



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

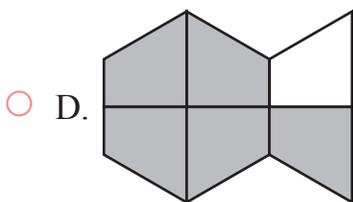
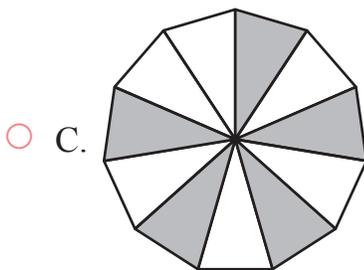
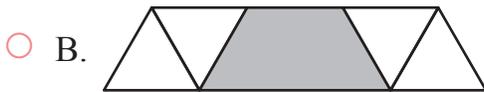
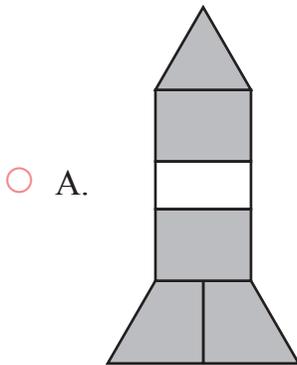
**Released Items
Support Materials
2013**

**Grade 4
Mathematics**

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

N&O 3.1 Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 999 through equivalency, composition, decomposition, or place value **using models, explanations, or other representations**; and **positive fractional numbers** (benchmark fractions: $\frac{a}{2}$, $\frac{a}{3}$, $\frac{a}{4}$, $\frac{a}{6}$, or $\frac{a}{8}$, where a is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the number of parts in the whole is equal to the denominator; and **decimals** (within a context of money) as a part of 100 **using models, explanations, or other representations**.

- 1 Kenneth made a design and shaded $\frac{5}{6}$ of the design gray. Which design could he have made?



NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

N&O 3.1 Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 999 through equivalency, composition, decomposition, or place value **using models, explanations, or other representations**; and **positive fractional numbers** (benchmark fractions: $\frac{a}{2}$, $\frac{a}{3}$, $\frac{a}{4}$, $\frac{a}{6}$, or $\frac{a}{8}$, where a is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the number of parts in the whole is equal to the denominator; and **decimals** (within a context of money) as a part of 100 **using models, explanations, or other representations**.

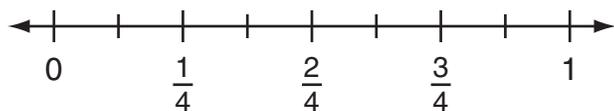


2 Which is another way to write 590?

- A. 59 tens
- B. 59 hundreds
- C. 50 tens + 9 ones
- D. 5 hundreds + 9 ones

N&O 3.2 Demonstrates understanding of the relative magnitude of numbers from 0 to 999 by ordering whole numbers; by comparing whole numbers to benchmark whole numbers (100, 250, 500, or 750); or by **comparing whole numbers to each other**; and **comparing or identifying equivalent positive fractional numbers** ($\frac{a}{2}$, $\frac{a}{3}$, $\frac{a}{4}$ where a is a whole number greater than 0 and less than or equal to the denominator) using models, number lines, or explanations.

3 Look at this number line.



What fraction is equivalent to $\frac{3}{4}$?

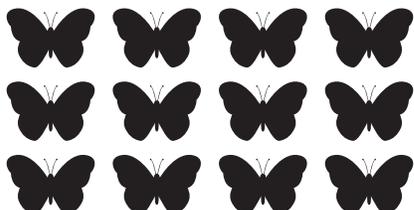
- A. $\frac{3}{6}$
- B. $\frac{6}{8}$
- C. $\frac{4}{3}$
- D. $\frac{6}{4}$

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

N&O 3.3 Demonstrates conceptual understanding of mathematical operations by describing or illustrating the inverse relationship between addition and subtraction of whole numbers; and the relationship between repeated addition and multiplication using models, number lines, or explanations.



4 Look at this group of butterflies.



Holly wrote two different number sentences that correctly represent this group of butterflies. Which two number sentences did she write?

A. $3 \times 4 = \square$
 $3 + 4 = \square$

B. $3 + 4 = \square$
 $3 + 3 + 3 + 3 = \square$

C. $3 \times 4 = \square$
 $3 \times 3 \times 3 \times 3 = \square$

D. $3 \times 4 = \square$
 $3 + 3 + 3 + 3 = \square$

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

N&O 3.4 Accurately solves problems involving addition and subtraction with and without regrouping; the concept of multiplication; and addition or subtraction of decimals (in the context of money).



