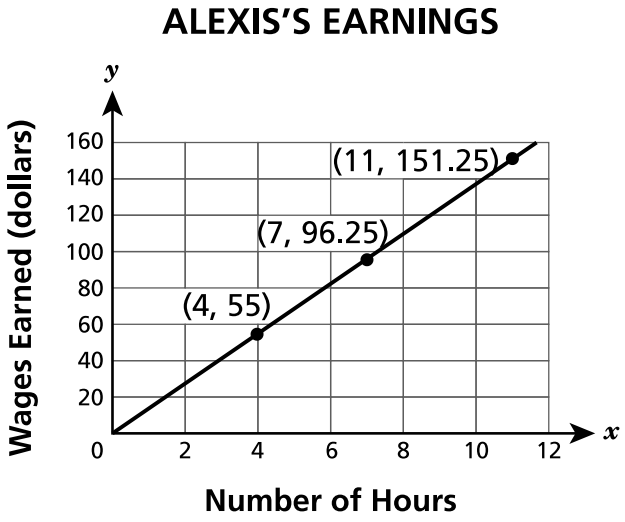
A $-4.3 + 4.7$

B $-6.5 + 6.7$

C $-4.3 + (-4.7)$

D $-6.5 + (-6.7)$

14 Alexis has a part-time job. The graph below shows the relationship between x, the number of hours worked, and y, the wages she earned.



What is Alexis's wage earned per hour?

A $0.07

B $1.57

C $10.00

D $13.75

17 Which expression is equivalent to $(-0.3) + 1.5$?

A $(-0.3) + (-1.5)$

B $(-1.5) + (0.3)$

C $1.5 - 0.3$

D $0.3 - 1.5$

20 Which expression is equivalent to $4(3x - 1.25) - 2(3.5x + 2)$?

A $-4x$

B $-2x$

C $5x - 1$

D $5x - 9$

21 A sweater has an original price of t dollars. The expression $t - 0.10t$ can be used to determine the sale price, in dollars, of the sweater. Which expression can also be used to determine the sale price, in dollars, of the sweater?

A $0.10t$

B $0.90t$

C $0.10t - t$

D $0.90t - t$

23 What is the product of $\left(-6\right)\left(-1\frac{1}{2}\right)$?

A -9

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

C $6\frac{1}{2}$

D 9

25 A chair is on sale at a discounted price of $49.00. The regular price of the chair is $10.00 less than 2 times the discounted price. What is the difference between the total cost of 3 regular-priced chairs and 3 chairs at the discounted price?

A $39.00

B $88.00

C $117.00

D $147.00

27 A car travels 30 miles and uses $1\frac{2}{3}$ gallons of fuel. What is the unit rate, in miles per gallon, for the car?

A $\frac{1}{50}$

B $\frac{1}{18}$

C 18

D 50

GO ON

28 A school sold tickets to a musical for $8.95 per person. The musical had two performances as described below.

- On Friday night, 152 people attended.
- On Saturday night, 25% more people attended than Friday night.

What was the total amount of money earned from tickets sold on these two nights?

A $1,700.50

B $2,723.04

C $2,944.55

D $3,060.90

29 Shannon has $500.00 in her bank account. Each week, she withdraws $40.00 from the account. If she does not deposit or withdraw any additional money, what is the maximum number of weeks she can withdraw the same amount of money and maintain a balance of at least $200.00 ?

A 5

B 7

C 8

D 12

32 A submarine at sea level descends at a constant rate. After descending for $1\frac{1}{3}$ hours, the submarine's depth is $2{,}700$ feet below sea level. At this rate, which value represents the depth, in feet, the submarine will have reached after descending for a total of $2\frac{1}{4}$ hours?

