Name:_____

New York State Testing Program

2016 Common Core Mathematics Test
Book 1

Grade 3

April 13–15, 2016

Released Questions

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 a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.

- Plan your time.

1 Which clock shows the time 7:08?

A

B

C

D
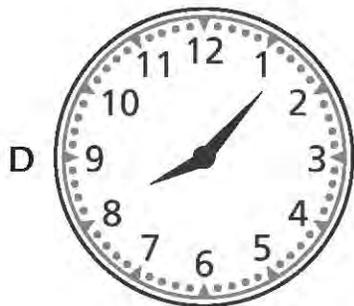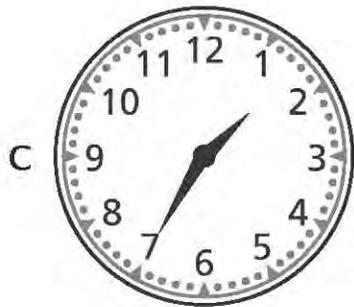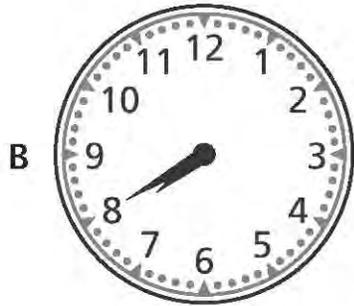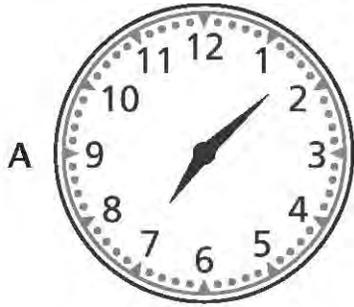
2 What is 836 rounded to the nearest 10?

A 800

B 830

C 840

D 870

3 Which two values are located at the same point on a number line?

A $\frac{4}{1}$ and 4

B $\frac{1}{3}$ and 3

C $\frac{8}{8}$ and 8

D $\frac{6}{2}$ and 4

7 Umi created the number pattern below by adding the same amount each time to get the next number.

20, 40, 60, 80, . . .

What will be the eighth number in the pattern?

A 160

B 240

C 320

D 640

8 In which equation could the number six replace the question mark to make the equation true?

A $9 \times \underline{\quad ? \quad} = 56$

B $48 \div \underline{\quad ? \quad} = 8$

C $30 \times 5 = \underline{\quad ? \quad}$

D $24 \div 3 = \underline{\quad ? \quad}$

12 The table shows the total number of wheels Mr. Monroe needs to make different numbers of wagons.

WHEELS NEEDED FOR WAGONS

| Number of Wagons	Total Number of Wheels
1	4
2	8
3	12
4	16

What is one pattern that can be seen in the table?

A The number of wheels increases by 1 each time.

B The number of wheels increases by 3 each time.

C The number of wheels increases by 4 each time.

D The number of wheels increases by 12 each time.

GO ON

13 If the equation $5 \times \underline{\quad ? \quad} = 45$ is true, then which expression can be used to find the missing value?

A $9 \div 45$

B $5 \div 45$

C $45 \div 9$

D $45 \div 5$

14 A diagram of Keisha's poster board is shown below.
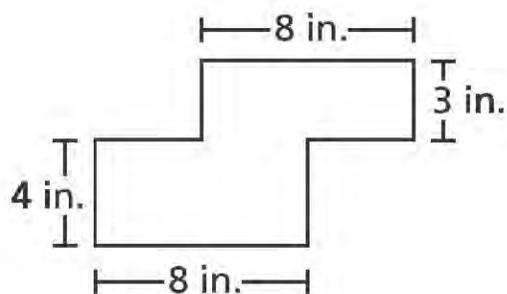

What was the total area, in square inches, of Keisha's poster board?

A 46 square inches

B 56 square inches

C 112 square inches

D 192 square inches

19 Maddie will ride her bike a total of 56 miles over 7 days. She will ride the same number of miles each day. What is the total number of miles Maddie will ride each day?