- 5 Jamie had 500 seeds in a bag. He planted 132 seeds in his garden and 115 seeds in flowerpots. How many seeds does Jamie have left in the bag?
- A. 163
 - B. 247
 - C. 253
 - D. 347

N&O 3.4 Accurately solves problems involving addition and subtraction with and without regrouping; the concept of multiplication; and addition or subtraction of decimals (in the context of money).

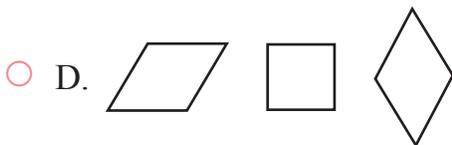
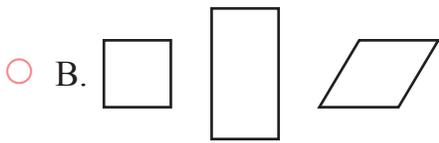


- 6 Some people from Quincy School visited a firehouse. There were 9 teachers and 8 groups of students. Each group had 4 students. How many people from Quincy School visited the firehouse?
- A. 44
 - B. 41
 - C. 32
 - D. 21

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

G&M 3.1 Uses properties or attributes of angles (number of angles) or sides (number of sides or length of sides) or composition or decomposition of shapes to identify, describe, or distinguish among triangles, squares, rectangles, rhombi, trapezoids, hexagons, or circles.

7 In which set are **all** the shapes rhombuses?



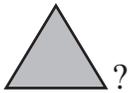
NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

F&A 3.1 Identifies and extends to specific cases a variety of patterns (linear and non-numeric) represented in models, tables, or sequences by extending the pattern to the next one, two, or three elements, or finding missing elements.

- 8 Kelsey covered some numbers in this pattern with shapes.

86, 74, 62, 50, , , 

What number did Kelsey cover with a



- A. 12
- B. 14
- C. 26
- D. 42

F&A 3.4 Demonstrates conceptual understanding of equality by showing equivalence between two expressions using models or different representations of the expressions; or by finding the value that will make an open sentence true (e.g., $2 + \square = 7$). (limited to one operation and limited to use addition, subtraction, or multiplication)

- 9 Look at these number sentences.

$$5 + 1 + \heartsuit = 10$$

$$11 - \star = \heartsuit$$

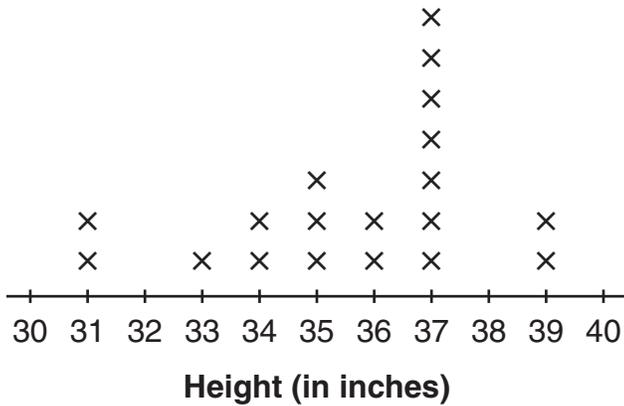
Each \heartsuit has the same value. What is the value of the \star ?

- A. 2
- B. 4
- C. 5
- D. 7

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

DSP 3.1 **Interprets a given representation** (line plots, tally charts, tables, or bar graphs) to answer questions related to the data, to analyze the data to formulate conclusions, or to make predictions. (IMPORTANT: *Analyzes data consistent with concepts and skills in M(DSP)–3–2.*)

- 10 Each student in Mrs. Rey’s class built a snowman. This line plot shows the height of each student’s snowman.



Key
× represents 1 snowman

What is the difference in height between the shortest snowmen and the tallest snowmen?

- A. 10 inches
- B. 8 inches
- C. 6 inches
- D. 4 inches

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

N&O 3.4 Accurately solves problems involving addition and subtraction with and without regrouping; the concept of multiplication; and addition or subtraction of decimals (in the context of money).



- 11 A toy store sold 546 cars and 285 trucks. How many more cars than trucks did the toy store sell?

Scoring Guide:

Score	Description
1	for correct answer, 261
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE A)



- 11 A toy store sold 546 cars and 285 trucks. How many more cars than trucks did the toy store sell?

The toy store sold 261 more cars than trucks.

The student's response is correct.

SCORE POINT 1
(EXAMPLE B)



- 11 A toy store sold 546 cars and 285 trucks. How many more cars than trucks did the toy store sell?

The toy store sold 261 more cars than trucks. I know this because, $546 - 285 = 261$. To check my answer, I added 285 and 261 up together and got 546. This is how I know the the toy store sold 261 more cars than trucks.

The student's response is correct. (Showing work is not required.)

