New York State Testing Program

2026

Mathematics Test

Grade 5

Scoring Leader Materials

Training Set

QAI30797

Note to Scorers

You may notice that some questions in these scoring materials appear with a bracketed credit value showing the respective number of credits. This is due to a style change that was recently field tested; therefore, not all items will have the bracketed credit value. An example of what the bracketed credit value looks like is provided below for your reference.

Example: Stem of the question. [2]

Grade 5 Mathematics Reference Sheet

CONVERSIONS

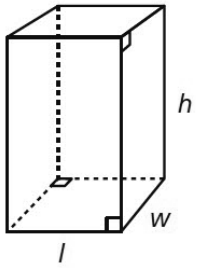
1 yard = 3 feet
1 mile = 5,280 feet
1 mile = 1,760 yards

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

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

FORMULAS AND FIGURES

Right Rectangular Prism



$V = l \times w \times h$
$V = B \times h$

1-Credit Constructed-Response Rubric

1 Credit	A 1-credit response is a **correct answer** to the question which indicates a thorough understanding of mathematical concepts and/or procedures.
0 Credits*	A 0-credit response is incorrect, irrelevant, or incoherent.

* Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

2-Credit Constructed-Response Holistic Rubric

2 Credits	A 2-credit response includes the correct solution to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task. This response • indicates that the student has completed the task correctly, using mathematically sound procedures • contains sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures • may contain inconsequential errors that do not detract from the correct solution and the demonstration of a thorough understanding
1 Credit	A 1-credit response demonstrates only a partial understanding of the mathematical concepts and/or procedures in the task. This response • correctly addresses only some elements of the task • may contain an incorrect solution but applies a mathematically appropriate process • may contain the correct solution but required work is incomplete
0 Credits*	A 0-credit response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

* Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

3-Credit Constructed-Response Holistic Rubric

3 Credits	A 3-credit response includes the correct solution(s) to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task. This response • indicates that the student has completed the task correctly, using mathematically sound procedures • contains sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures • may contain inconsequential errors that do not detract from the correct solution(s) and the demonstration of a thorough understanding
2 Credits	A 2-credit response demonstrates a partial understanding of the mathematical concepts and/or procedures in the task. This response • appropriately addresses most but not all aspects of the task using mathematically sound procedures • may contain an incorrect solution but provides sound procedures, reasoning, and/or explanations • may reflect some minor misunderstanding of the underlying mathematical concepts and/or procedures
1 Credit	A 1-credit response demonstrates only a limited understanding of the mathematical concepts and/or procedures in the task. This response • may address some elements of the task correctly but reaches an inadequate solution and/or provides reasoning that is faulty or incomplete • exhibits multiple flaws related to misunderstanding of important aspects of the task, misuse of mathematical procedures, or faulty mathematical reasoning • reflects a lack of essential understanding of the underlying mathematical concepts • may contain the correct solution(s) but required work is limited
0 Credits*	A 0-credit response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

* Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

1-Credit Constructed-Response Mathematics Scoring Policies

1. The student is **not** required to show work for a 1-credit constructed-response question, therefore, any work shown will **not** be scored. A clearly identified correct response should still receive full credit.
2. If the student clearly identifies a correct answer but fails to write that answer in the answer space, the student should still receive full credit.
3. If the student provides one legible response (and one response only), the rater should score the response, even if it has been crossed out.
4. If the student has written more than one response but has crossed some out, the rater should score only the response that has **not** been crossed out.
5. If the student provides more than one response but does not indicate which response is to be considered the correct response and none have been crossed out, the student shall not receive credit.
6. If the student does not provide the answer in the form as directed in the question, the student will not receive credit.
7. In questions requiring number sentences, the number sentences must be written horizontally.
8. When measuring angles with a protractor, there is a +/- 5 degrees deviation allowed of the true measure.
9. Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted). This is not to be confused with a score of zero wherein the student does respond to part or all of the question, but that work results in a score of zero.

2- and 3-Credit Constructed-Response Mathematics Scoring Policies

1. If a student shows the work in other than a designated "Show your work" or "Explain" area, that work should still be scored.
2. If the question requires students to show their work, and the student shows appropriate work and clearly identifies a correct answer but fails to write that answer in the answer space, the student should still receive full credit.
3. If students are directed to show work or provide an explanation, a correct answer with **no** work shown or **no** explanation provided, receives **no** credit.
4. If students are **not** directed to show work, any work shown will **not** be scored. This applies to questions that do **not** ask for any work and questions that ask for work for one part and do **not** ask for work in another part.
5. If the student provides one legible response (and one response only), the rater should score the response, even if it has been crossed out.
6. If the student has written more than one response but has crossed some out, the rater should score only the response that has **not** been crossed out.
7. If the student provides more than one response, but does not indicate which response is to be considered the correct response and none have been crossed out, the student shall not receive full credit.
8. Trial-and-error responses are **not** subject to Scoring Policy #6 above, since crossing out is part of the trial-and-error process.
9. If a response shows repeated occurrences of the same conceptual error within a question, the conceptual error should **not** be considered more than once in gauging the demonstrated level of understanding.
10. In questions requiring number sentences, the number sentences must be written horizontally.
11. When measuring angles with a protractor, there is a +/- 5 degrees deviation allowed of the true measure.
12. Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted). This is not to be confused with a score of zero wherein the student does respond to part or all of the question but that work results in a score of zero.

