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Our Students. Their Moment.

# New York State Testing Program <br> Grade 5 Common Core Mathematics Test 

## Released Questions

## June 2017

New York State administered the Mathematics Common Core Tests in May 2017 and is now 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 2017 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 2017 NYS Grades 3-8 Common Core English Language Arts and Mathematics test materials for review, discussion, and use.

For 2017, included in these released materials are at least 75 percent of the test questions that appeared on the 2017 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-andmathematics.

## 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.

Name: $\qquad$


# New York State Testing Program 

2017 Common Core Mathematics Test Book 1 Grade


May 2-4, 2017

## Released Questions

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## Grade 5 Mathematics Reference Sheet

## CONVERSIONS

1 mile $=5,280$ feet
1 mile = 1,760 yards

1 pound = 16 ounces
1 ton = 2,000 pounds

1 cup $=8$ fluid ounces
1 pint $=2$ cups
1 quart $=2$ pints
1 gallon $=4$ quarts
1 liter $=1,000$ cubic centimeters

## FORMULAS

Right Rectangular Prism
$V=B h$ or $V=I w h$

## Book 1

TIPS FOR TAKING THE TEST
Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before choosing your response.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.

1 What part of the expression below should be calculated first?

$$
8+\{22 \times[15+(14 \times 2)]\}
$$

A $8+22$
B $22 \times 15$
C $14 \times 2$
D $15+14$

2 Tara baked $6 \frac{1}{2}$ dozen cookies. She sold $3 \frac{2}{6}$ dozen of the cookies she made. How many dozens of cookies does Tara have remaining?

A $3 \frac{1}{6}$
B $3 \frac{1}{4}$
C $3 \frac{3}{8}$
D $3 \frac{5}{6}$

3 Prism A is shown below. The height of Prism B is 2 times the height of Prism A. The length and width of both prisms are the same.


Prism A

What is the volume, in cubic inches, of Prism B ?

A 20
B 44
C 45
D 60

4 Which decimal is equivalent to $\frac{41}{100}$ ?
A 41.0
B 4.10
C 0.41
D 0.041

6 What number is equivalent to the expanded form shown below?

$$
(2 \times 100)+(3 \times 1)+\left(4 \times \frac{1}{10}\right)+\left(3 \times \frac{1}{1,000}\right)
$$

A 203.043
B 203.403
C 230.430
D 230.403

7 Which phrase is represented by the expression $5 \times(36+9)$ ?
A the product of 36 and 5, increased by 9
B the product of 36 and 9, multiplied by 5
C the sum of 36 and 9 , multiplied by 5
D the sum of 36 and 5 , increased by 9

8 The value of the digit in the hundreds place in the number 653,841 is $\frac{1}{10}$ the value of the digit in the thousands place in which number?

A 748,917
B 749,817
C 784,917
D 797,481

9 The table below lists the number of layers of centimeter cubes, along with the number of cubes in each layer, in each of four rectangular prisms.

LAYERS OF CUBES IN RECTANGULAR PRISMS

| Prism | Number of <br> Layers | Number of Cubes <br> in Each Layer |
| :---: | :---: | :---: |
| R | 3 | 8 |
| S | 5 | 5 |
| T | 6 | 5 |
| U | 7 | 4 |

Which rectangular prism has the greatest volume?

A Prism R
B Prism S
C Prism T
D Prism U

12 The decimal grid shown below is shaded and marked with Xs to model an expression.


Which expression could be modeled by this decimal grid?

A $0.08 \times 0.04$
B $0.08 \times 0.40$
C $0.80 \times 0.04$
D $0.80 \times 0.40$

13 What is the value of the expression $\frac{1}{5} \div 4$ ?
A $\frac{20}{1}$
B $\frac{5}{4}$
C $\frac{4}{5}$
D $\frac{1}{20}$

14 Mia buys 5 yards of ribbon to make bracelets. She needs 18 inches of ribbon to make 1 bracelet. How many bracelets can Mia make if she uses all the ribbon she buys?

A 90
B 10
C 3
D 2

15 The decimal grids below are shaded to model an expression.


What is the value of the expression modeled by the decimal grids?

A 3.29
B 3.32
C 4.10
D 4.13

16 Which expression is equivalent to $\frac{3}{5}$ ?
A $3 \times 5$
B $3+5$
C $3 \div 5$
D 3-5

17 Tyler completely filled the box shown below with unit cubes, with no gaps or overlaps.


He then counted the number of cubes that he used to fill the box. What type of measurement is represented by the number of cubes Tyler counted?