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 0
(EXAMPLE A)



- 11 A toy store sold 546 cars and 285 trucks. How many more cars than trucks did the toy store sell?

$$\begin{array}{r} 3 \\ 546 \\ - 285 \\ \hline 161 \end{array}$$

answer
161

The student's response is incorrect.

SCORE POINT 0
(EXAMPLE B)



- 11 A toy store sold 546 cars and 285 trucks. How many more cars than trucks did the toy store sell?

$$\begin{array}{r} 1 \\ 546 \\ + 285 \\ \hline 831 \end{array}$$

more cars than trucks.

The student's response is incorrect.

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

F&A 3.4 Demonstrates conceptual understanding of equality by showing equivalence between two expressions using models or different representations of the expressions; or by finding the value that will make an open sentence true (e.g., $2 + \square = 7$). (limited to one operation and limited to use addition, subtraction, or multiplication)

12 Look at this number sentence. Each square has the **same** value.

$$12 - \square = \square$$

What is the value of each square?

Scoring Guide:

Score	Description
1	for correct answer, 6
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1

- 12 Look at this number sentence. Each square has the **same** value.

$$12 - \square = \square$$

What is the value of each square?

the value is 6

The student's response is correct.

SCORE POINT 0

- 12 Look at this number sentence. Each square has the **same** value.

$$12 - \square = \square$$

What is the value of each square?

0 or 12

The student's response is incorrect.

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

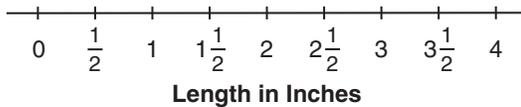
DSP 3.3 Identifies or describes representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M(DSP)–3–1.

- 13 Kyle measured the lengths of eight paw prints he saw on a hike. He made this list to show the length, in inches, of each paw print he measured.

$1\frac{1}{2}$ inches
 2 inches
 $3\frac{1}{2}$ inches
 2 inches
 $\frac{1}{2}$ inch
 $\frac{1}{2}$ inch
 2 inches
 $2\frac{1}{2}$ inches

Use the data from Kyle’s list to complete this line plot.

Paw Prints



Key
× represents 1 paw print

Scoring Guide:

Score	Description
1	for a correct line plot
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

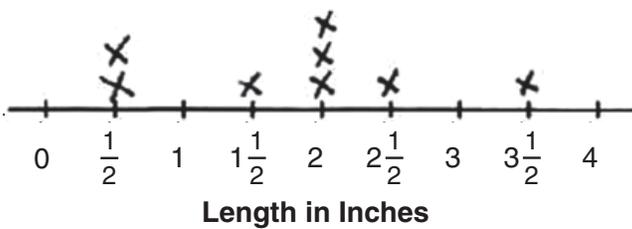
SCORE POINT 1

- 13 Kyle measured the lengths of eight paw prints he saw on a hike. He made this list to show the length, in inches, of each paw print he measured.

$1\frac{1}{2}$ inches
2 inches
$3\frac{1}{2}$ inches
2 inches
$\frac{1}{2}$ inch
$\frac{1}{2}$ inch
2 inches
$2\frac{1}{2}$ inches

Use the data from Kyle's list to complete this line plot.

Paw Prints



The student's response is correct.

Key

x represents 1 paw print

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

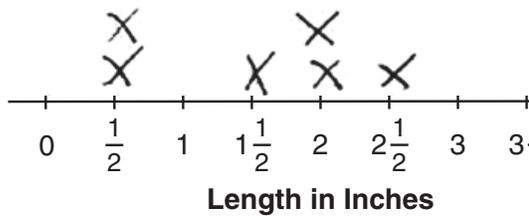
SCORE POINT 0
(EXAMPLE A)

- 13 Kyle measured the lengths of eight paw prints he saw on a hike. He made this list to show the length, in inches, of each paw print he measured.

$1\frac{1}{2}$ inches
2 inches
$3\frac{1}{2}$ inches
2 inches
$\frac{1}{2}$ inch
$\frac{1}{2}$ inch
2 inches
$2\frac{1}{2}$ inches

Use the data from Kyle's list to complete this line plot.

Paw Prints



Key × represents 1 paw print
--

The student's response is incorrect.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

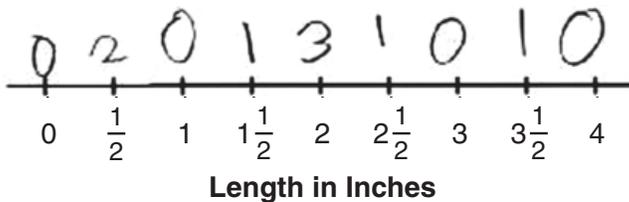
SCORE POINT 0
(EXAMPLE B)

- 13 Kyle measured the lengths of eight paw prints he saw on a hike. He made this list to show the length, in inches, of each paw print he measured.