37

Ms. Roberts has 3 packages of paper. She gives each student in her class $\frac{1}{8}$ of a package of paper for a project. If she gives out all of the paper to her students, how many students are in her class?

Answer _____ students

EXEMPLARY RESPONSE

37

Ms. Roberts has 3 packages of paper. She gives each student in her class $\frac{1}{8}$ of a package of paper for a project. If she gives out all of the paper to her students, how many students are in her class?

Answer 24 students

GUIDE PAPER 1

37

Ms. Roberts has 3 packages of paper. She gives each student in her class $\frac{1}{8}$ of a package of paper for a project. If she gives out all of the paper to her students, how many students are in her class?

Answer $3 \div \frac{1}{8} = 3 \times 8 = 24$ students

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

37

Ms. Roberts has 3 packages of paper. She gives each student in her class $\frac{1}{8}$ of a package of paper for a project. If she gives out all of the paper to her students, how many students are in her class?

Answer 24 students

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

37

Ms. Roberts has 3 packages of paper. She gives each student in her class $\frac{1}{8}$ of a package of paper for a project. If she gives out all of the paper to her students, how many students are in her class?

Answer $\frac{1}{8} \div \frac{3}{1} = \frac{1}{8} \times \frac{1}{3} = \frac{1}{24}$ students

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

38

The distance from a school to a post office is 5 miles. What is this distance in yards?

Answer _____ yards

EXEMPLARY RESPONSE

38

The distance from a school to a post office is 5 miles. What is this distance in yards?

Answer 8,800 yards

GUIDE PAPER 1

38

The distance from a school to a post office is 5 miles. What is this distance in yards?

1mile = 1,760yards
5miles = 8800yards

$$\begin{array}{r} 1760 \\ \times \quad 5 \\ \hline 8800 \end{array}$$

Answer The distance from a school to a post office is 8800yards. yards

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

38

The distance from a school to a post office is 5 miles. What is this distance in yards?

Answer 8,800 yards

Score Credit 1 (out of 1 credit)

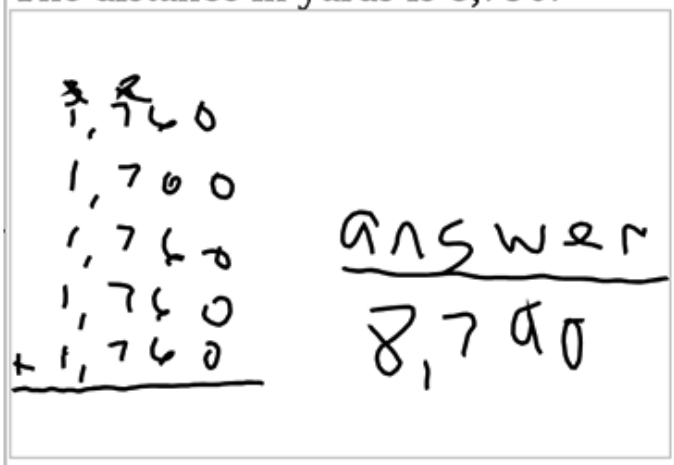
A correct answer is provided.

GUIDE PAPER 3

38

The distance from a school to a post office is 5 miles. What is this distance in yards?

The distance in yards is 8,790.



Answer yards

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

EXEMPLARY RESPONSE

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

No, the student is not correct.
A rectangle is any quadrilateral with 4 right angles.
A square has four 90-degree angles, so it is also a rectangle.

OR other valid explanation

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

No, because a rectangle only has to have 4 sides and 4 right angles and a square has both, the only thing the is different in a square is that it needs 4 equal sides, just because a rectangle does not always have 4 sides of equal length that does not mean that squares are not rectangles, it means that rectangles are not always squares.

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The student's claim is correctly identified, and a valid explanation is provided to support that a square is also a rectangle.

This response is complete and correct.