A area
B height
C volume
D perimeter

21 Each student in a class plays one of three sports: soccer, volleyball, or basketball.

- $\frac{3}{5}$ of the number of students play soccer
- $\frac{1}{4}$ of the number of students play volleyball

What fraction of the number of students play basketball?
A $\frac{3}{20}$
B $\frac{4}{9}$
C $\frac{5}{9}$
D $\frac{17}{20}$

22 What is the value of 0.1561 rounded to the nearest tenth?
A 0.15
B 0.16
C 0.1
D 0.2

Grade 5
2017 Common Core Mathematics Test
Book 1
May 2-4, 2017

Name: $\qquad$


# New York State Testing Program 

2017 Common Core Mathematics Test
Book 2

Grade

$\Gamma$
May 2-4, 2017

## Released Questions

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## Grade 5 Mathematics Reference Sheet

## CONVERSIONS

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1 pint $=2$ cups
1 quart $=2$ pints
1 gallon $=4$ quarts
1 liter $=1,000$ cubic centimeters

## FORMULAS

Right Rectangular Prism
$V=B h$ or $V=I w h$

## Book 2

TIPS FOR TAKING THE TEST
Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before choosing your response.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.

23 The figure below is made of unit cubes.


How many unit cubes need to be added to the figure so that it will have a total volume of 12 cubic units?

A 1
B 2
C 4
D 8

24 The operation symbol and the exponent are missing in the equation shown below.

$$
7,320 \square 10 \square=0.07320
$$

Which operation symbol and exponent should go in the boxes to make the equation true?

A $\times$ and 2
B $\div$ and 2
C $\times$ and 5
D $\div$ and 5

25 A square and a rhombus are shown below.


Which attribute is true of one of the shapes but not of both?

A All angles are right angles.
B All sides are the same length.
C There are two sets of equal angles.
D There are two sets of parallel sides.

26 Point $K$ is shown on the number line below.


Which number sentence best describes the value represented by point $K$ ?

A $K>0.13$
B $\mathrm{K}<0.13$
C $\mathrm{K}=0.15$
D $\mathrm{K}=0.35$

27 The table below shows the distance some players hit a softball.

## SOFTBALL DISTANCES

| Name | Distance |
| :---: | :---: |
| Amalia | 36 inches |
| Nick | 6 feet |
| Lila | 108 inches |

Pablo hit the softball 2 yards. Which player or players hit the softball the same distance as Pablo?

A Amalia only
B Nick only
C Lila only
D Amalia and Nick

28 The line plot below shows the lengths of all the pieces of string Emma used for an art project. She cut all these pieces from one original piece of string.

## PIECES OF STRING



Emma had 1 foot of string left over. How long, in feet, was the original piece of string?
A $1 \frac{6}{8}$
B $1 \frac{7}{8}$
C $3 \frac{7}{8}$
D $6 \frac{1}{8}$

29 For which values of $k$ would the product of $\frac{k}{3} \times 12$ be greater than 12 ?
A for any value of $k$ less than 1 but greater than 0
B for any value of $k$ less than 3 but greater than 1
C for any value of $k$ equal to 3
D for any value of $k$ greater than 3

32 Each day last week, Ms. Wilson walked $\frac{3}{4}$ mile. What is the total distance, in miles, that Ms. Wilson walked in 4 days?

A 1
B 2
C 3
D 4

33 A right rectangular prism is shown below. The volume of the prism is determined by using unit cubes.


Which statement describes how to determine the volume of the prism in cubic units?

A Add the length, width, and height: $4+3+2$.

B Add the length and width and then multiply by the height: $(4+3) \times 2$.

C Determine the area of the base and add the number of layers of cubes: $(4 \times 3)+2$.

D Determine the area of the base and multiply by the number of layers of cubes: $(4 \times 3) \times 2$.

36 What is the volume of the cube shown below?


A 1 cubic unit
B 3 cubic units
C 4 cubic units
D 6 cubic units

37 During a hike, 3 friends equally shared $\frac{1}{2}$ pound of trail mix. What amount of trail mix, in pounds, did each friend receive?

A $\frac{1}{6}$

B $\frac{3}{2}$

C $3 \frac{1}{2}$
D 6

41 Which expression has a value greater than $\frac{1}{2}$ ?
A $\frac{1}{2} \times \frac{4}{5}$
B $\frac{1}{2} \times \frac{4}{4}$
C $\frac{1}{2} \times \frac{5}{5}$
D $\frac{1}{2} \times \frac{5}{4}$

42 A science teacher has 0.4 liter of seawater. She gives each of her 22 students a container and a 5-milliliter spoon. She then asks her students to put two spoonfuls of seawater into their containers. How many milliliters of seawater will be left after all 22 students have filled their containers?