A 8

B 9

C 49

D 63

20 Four students each drew a figure. Each student shaded part of the figure to represent a fraction.
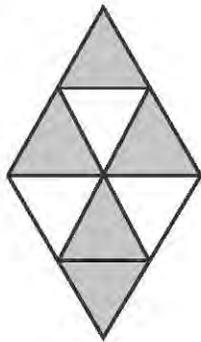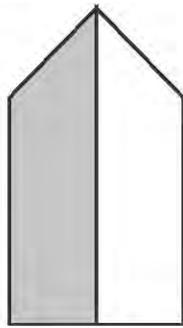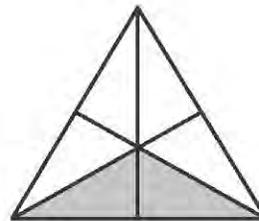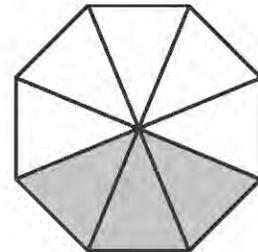

Selena   Tara   Carson   Erik

Which sentence about the figures is true?

A Selena shaded $\frac{5}{8}$ of her figure.

B Tara shaded $\frac{1}{1}$ of her figure.

C Carson shaded $\frac{2}{4}$ of his figure.

D Erik shaded $\frac{5}{3}$ of his figure.

GO ON

21 A group of students played a basketball game after school. Which total can be found using the expression 7 × 2?

   A the total number of points if a player made 7 shots and each shot was worth 2 points

   B the total number of basketballs if 7 basketballs were old and 2 basketballs were new

   C the total number of points if one player had 7 points and a different player had 2 points

   D the total number of basketballs used if there were 7 basketballs and 2 of the basketballs were not used

22 Which two fractions both represent the same location on a number line?

   A $\dfrac{2}{3}, \dfrac{1}{5}$

   B $\dfrac{3}{4}, \dfrac{6}{8}$

   C $\dfrac{2}{4}, \dfrac{3}{5}$

   D $\dfrac{5}{6}, \dfrac{5}{8}$

Grade 3
2016 Common Core
Mathematics Test
Book 1
April 13–15, 2016

Name: _____

New York State Testing Program

2016 Common Core Mathematics Test
Book 2

Grade 3

April 13–15, 2016

Released Questions

Book 2

TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

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- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.

- Plan your time.

23 What number makes the equation below true?

$$81 \div \underline{\hspace{1cm}} = 9$$

A 8

B 9

C 72

D 90

24 Which expression is equal to 720?

A 7×20

B 8×80

C 9×80

D 9×90

25 Mr. Kohlberg owns a flower shop. At the beginning of the day, he had 152 roses. Mr. Kohlberg sold 96 of the roses and then wanted to separate the rest of the roses equally among 8 vases. What will be the total number of roses in each vase?

A 7

B 12

C 48

D 56

GO ON

26 There are four shapes shown below.
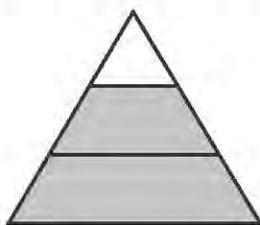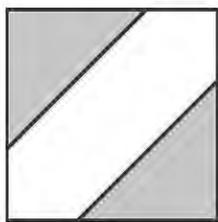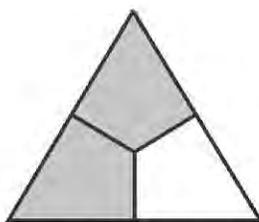
Shape 1   Shape 2   Shape 3   Shape 4
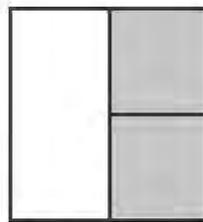
Which of the shapes is $\frac{2}{3}$ shaded?

A shape 1

B shape 2

C shape 3

D shape 4

27 Which situation could be represented by the expression 6×2?

A Rocco hiked six miles each day for two days.

B Rocco had six baseballs and gave away two of them.

C Rocco had a total of six tennis balls in two cans.

D Rocco biked six miles and then continued for two more miles.