$1\frac{1}{2}$ inches
2 inches
 $3\frac{1}{2}$ inches
2 inches
 $\frac{1}{2}$ inch
 $\frac{1}{2}$ inch
2 inches
 $2\frac{1}{2}$ inches

Use the data from Kyle's list to complete this line plot.

Paw Prints



The student's response is incorrect.

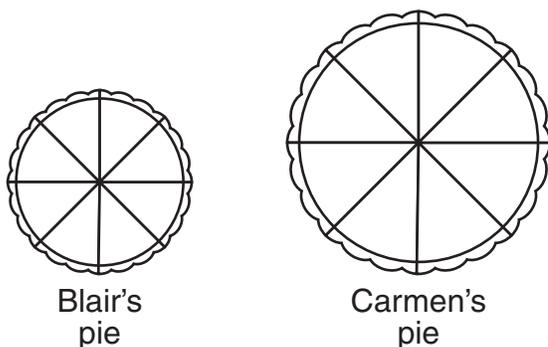
Key

× represents 1 paw print

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

N&O 3.1 Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 999 through equivalency, composition, decomposition, or place value **using models, explanations, or other representations**; and **positive fractional numbers** (benchmark fractions: $\frac{a}{2}$, $\frac{a}{3}$, $\frac{a}{4}$, $\frac{a}{6}$, or $\frac{a}{8}$, where a is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the number of parts in the whole is equal to the denominator; and **decimals** (within a context of money) as a part of 100 **using models, explanations, or other representations**.

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

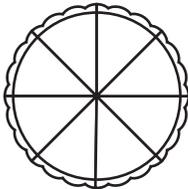
Scoring Guide:

Score	Description
2	for correct answer in part a, $\frac{2}{8}$ or equivalent , and correct explanation in part b for why statement is incorrect
1	for correct answer in part a only OR for correct explanation in part b only
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

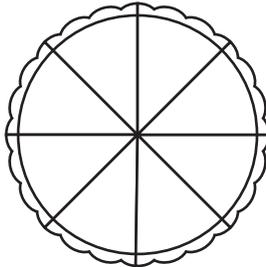
NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 2
(EXAMPLE A)

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair's
pie



Carmen's
pie

Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

$$\frac{2}{8}$$

Part a: The student's response is correct.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

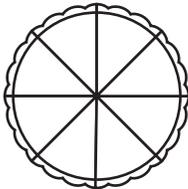
Blair's statement is not correct
because the pies are both cut into
eighths but Blair's pie is smaller
so that means her pieces are smaller.

Part b: The student's explanation is correct.

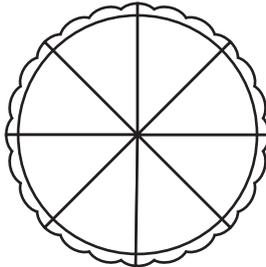
NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 2
(EXAMPLE B)

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair's
pie



Carmen's
pie

Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

$$\frac{1}{4}$$

Part a: The student's response is correct.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

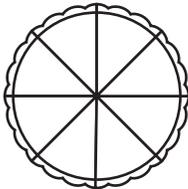
Blair is not correct. Her pie is smaller so Blair had less pie.

Part b: The student's explanation is correct.

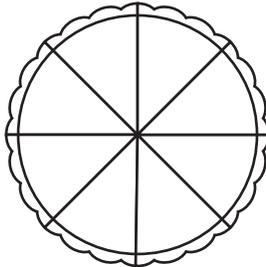
NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE A)

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair's
pie



Carmen's
pie

Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

Blair ate 2 out of 8 peaces of her pie.

Part a: The student's response is incorrect.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

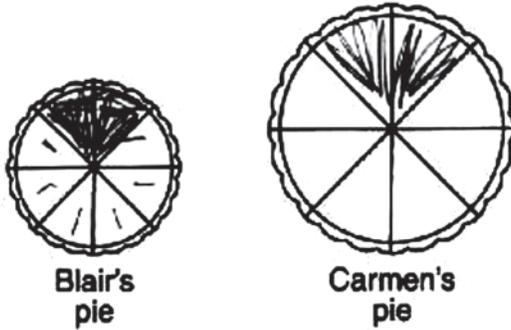
It is not true because Carmens' pie is bigger.

Part b: The student's explanation is correct.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE B)

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

$$\frac{2}{8}$$

Part a: The student's response is correct.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

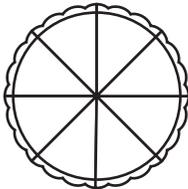
Blair's statement is correct because the pies are in equal pieces.