A 70
B 180
C 290
D 780

43 What is the value of the expression below?

$$
\frac{1}{25} \div 74
$$

A $\frac{1}{1,850}$
B $\mathbf{1 , 8 5 0}$

C $\frac{25}{74}$
D $2 \frac{24}{25}$

44 Which phrase best describes a figure with dimensions of 2 units by 2 units by 4 units and a volume of 16 cubic units?

A a solid figure that can be filled with 16 cubes that each measure 1 cubic unit
B a solid figure that can be filled with 1 cube that measures 16 units on each edge
C a solid figure that can be covered with 16 squares that each measure 1 square unit
D a solid figure that can be covered with 1 square that measures 16 units on each edge

45 Susan determined that the expression below is equal to 7.59 .

$$
15.91-8.32
$$

Which expression can Susan use to check her answer?

A 8.32-7.59
B $8.32+7.59$
C $\quad 15.91+8.32$
D $15.91+7.59$

Grade 5
2017 Common Core Mathematics Test
Book 2
May 2-4, 2017

Name: $\qquad$


# New York State Testing Program 

## 2017 Common Core Mathematics Test Book 3

Grade


May 2-4, 2017

## Released Questions

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## Grade 5 Mathematics Reference Sheet

## CONVERSIONS

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1 cup $=8$ fluid ounces
1 pint $=2$ cups
1 quart $=2$ pints
1 gallon $=4$ quarts
1 liter $=1,000$ cubic centimeters

## FORMULAS

Right Rectangular Prism
$V=B h$ or $V=I w h$

## Book 3

TIPS FOR TAKING THE TEST
Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before writing your response.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.
- Be sure to show your work when asked.

Harry's fitness trainer recommends that Harry drink 8 fluid ounces of water 8 times a day. Harry has a water bottle that holds $1 \frac{1}{4}$ pints of water when filled. Today, he has filled the water bottle three times and drank all of the water each time. Harry claims that he drank the total amount of water recommended by his fitness trainer. Explain why Harry's claim is not true.

## Answer

$\qquad$
$\qquad$
$\qquad$

47 Rodney bought a 25 -pound bag of dog food. His dog ate $10 \frac{2}{5}$ pounds of the food in the first month and $10 \frac{4}{5}$ pounds of the food in the second month. How much dog food, in pounds, was remaining in the bag at the end of the two months?

## Show your work.

Answer $\qquad$ pounds

48 Sixteen students in a drama club want to attend a play. The ticket price is $\$ 35$ for each student, and the transportation and meals for everyone will cost $\$ 960$.

To pay for the trip, the students design sweatshirts to sell for a profit of $\$ 19$ per sweatshirt. If each student sells the same number of sweatshirts, how many sweatshirts must each student sell so that there will be enough money to pay for the entire cost of the trip?

Show your work.

Answer $\qquad$ sweatshirts

49 Jessie set up a lemonade stand for three days.

- On Saturday, she sold $10 \frac{2}{3}$ gallons of lemonade.
- On Sunday, she sold $3 \frac{1}{3}$ gallons more than she sold on Saturday.
- On Monday, she sold $2 \frac{2}{3}$ gallons less than she sold on Sunday.

How many gallons of lemonade did Jessie sell on Monday?

Show your work.

Answer $\qquad$ gallons

50 Three students performed a science experiment using salt and a beaker. The beaker contained 530.2 grams of salt before the experiment started. During the experiment, each of the 3 students removed 47.36 grams of salt from the beaker.

How much salt, in grams, was left in the beaker at the end of the experiment?

Show your work.

Answer $\qquad$ grams

51 The dimensions of Mr. Tai's living room are 10 feet $\times 18$ feet $\times 8$ feet, and the dimensions of his family room are 14 feet $\times 20$ feet $\times 8$ feet. What is the total volume, in cubic feet, of the two rooms?

Show your work.

Answer $\qquad$ cubic feet

52 The diagram below shows a set of three different-sized containers Tanner used for storing dry goods. The largest container held $12 \frac{3}{4}$ cups of dry goods.


What was the total amount, in cups, of dry goods that Tanner could store in all three containers?

Show your work.

Answer $\qquad$ cups

53 A juice company produced 8,064 cartons of juice in 21 days. Each day, they produced the same number of cartons and delivered those cartons to 16 area coffee shops. The cartons were delivered in cases of six cartons per case, and each coffee shop received an equal number of cases in each delivery. How many cases were delivered to each coffee shop each day?