31 Mr. Gomez built a deck. The deck had an area of 29 square meters. Which figure could represent the deck?

A

KEY
☐ = 1 square meter

B

KEY
☐ = 1 square meter

C

KEY
☐ = 1 square meter

D

KEY
☐ = 1 square meter
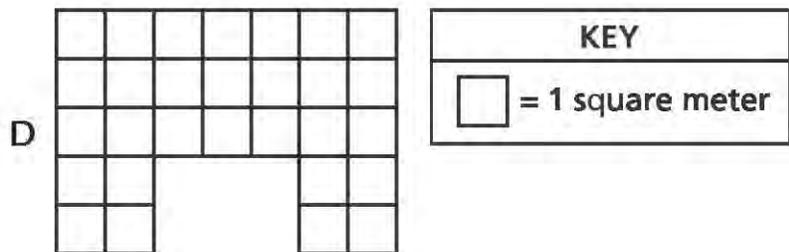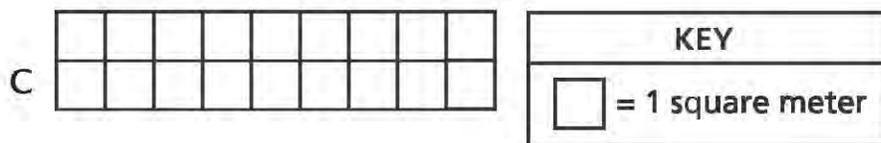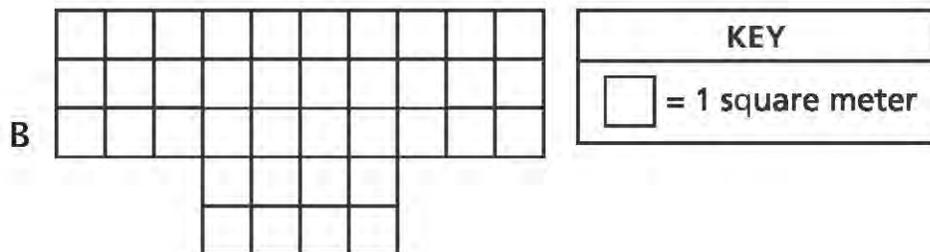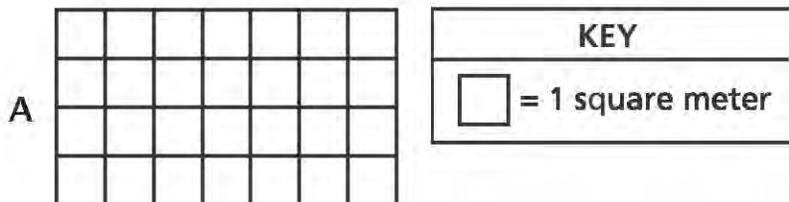
GO ON

32 A number belongs in the box below. When the number is rounded to the nearest hundred, the result will be 900.

$$\boxed{?}$$

Which number belongs in the box?

A 849

B 852

C 960

D 999

33 Kara has a bucket of water, as shown below.
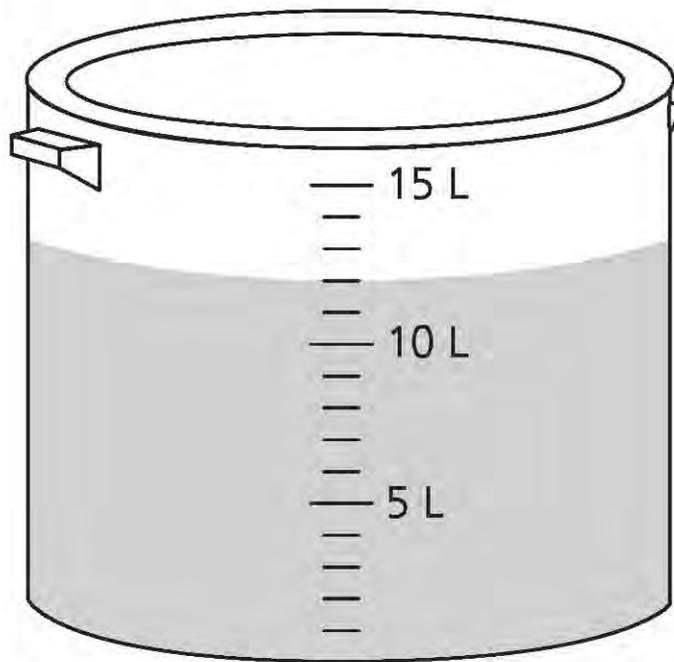
Kara wants to pour all of the water equally into 3 bowls for her dogs. How many liters of water should Kara pour into each bowl?