A $5{,}805.00$

B $5{,}400.00$

C $4{,}837.50$

D $4{,}556.25$

STOP

Grade 7
Mathematics Test
Session 1
Spring 2025

Name: _____

New York State Testing Program

Mathematics Test
Session 2

Grade 7

Spring 2025

RELEASED QUESTIONS

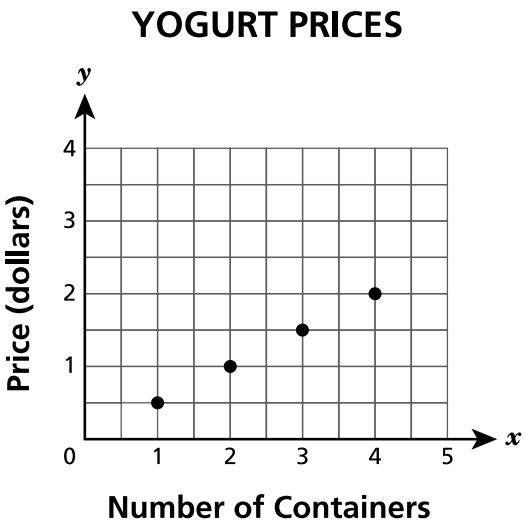
Session 2

TIPS FOR TAKING THE TEST

Here are some ideas to help you do your best:

- Read each question carefully. Take your time.
- You have a ruler, a protractor, a reference sheet, and a calculator that you can use on the test if they help you answer the question.
- Be sure to show your work when asked.
- Be sure to explain your answer when asked.

33 The graph below shows the prices for a number of containers of a type of yogurt.



Which statement describes the unit price per container of yogurt?

A The unit price is $\$0.50$.

B The unit price is $\$1.00$.

C The unit price is $\$1.50$.

D The unit price is $\$2.00$.

34 A student attends a fair. Admission to the fair is $\$12.00$ and each ride ticket costs $\$5.50$. The student can spend, at most, $\$46.00$ on admission and ride tickets. Which inequality can be used to find the number of ride tickets, x, the student can buy?

A $12x + 5.5 \leq 46$

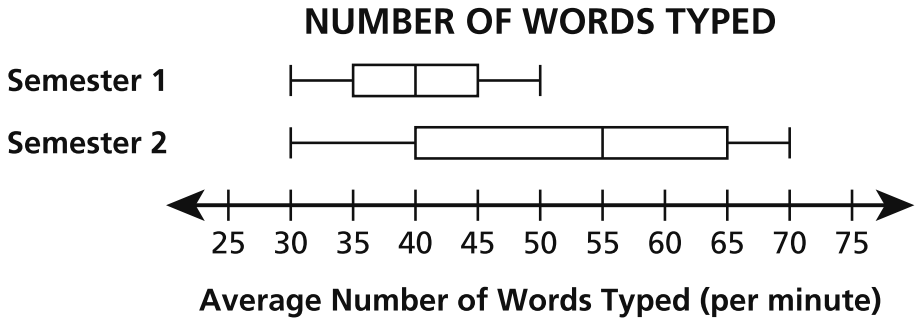
B $5.5x + 12 \leq 46$

C $5.5x + 12 \geq 46$

D $12x + 5.5 \geq 46$

GO ON

35 Students in a class are recording the number of words they can type per minute each semester during the school year. The box plots below show the results for two semesters.



What is the difference in the median number of words typed per minute from Semester 1 to Semester 2 ?

A 5

B 10

C 15

D 20

36 Jacob bought a phone for x dollars. One year later, the value of the phone decreased by 20%. Which expression represents the value of the phone after the decrease?

A $0.2x$

B $0.8x$

C $x - 0.2$

D $x - 0.8$

37 The temperature at $8{:}00$ a.m. was $-7°\text{F}$. At $3{:}00$ p.m., the temperature had risen to $8°\text{F}$. What was the change in temperature, in degrees Fahrenheit, from $8{:}00$ a.m. to $3{:}00$ p.m.?

A -15

B -1

C 1

D 15

38 Audrey is planning a party for 30 people. She wants to buy enough juice for each person to have exactly 2 servings of juice.

- Each bottle of juice has 5 servings.
- Each bottle of juice costs $4.89.

What is the total amount it will cost Audrey to buy the bottles of juice to serve her guests and have no juice left over?