Part b: The student's explanation is incorrect.

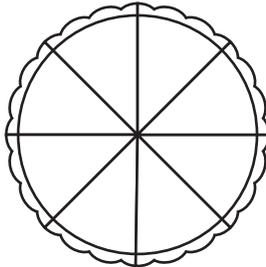
NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 0

- 14 Blair and Carmen each made a pie. Each of these pies is cut into equal pieces.



Blair's
pie



Carmen's
pie

Blair ate 2 pieces of her pie.

- a. Write a fraction to show the part of the pie Blair ate.

$$\frac{6}{8}$$

Part a: The student's response is incorrect.

Carmen ate 2 pieces of her pie. Blair said, "Carmen and I ate the same amount of pie."

- b. Explain why Blair's statement is or is not correct.

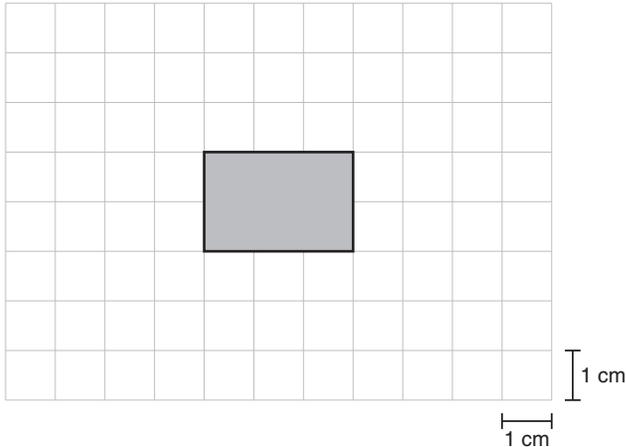
It is correct because
they both ate two pieces
of their pie.

Part b: The student's explanation is incorrect.

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

G&M 3.6 Demonstrates conceptual understanding of perimeter of polygons, and the area of rectangles on grids using a variety of models or manipulatives. Expresses all measures using appropriate units.

- 15 Riley shaded squares gray on this grid to make a shape.



- a. What is the **perimeter**, in centimeters, of the shape Riley made?

_____ centimeters

Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

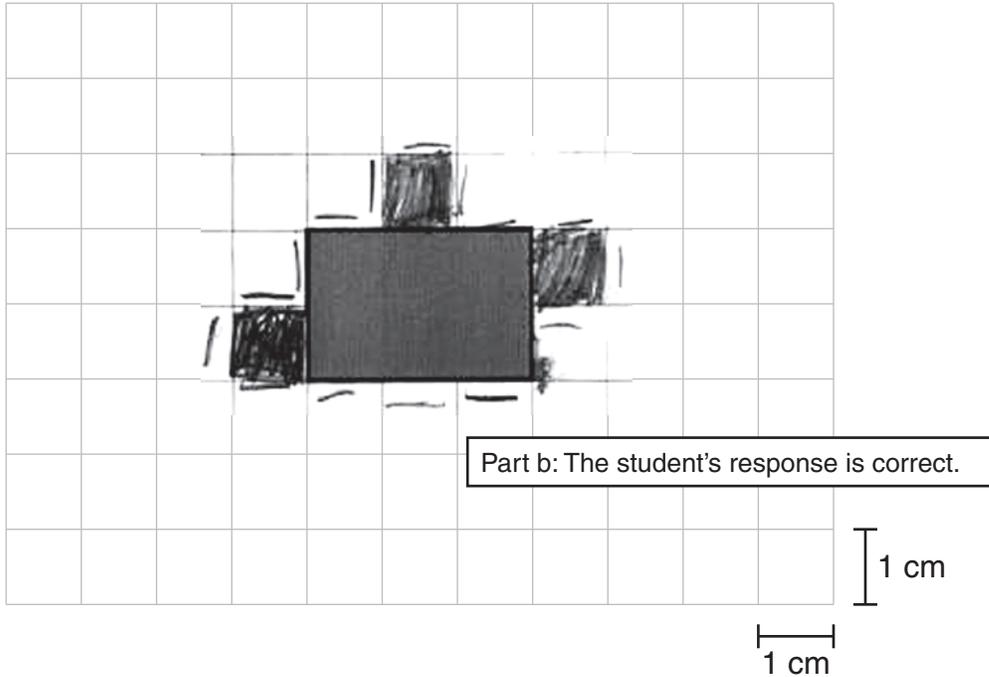
Scoring Guide:

Score	Description
2	for correct answer in part a, 10 , and correct shape in part b
1	for correct answer in part a only OR for correct shape in part b only
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 2
(EXAMPLE A)

- 15 Riley shaded squares gray on this grid to make a shape.