Show your work.

Answer $\qquad$ cases

54 For 4 weeks in June, Cameron biked $3 \frac{1}{4}$ miles each week and swam $2 \frac{1}{2}$ miles each week. For 3 weeks in July, he biked $4 \frac{3}{4}$ miles each week and swam $3 \frac{1}{2}$ miles each week.

How much greater was the total distance Cameron biked and swam in July compared to the total distance he biked and swam in June?

Show your work.

Answer $\qquad$ mile(s)

55 The table below shows part of the operating budget of a small dairy farm for last year. The only expense not listed in the table is maintenance.

## LAST YEAR'S OPERATING BUDGET

| Expense | Fraction of <br> Budget |
| :--- | :---: |
| Food | $\frac{1}{3}$ |
| Housing | $\frac{1}{3}$ |
| Medical Care | $\frac{1}{4}$ |

This year, the managers of the farm will change the fraction of the budget for housing to $\frac{1}{8}$ but will leave the fraction of the budget for food and medical care the same. Again, the remaining portion of the budget will be for maintenance expenses. What is the difference between the fraction of the budget for maintenance this year and last year?

Show your work.

Answer $\qquad$

Grade 5
2017 Common Core Mathematics Test
Book 3
May 2-4, 2017

THE STATE EDUCATION DEPARTMENT
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234
2017 Mathematics Tests Map to the Standards
Released Questions on EngageNY

|  | Type | Key | Points |  | Released Questions 0 | gageNY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Standard |  | Secondary Standard(s) | Multiple Choice Questions: <br> Percentage of Students Who Answered Correctly (P-Value) | Constructed Response Questions: |  |
|  |  |  |  |  |  |  |  | Average Points Earned | P-Value (Average Points Earned $\div$ Total Possible Points) |
| Book 1 |  |  |  |  |  |  |  |  |  |
| 1 | Multiple Choice | C | 1 | CCSS.Math.Content.5.OA.A. 1 | Operations and Algebraic Thinking |  | 0.85 |  |  |
| 2 | Multiple Choice | A | 1 | CCSS.Math.Content.5.NF.A. 1 | Number and Operations- Fractions |  | 0.82 |  |  |
| 3 | Multiple Choice | D | 1 | CCSS.Math.Content.5.MD.C. 4 | Measurement and Data |  | 0.76 |  |  |
| 4 | Multiple Choice | C | 1 | CCSS.Math.Content.4.NF.C.6 | Number and Operations in Base Ten |  | 0.75 |  |  |
| 6 | Multiple Choice | B | 1 | CCSS.Math.Content.5.NBT.A.3a | Number and Operations in Base Ten |  | 0.71 |  |  |
| 7 | Multiple Choice | C | 1 | CCSS.Math.Content.5.OA.A. 2 | Operations and Algebraic Thinking |  | 0.71 |  |  |
| 8 | Multiple Choice | A | 1 | CCSS.Math.Content.5.NBT.A. 1 | Number and Operations in Base Ten |  | 0.40 |  |  |
| 9 | Multiple Choice | C | 1 | CCSS.Math.Content.5.MD.C.5b | Measurement and Data |  | 0.74 |  |  |
| 12 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NBT.B. 7 | Number and Operations in Base Ten |  | 0.40 |  |  |
| 13 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NF.B.7a | Number and Operations- Fractions |  | 0.65 |  |  |
| 14 | Multiple Choice | B | 1 | CCSS.Math.Content.5.MD.A. 1 | Measurement and Data |  | 0.49 |  |  |
| 15 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NBT.B. 7 | Number and Operations in Base Ten |  | 0.75 |  |  |
| 16 | Multiple Choice | C | 1 | CCSS.Math.Content.5.NF.B.3 | Number and Operations- Fractions |  | 0.70 |  |  |
| 17 | Multiple Choice | C | 1 | CCSS.Math.Content.5.MD.C.3a | Measurement and Data |  | 0.66 |  |  |
| 21 | Multiple Choice | A | 1 | CCSS.Math.Content.5.NF.A. 2 | Number and Operations- Fractions |  | 0.63 |  |  |
| 22 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NBT.A. 4 | Number and Operations in Base Ten |  | 0.51 |  |  |
| Book 2 |  |  |  |  |  |  |  |  |  |
| 23 | Multiple Choice | C | 1 | CCSS.Math.Content.5.MD.C.3b | Measurement and Data |  | 0.88 |  |  |
| 24 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NBT.A. 2 | Number and Operations in Base Ten |  | 0.46 |  |  |
| 25 | Multiple Choice | A | 1 | CCSS.Math.Content.5.G.B. 3 | Geometry |  | 0.59 |  |  |
| 26 | Multiple <br> Choice | B | 1 | CCSS.Math.Content.5.NBT.A.3b | Number and Operations in Base Ten |  | 0.68 |  |  |