A 4

B 5

C 9

D 15

GO ON

34 Leroy made a game board, shown below. Each small square on the game board has the same area.
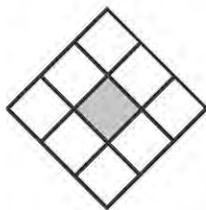
What fraction of the game board is shaded?

A $\frac{1}{9}$

B $\frac{1}{8}$

C $\frac{1}{6}$

D $\frac{1}{3}$

38 Tomas made a poster for his science project. The shaded part of the figure below shows the area of his poster.

KEY
☐ = 1 square unit
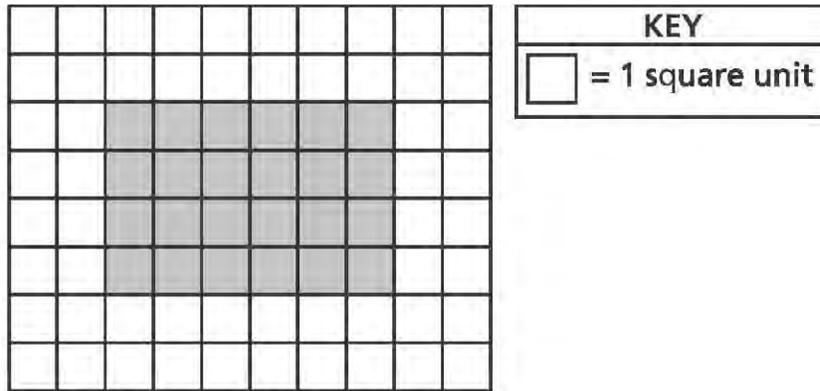
Which figure has the same area as the poster?

A

├──── 8 units ────┤

⌐ 3 units

C

├──── 7 units ────┤

⌐ 3 units

B

├── 6 units ──┤

⌐ 6 units

D

├─ 5 units ─┤

⌐ 5 units
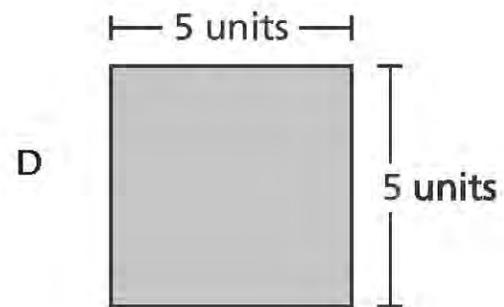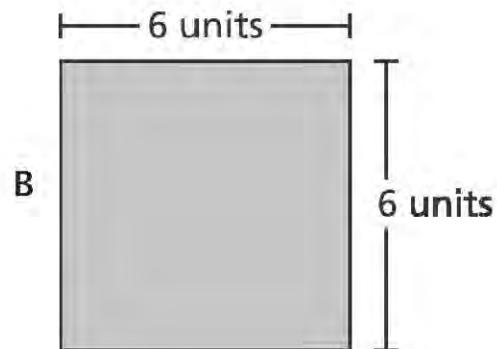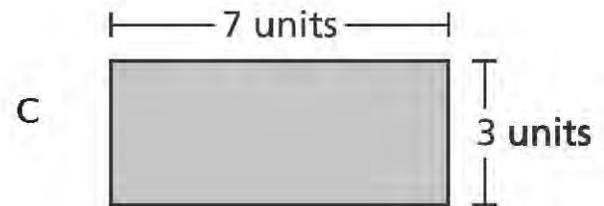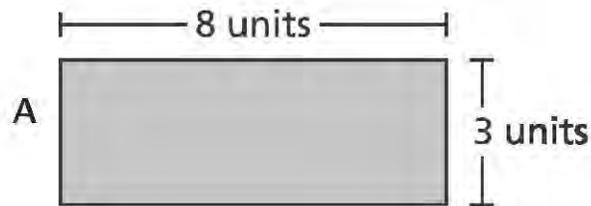
39 The first number in a number pattern is 28. The pattern rule is to add 14 to get the next number in the pattern. If the pattern continues, which statement is true?

A All the numbers in the pattern can be divided equally by 10.

B All the numbers in the pattern can be divided equally by 4.

C All the numbers in the pattern can be divided equally by 8.

D All the numbers in the pattern can be divided equally by 7.