- a. What is the **perimeter**, in centimeters, of the shape Riley made?

10 centimeters

Part a: The student's response is correct.

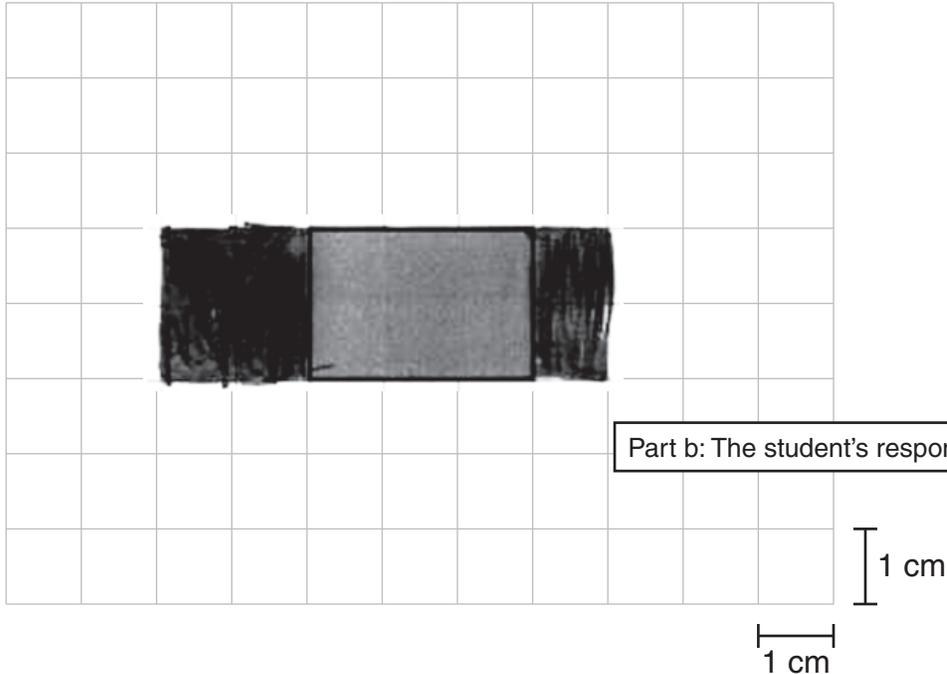
Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 2
(EXAMPLE B)

- 15 Riley shaded squares gray on this grid to make a shape.



- a. What is the **perimeter**, in centimeters, of the shape Riley made?

10 centimeters

Part a: The student's response is correct.

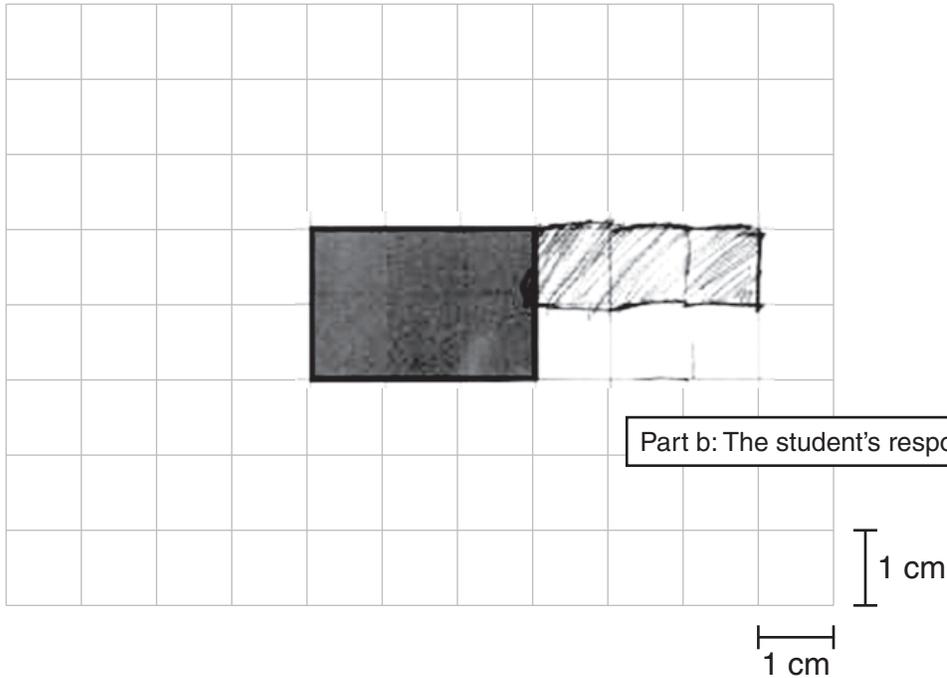
Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE A)

- 15 Riley shaded squares gray on this grid to make a shape.