| Grade 5 Released Questions on EngageNY |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 5 <br> Question | Type | Key | Points | Standard | Cluster | Secondary Standard(s) | Multiple Choice Questions: <br> Percentage of Students Who Answered Correctly (P-Value) | Constructed Response Questions: |  |
|  |  |  |  |  |  |  |  | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { Points } \\ \text { Earned } \end{array}$ | P-Value (Average Points Earned $\div$ Total Possible Points) |
| 27 | Multiple <br> Choice | B | 1 | CCSS.Math.Content.4.MD.A. 1 | Measurement and Data |  | 0.61 |  |  |
| 28 | Multiple <br> Choice | D | 1 | CCSS.Math.Content.5.MD.B. 2 | Measurement and Data |  | 0.52 |  |  |
| 29 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NF.B.5b | Number and Operations- Fractions |  | 0.59 |  |  |
| 32 | Multiple Choice | C | 1 | CCSS.Math.Content.5.NF.B. 4 | Number and Operations- Fractions |  | 0.77 |  |  |
| 33 | Multiple Choice | D | 1 | CCSS.Math.Content.5.MD.C.5a | Measurement and Data |  | 0.79 |  |  |
| 36 | Multiple Choice | A | 1 | CCSS.Math.Content.5.MD.C.3a | Measurement and Data |  | 0.73 |  |  |
| 37 | Multiple Choice | A | 1 | CCSS.Math.Content.5.NF.B. 7 | Number and Operations- Fractions |  | 0.58 |  |  |
| 41 | Multiple Choice | D | 1 | CCSS.Math.Content.5.NF.B.5a | Number and Operations- Fractions |  | 0.61 |  |  |
| 42 | Multiple Choice | B | 1 | CCSS.Math.Content.5.MD.A. 1 | Measurement and Data |  | 0.45 |  |  |
| 43 | Multiple Choice | A | 1 | CCSS.Math.Content.5.NF.B.7a | Number and Operations- Fractions |  | 0.60 |  |  |
| 44 | Multiple Choice | A | 1 | CCSS.Math.Content.5.MD.C.3b | Measurement and Data |  | 0.64 |  |  |
| 45 | Multiple Choice | B | 1 | CCSS.Math.Content.5.NBT.B. 7 | Number and Operations in Base Ten |  | 0.76 |  |  |
| Book 3 |  |  |  |  |  |  |  |  |  |
| 46 | Constructed Response |  | 2 | CCSS.Math.Content.5.MD.A. 1 | Measurement and Data |  |  | 0.57 | 0.29 |
| 47 | Constructed Response |  | 2 | CCSS.Math.Content.5.NF.A. 2 | Number and Operations- Fractions |  |  | 1.00 | 0.50 |
| 48 | Constructed Response |  | 2 | CCSS.Math.Content.5.NBT.B.6 | Number and Operations in Base Ten |  |  | 0.56 | 0.28 |
| 49 | Constructed Response |  | 2 | CCSS.Math.Content.5.NF.A. 2 | Number and Operations- Fractions |  |  | 1.03 | 0.51 |
| 50 | Constructed Response |  | 2 | CCSS.Math.Content.5.NBT.B. 7 | Number and <br> Operations in Base Ten |  |  | 0.98 | 0.49 |
| 51 | Constructed Response |  | 2 | CCSS.Math.Content.5.MD.C.5b | Measurement and Data |  |  | 1.30 | 0.65 |
| 52 | Constructed Response |  | 3 | CCSS.Math.Content.5.NF.B. 6 | Number and Operations- Fractions |  |  | 0.58 | 0.19 |
| 53 | Constructed Response |  | 3 | CCSS.Math.Content.5.NBT.B.6 | Number and <br> Operations in Base Ten |  |  | 1.18 | 0.39 |
| 54 | Constructed Response |  | 3 | CCSS.Math.Content.5.NF.B. 6 | Number and Operations- Fractions | CCSS.Math.Content.5.NF.A. 1 |  | 1.12 | 0.37 |
| 55 | Constructed Response |  | 3 | CCSS.Math.Content.5.NF.A. 2 | Number and Operations- Fractions |  |  | 1.25 | 0.42 |

[^0]
[^0]:     including a balanced combination of procedural and conceptual understanding.