40 There were 6 rows of chairs set up for a meeting. Each row had 8 chairs. What was the total number of chairs set up for the meeting?

A 14

B 36

C 48

D 64

41 A circle is divided into parts. Each part is $\frac{1}{4}$ of the total area of the circle. Which sentence describes the circle?

A The circle has 1 small part and 3 large parts.

B The circle has 1 small part and 4 large parts.

C The circle has 4 parts that are each the same size.

D The circle has 5 parts that are each the same size.

GO ON

42 A baker made 232 muffins. He sent 190 of the muffins to a local hotel. He will put the rest of the muffins in boxes. Each box can hold 6 muffins. Which equation can be used to find b, the number of boxes the baker will need?

A $(232 - 190) \div 6 = b$

B $(232 + 190) \times 6 = b$

C $(232 - 190) \times 6 = b$

D $(232 + 190) \div 6 = b$

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- Be sure to show your work when asked.
- Plan your time.

45 Haley cut pieces of ribbon to make bookmarks. Each bookmark was $\frac{1}{8}$ foot long. Draw a point at $\frac{1}{8}$ on the number line below and label the point A.
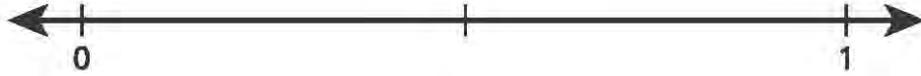
Haley placed 5 of the bookmarks end to end.

Draw a point on the number line below to represent the total length of the 5 bookmarks. Label the point B.
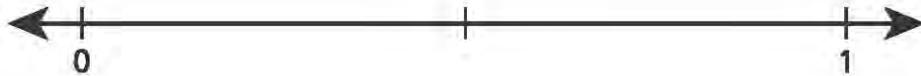
46 Katia received a sticker each time she picked up her toys. She placed some of the stickers on page 1 of her scrapbook, as shown below.

Page 1
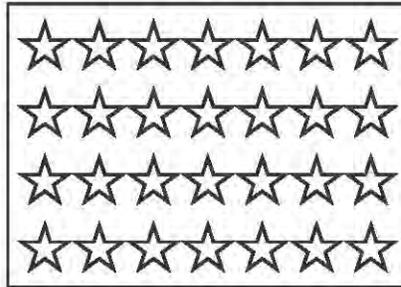
Write numbers in the blanks below to show two multiplication facts represented by the array of stickers on page 1 of her scrapbook.

_____ × _____ = _____

_____ × _____ = _____

Katia placed the rest of the stickers on pages 2 and 3 of her scrapbook, as shown below.

Page 2   **Page 3**

Complete the expression below to represent the total number of stickers on pages 2 and 3.

_____ × (_____ + _____)

GO ON

47 Several students voted on their favorite sports activities.

- Eight students voted for basketball.
- Three students voted for volleyball.
- Seven students voted for baseball.
- Four students voted for kickball.

Complete the picture graph below to show the data.

FAVORITE SPORT ACTIVITY

Activity	Number of Students
Basketball	
Volleyball	
Baseball	
Kickball	

KEY
◯ = 2 students

GO ON

48 Nadia had a strip of green paper that was 18 inches long. She cut the green paper into three pieces with equal lengths.

She also had a strip of red paper that was 24 inches long. She cut the red paper into pieces that were the same length as each cut piece of green paper.

When she was finished cutting, how many pieces of red and green paper did Nadia have in total?

Show your work.

Answer _____ pieces

49 Mr. Nuccio's sandwich shop was 9 yards long and 7 yards wide before he added a new section. The shaded squares below show the new section.