Part b: The student's response is correct.

- a. What is the **perimeter**, in centimeters, of the shape Riley made?

9 centimeters

Part a: The student's response is incorrect.

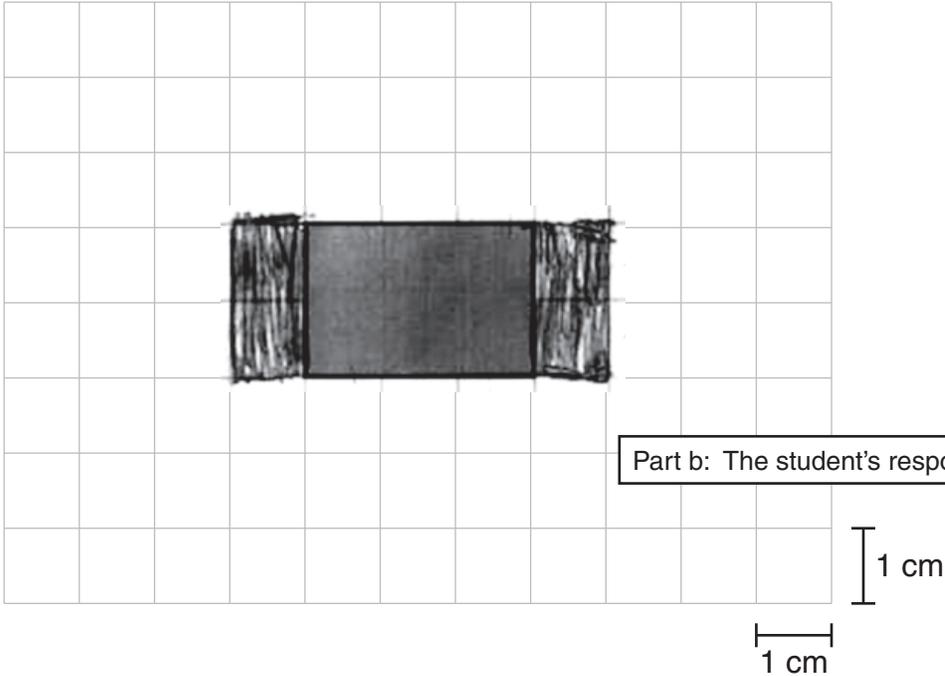
Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE B)

- 15 Riley shaded squares gray on this grid to make a shape.



- a. What is the **perimeter**, in centimeters, of the shape Riley made?

10 centimeters

Part a: The student's response is correct.

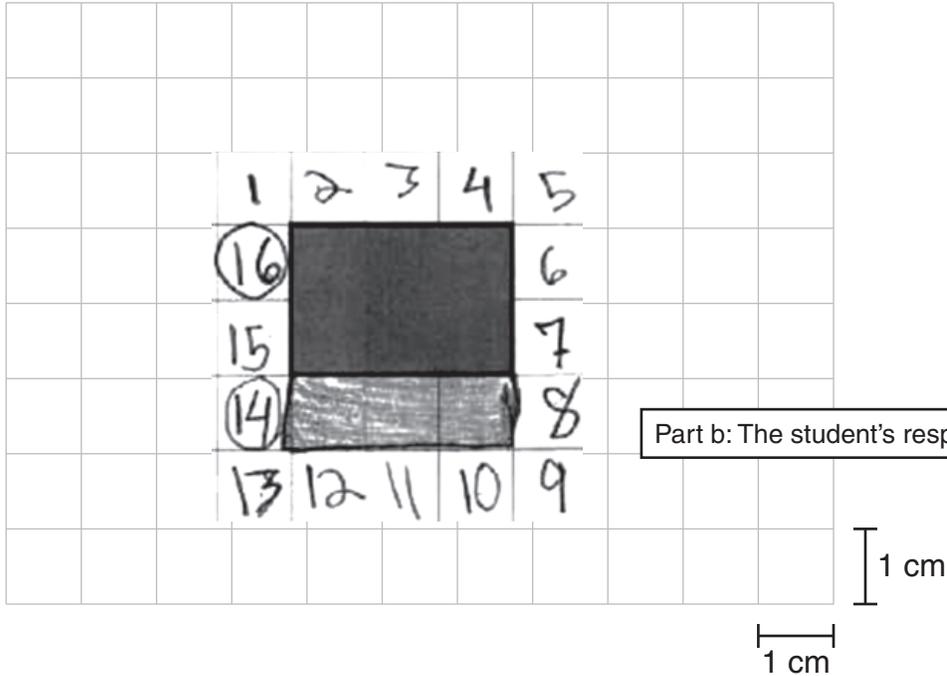
Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 0

- 15 Riley shaded squares gray on this grid to make a shape.