A $29.34

B $48.90

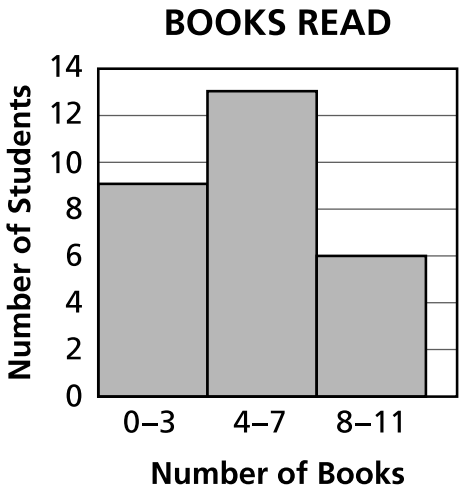
C $58.68

D $73.35

GO ON

39 **This question is worth 1 credit.**

The histogram below shows the results from a survey given to each student in a 6th grade class about the number of books they read over the summer.



Based on the histogram, how many students were surveyed?

Answer _____ students

40 **This question is worth 1 credit.**

An expression is shown below.

$$\frac{0.5(4-6)}{0.2}$$

Determine the value of the expression.

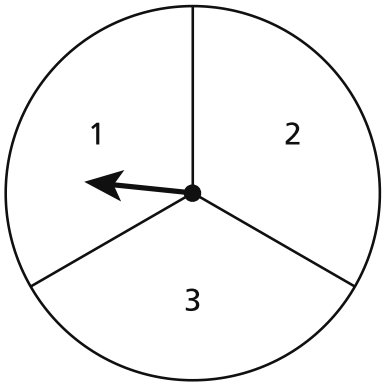
Answer _____

GO ON

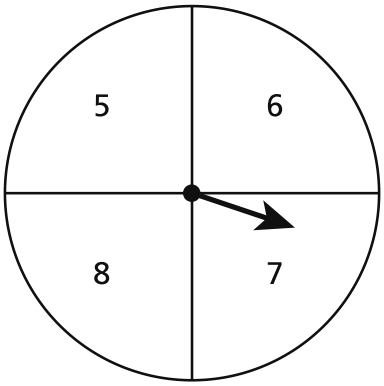
41 **This question is worth 1 credit.**

Darius will spin the arrows on two spinners. Spinner A is divided into three equal sections and Spinner B is divided into four equal sections as shown below. Darius will spin each arrow one time.

SPINNER A



SPINNER B



What is the probability that the product of the two numbers that the arrows land on from Darius's spins will be an odd number?

Answer _____

42 **This question is worth 2 credits.**

Diego, Kris, and Mary each paid the same amount for a movie ticket at a theater. Each person also bought a small popcorn for $\$6.50$, including tax. The 3 friends spent a total of $\$54.00$ on the movie tickets and popcorn. What was the price of each movie ticket?

Show your work.

Answer $\$$ _____

GO ON

43 **This question is worth 2 credits.**

Andrea had a gift card with a balance of $25.00. She makes a $25.00 purchase using the gift card. Would the gift card balance be zero dollars after this transaction?

Explain your answer.

44 **This question is worth 2 credits.**

Ryan drinks $\frac{3}{8}$ gallon of water for every $1\frac{1}{2}$ hours of exercise. At this rate, how much water, in gallons, does Ryan drink per hour of exercise?

Show your work.

Answer _____ gallon(s)

GO ON

45 **This question is worth 2 credits.**

The table below shows the price, in dollars, of different numbers of cans of soda.

SODA PRICES

Number of Cans	Price (dollars)
2	5.50
4	11.00
8	22.00
10	27.50

Is the relationship between the price, in dollars, and the number of cans of soda proportional?

Explain how you determined your answer.

46 **This question is worth 2 credits.**

An expression is shown below.

$$-5y + 3 - 6y + 10y - 1$$

Simplify the expression completely.

Show your work.

Answer _____

GO ON

47 **This question is worth 2 credits.**

Jeffrey is painting a rectangular mural on his bedroom wall. He sketches his design on a piece of paper as described below.