KEY
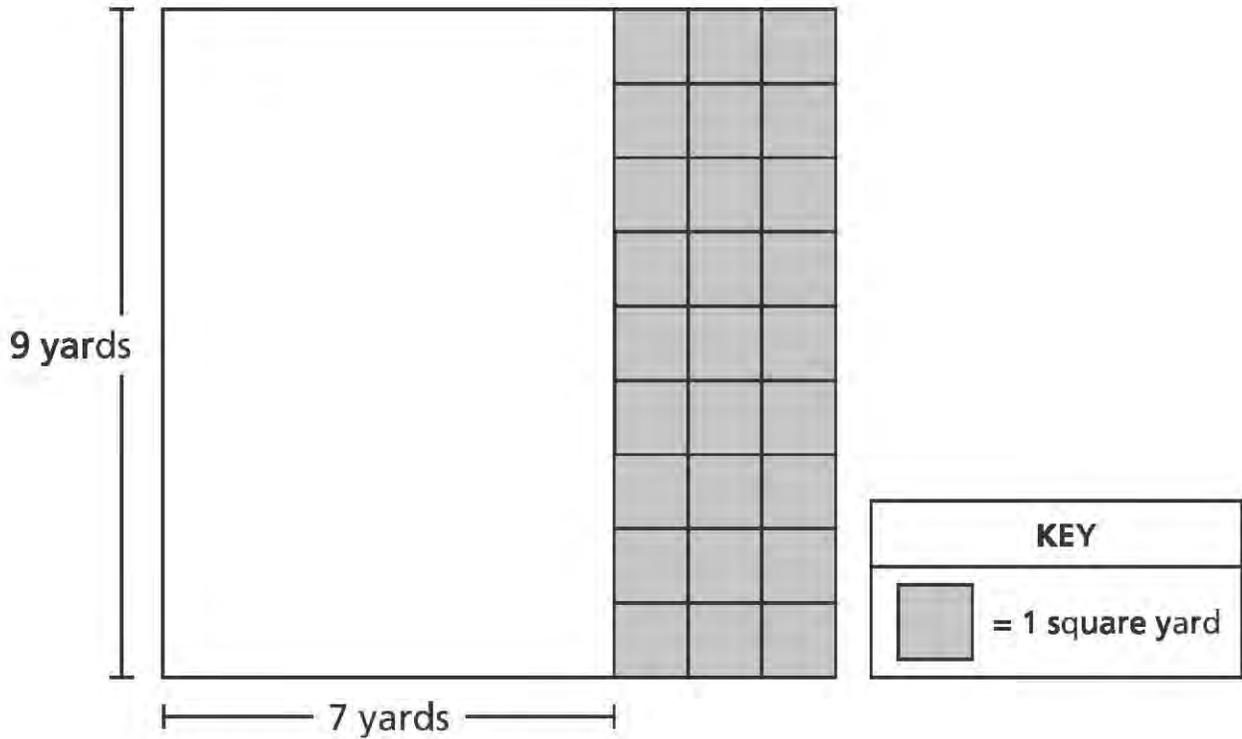
▢ = 1 square yard

What is the total area, in square yards, of Mr. Nuccio's sandwich shop after the new section was added?

Show your work.

Answer _____ square yards

50 Sharon wants to make key chains with different-colored beads, as shown below.

KEY CHAIN

Green Beads   Red Beads   Blue Beads
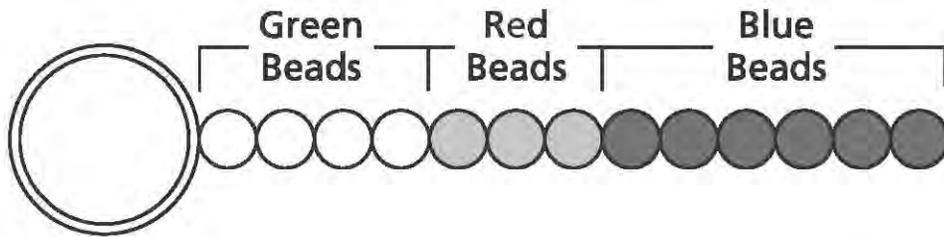
Each key chain will look the same. Sharon will use a total of 20 green beads to make all her key chains. What is the number of red beads and the number of blue beads she will need to make all of the key chains?

Show your work.