Part b: The student's response is incorrect.

- a. What is the **perimeter**, in centimeters, of the shape Riley made?

14 centimeters

Part a: The student's response is incorrect.

Riley wants to change her shape so that the new shape has a perimeter of 16 centimeters.

- b. On the grid above, use your pencil to add shaded squares to Riley's shape so that the new shape has a perimeter of 16 centimeters. Be sure to shade the squares.

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

DSP 3.2 Analyzes patterns, trends, or distributions in data in a variety of contexts by determining or using most frequent (mode), least frequent, largest, or smallest.

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	
Mr. Blake	
Mrs. Ryan	

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez’s class, Mr. Blake’s class, and Mrs. Ryan’s class. Show your work or explain how you know.

Scoring Guide:

Score	Description
2	for correct answer, 17, 20, 20 , with sufficient explanation given or work shown to indicate correct strategy
1	for correct answer, with insufficient or no explanation given or work shown OR for appropriate strategy, with incorrect or missing work
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

**NECAP 2013 RELEASED ITEMS
GRADE 4 MATH**

**SCORE POINT 2
(EXAMPLE A)**

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	20
Mr. Blake	20
Mrs. Ryan	17

The student's response is correct, with sufficient work shown.

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez's class, Mr. Blake's class, and Mrs. Ryan's class. Show your work or explain how you know.

$$20 + (21 \times 2) + 18 = 80$$

$$\begin{array}{r} 20 \\ \times 2 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 180 \\ + 40 \\ \hline 220 \end{array}$$

$$\begin{array}{r} 120 \\ + 17 \\ \hline 137 \end{array}$$

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 2
(EXAMPLE B)

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	20
Mr. Blake	20
Mrs. Ryan	17

The student's response is correct, with sufficient explanation given.

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez's class, Mr. Blake's class, and Mrs. Ryan's class. Show your work or explain how you know.

I added up 20, 21, 21, and 18
it equaled 80. I subtracted 80
from 137 and that equaled 57. I put
40 from chart 2 20's. I subtracted
17 > 0 in Mrs. Ryan's came out with
I put 17.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE A)

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	20
Mr. Blake	17
Mrs. Ryan	20

The student's response is correct, with no explanation or work shown.

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez's class, Mr. Blake's class, and Mrs. Ryan's class. Show your work or explain how you know.

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 1
(EXAMPLE B)

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	20
Mr. Blake	20
Mrs. Ryan	27

The student's response is incorrect. The student's work is appropriate, but contains a computation error.

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez's class, Mr. Blake's class, and Mrs. Ryan's class. Show your work or explain how you know.

$$\begin{aligned} 20 + 21 &= 31 \\ 31 + 21 &= 52 \\ 52 + 18 &= 70 \\ 70 + 20 &= 90 \\ 90 + 20 &= 110 \end{aligned}$$

$$110 + 27 = 137$$

NECAP 2013 RELEASED ITEMS
GRADE 4 MATH

SCORE POINT 0

- 16 Mr. Larson is making this chart to show the number of students in each fourth-grade class at Wilson School.

Fourth-Grade Classes

Class	Number of Students
Mr. Hanson	20
Ms. Polk	21
Mrs. Watson	21
Ms. Yazzie	18
Mrs. Lopez	20
Mr. Blake	18
Mrs. Ryan	19

The student's response is incorrect, with insufficient explanation given.

- There is a total of 137 students in the fourth grade.
- The most common number of students in a class is 20.

Complete the chart to show how many students could be in Mrs. Lopez's class, Mr. Blake's class, and Mrs. Ryan's class. Show your work or explain how you know.

I used my coculator

$20 + 21 + 21 + 18 + 20 + 18 + 19$
(on coculator)

Grade 4 Mathematics Released Item Information – 2013

Released Item Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Tools Allowed		✓		✓	✓	✓					✓					
Content Strand ¹	NO	NO	NO	NO	NO	NO	GM	FA	FA	DP	NO	FA	DP	NO	GM	DP
GLE Code	3-1	3-1	3-2	3-3	3-4	3-4	3-1	3-1	3-4	3-1	3-4	3-4	3-3	3-1	3-6	3-2
Depth of Knowledge Code	2	1	2	2	2	2	2	2	2	2	1	2	2	2	3	3
Item Type ²	MC	SA	SA	SA	SA	SA	SA									
Answer Key	D	A	B	D	C	B	D	B	D	B						
Total Possible Points	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2

¹Content Strand: NO = Numbers & Operations, GM = Geometry & Measurement, FA = Functions & Algebra, DP = Data, Statistics, & Probability

²Item Type: MC = Multiple Choice, SA = Short Answer