- He uses the entire piece of paper for his design.
- The paper has a length of 8 inches and a width of 6 inches.
- The scale factor is 1 inch to 1.75 feet.

What is the actual area, in square feet, of the mural that Jeffrey will paint on his wall?

Show your work.

Answer _____ square feet

48 **This question is worth 3 credits.**

A store is offering discounts on two types of shirts.

- a 10% discount on short sleeve shirts with an original price of $40.00
- a 25% discount on long sleeve shirts with an original price of $50.00

How much will a customer spend, without tax, if they purchase one of each type of shirt?

Show your work.

Answer $ _____

STOP

Grade 7
Mathematics Test
Session 2
Spring 2025

THE STATE EDUCATION DEPARTMENT

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

2025 Mathematics Tests Map to the Standards

Grade 7

Question	Type	Key	Points	Standard	Cluster	Subscore	Secondary Standard(s)
Session 1							
2	Multiple Choice	C	1	NGLS.Math.Content.NY-7.RP.2a	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
3	Multiple Choice	B	1	NGLS.Math.Content.NY-7.SP.8b	Statistics and Probability		
8	Multiple Choice	A	1	NGLS.Math.Content.NY-7.RP.2c	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
10	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.4a	Expressions and Equations	Expressions and Equations	NGLS.Math.Content.NY-7.EE.1
13	Multiple Choice	A	1	NGLS.Math.Content.NY-7.NS.1b	The Number System	The Number System	NGLS.Math.Content.NY-7.NS.1a
14	Multiple Choice	D	1	NGLS.Math.Content.NY-7.RP.2b	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
17	Multiple Choice	C	1	NGLS.Math.Content.NY-7.NS.1d	The Number System	The Number System	
20	Multiple Choice	D	1	NGLS.Math.Content.NY-7.EE.1	Expressions and Equations	Expressions and Equations	
21	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.2	Expressions and Equations	Expressions and Equations	
23	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.2a	The Number System	The Number System	
25	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations	
27	Multiple Choice	C	1	NGLS.Math.Content.NY-7.RP.1	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
28	Multiple Choice	D	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations	
29	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.4b	Expressions and Equations	Expressions and Equations	
32	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.3	The Number System	The Number System	NGLS.Math.Content.NY-7.RP.3
Session 2							
33	Multiple Choice	A	1	NGLS.Math.Content.NY-7.RP.2d	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
34	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.4b	Expressions and Equations	Expressions and Equations	
35	Multiple Choice	C	1	NGLS.Math.Content.NY-7.SP.3	Statistics and Probability		
36	Multiple Choice	B	1	NGLS.Math.Content.NY-7.EE.2	Expressions and Equations	Expressions and Equations	
37	Multiple Choice	D	1	NGLS.Math.Content.NY-7.NS.1c	The Number System	The Number System	
38	Multiple Choice	C	1	NGLS.Math.Content.NY-7.EE.3	Expressions and Equations	Expressions and Equations	
39	Constructed Response	n/a	1	NGLS.Math.Content.NY-6.SP.5a	Statistics and Probability		
40	Constructed Response	n/a	1	NGLS.Math.Content.NY-7.NS.2c	The Number System	The Number System	
41	Constructed Response	n/a	1	NGLS.Math.Content.NY-7.SP.8a	Statistics and Probability		NGLS.Math.Content.NY-7.SP.8b
42	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.EE.4a	Expressions and Equations	Expressions and Equations	
43	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.NS.1a	The Number System	The Number System	
44	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.RP.1	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
45	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.RP.2a	Ratios and Proportional Relationships	Ratios and Proportional Relationships	
46	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.EE.1	Expressions and Equations	Expressions and Equations	
47	Constructed Response	n/a	2	NGLS.Math.Content.NY-7.G.1	Geometry		
48	Constructed Response	n/a	3	NGLS.Math.Content.NY-7.RP.3	Ratios and Proportional Relationships	Ratios and Proportional Relationships	

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.