Answer _____ red beads

_____ blue beads

51 Shade the models below to show 3 equivalent fractions and explain why they are equivalent.

A   **B**   **C**

_____

_____

_____

GO ON
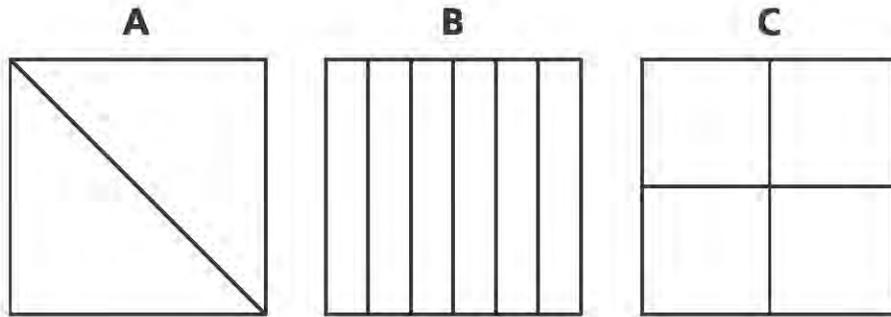
52 There were 80 adults and 20 children at a school play. The school collected $8 for each adult's ticket and $3 for each child's ticket. The school donated $125 of the money from tickets to a local theater program and used the remaining money to buy supplies for next year's school play.

How much money does the school have to buy supplies for next year's play?

Show your work.

Answer $ _____

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Grade 3   **Released Questions Available on EngageNY**

Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions: Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
Book 1									
1	Multiple Choice	A	1	CCSS.Math.Content.3.MD.A.1	Measurement and Data		0.79		
2	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.1	Number and Operations in Base Ten		0.77		
3	Multiple Choice	A	1	CCSS.Math.Content.3.NF.A.3c	Number and Operations—Fractions	CCSS.Math.Content.3.NF.A.2b	0.31		
7	Multiple Choice	A	1	CCSS.Math.Content.3.NBT.A.3	Number and Operations in Base Ten	CCSS.Math.Content.3.OA.D.9	0.83		
8	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking		0.58		
12	Multiple Choice	C	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking		0.81		
13	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.6	Operations and Algebraic Thinking		0.55		
14	Multiple Choice	B	1	CCSS.Math.Content.3.MD.C.7d	Measurement and Data		0.62		
19	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking		0.65		
20	Multiple Choice	A	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions	CCSS.Math.Content.3.G.A.2	0.85		
21	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking		0.73		
22	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3a	Number and Operations—Fractions		0.49		
Book 2									
23	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking		0.84		
24	Multiple Choice	C	1	CCSS.Math.Content.3.NBT.A.3	Number and Operations in Base Ten		0.57		
25	Multiple Choice	A	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking		0.53		
26	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions	CCSS.Math.Content.3.G.A.2	0.72		

Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions: Percentage of Students Who Answered Correctly (P-Value)	Constructed Response Questions: Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
27	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.1	Operations and Algebraic Thinking		0.64		
31	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.6	Measurement and Data	CCSS.Math.Content.3.MD.C.5b	0.89		
32	Multiple Choice	B	1	CCSS.Math.Content.3.NBT.A.1	Number and Operations in Base Ten		0.67		
33	Multiple Choice	A	1	CCSS.Math.Content.3.MD.A.2	Measurement and Data		0.60		
34	Multiple Choice	A	1	CCSS.Math.Content.3.G.A.2	Geometry		0.89		
38	Multiple Choice	A	1	CCSS.Math.Content.3.MD.C.7a	Measurement and Data	CCSS.Math.Content.3.MD.C.7b	0.59		
39	Multiple Choice	D	1	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking		0.41		
40	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking		0.81		
41	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions		0.58		
42	Multiple Choice	A	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking		0.59		
Book 3									
45	Constructed Response		2	CCSS.Math.Content.3.NF.A.2	Number and Operations—Fractions			0.86	0.43
46	Constructed Response		2	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking	CCSS.Math.Content.3.OA.A.3		1.27	0.63
47	Constructed Response		2	CCSS.Math.Content.3.MD.B.3	Measurement and Data	CCSS.Math.Content.3.NF.A.1		1.37	0.69
48	Constructed Response		2	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking	CCSS.Math.Content.3.OA.A.3		0.49	0.24
49	Constructed Response		2	CCSS.Math.Content.3.MD.C.7c	Measurement and Data	CCSS.Math.Content.3.MD.C.7b		1.10	0.55
50	Constructed Response		3	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking	CCSS.Math.Content.3.OA.D.8		1.12	0.37
51	Constructed Response		3	CCSS.Math.Content.3.NF.A.3b	Number and Operations—Fractions	CCSS.Math.Content.3.NF.A.3d, CCSS.Math.Content.3.NF.A.3a		1.59	0.53
52	Constructed Response		3	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking	CCSS.Math.Content.3.NBT.A.3		1.01	0.34

*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.