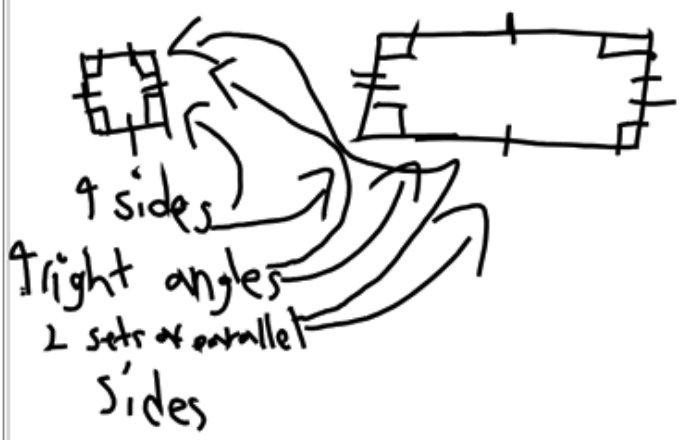
GUIDE PAPER 2

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

No he is not. A square can be a rectangle because both have 4 sides, two pairs of parallel sides, and 4 right angle.



Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The student's claim is correctly identified, and a valid explanation is provided to support that a square is also a rectangle.

This response is complete and correct.

GUIDE PAPER 3

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

The student is not correct because rectangles have four rightangles and so does a square so a square can be a rectangle.

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The student's claim is correctly identified, and a valid explanation is provided to support that a square is also a rectangle.

This response is sufficient to show a thorough understanding.

GUIDE PAPER 4

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

This student is not correct because a rectangle and square are polygons but they both have 4 sides and are both quads which have rectangles and squares because they have 4 sides which is a main factor but the unequal sides don't matter because they both have 4 sides and right angles, which make them the same.Therefore rectangles and squares are the same

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- The student's claim is correctly identified, and reasoning is provided to support that a square is also a rectangle.
- However, an incorrect statement is made that "rectangles and squares are the same."

This response correctly addresses only some elements of the task.

GUIDE PAPER 5

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

the student is not correct because squares can be rectangles because they both have 4 sides and a square is a sub category of rectangles but a rectangle can't be a square because it doesn't have 4 equal sides.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- The student's claim is correctly identified.
- However, the reasoning to support that a square is a rectangle is incomplete, and an incorrect statement is made that "a rectangle can't be a square."

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

A rectangle is supposed to have two pairs of parallel sides. A square has all sides the same length. A rectangle has four right angles, and so does a square. But yes, a rectangle can be a square, but a square cannot be considered a rectangle.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- Although correct reasoning is provided to support that a square is also a rectangle, the student's claim is incorrectly identified.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

he is curret because and rectangle always have 4nsides

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- The student's claim is incorrectly identified, and the explanation is insufficient to demonstrate any understanding.

Holistically, this response shows no overall understanding of the task.

40

A student states that a square cannot also be considered a rectangle because a rectangle does not have four sides of equal length. Is the student correct? Be sure to include properties of rectangles and squares to support your answer.

Explain how you know your answer is correct.

A square can be a rectagle

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- A correct claim is made that "A square can be a rectagle;" however, no explanation is provided.

Per Scoring Policy #3 for 2- and 3-credit responses, this response receives no credit.

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

Answer _____ square feet

EXEMPLARY RESPONSE

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$16\ ^{1}/_{3} \times 12\ ^{1}/_{2}$

$= {}^{49}/_{3} \times {}^{25}/_{2}$

$= 204\ ^{1}/_{6}$

OR other valid response

Answer $204\ ^{1}/_{6}$ square feet

OR equivalent

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$$16\frac{1}{3} = \frac{49}{3}$$
$$12\frac{1}{2} = \frac{25}{2}$$
$$\frac{25}{2} \times \frac{49}{3} = \frac{1225}{6} = 204\frac{1}{6} \text{ square feet}$$

Answer $204\frac{1}{6}$ square feet

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The area of the garden is correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 2

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$$\frac{49}{3} \times \frac{25}{2} = \frac{1225}{6}$$

$$1225 \div 6 = 204\frac{1}{6}$$

Answer $204\frac{1}{6}$ square feet

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The area of the garden is correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 3

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$$\frac{98}{6} \times \frac{75}{6} = \frac{7{,}350}{36} = \frac{1{,}225}{6}$$

Answer $\frac{1{,}225}{6}$ square feet

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The area of the garden is correctly determined using sound procedures.

This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 4

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$$16\frac{1}{3} \times 12\frac{1}{2} = \frac{1225}{6}$$

Answer $204\frac{1}{6}$ square feet

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- A correct expression is written to determine the area of the garden, and a correct value for the expression is determined, but it is unclear how this value is obtained.

This response contains the correct solution, but the required work is incomplete.

GUIDE PAPER 5

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$ $\quad 16 \times 12 = 192$

Answer $192\frac{1}{6}$ square feet

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- The products of whole parts and fraction parts are correctly determined.
- However, the work is incomplete, and the sum of the products is provided as an incorrect solution.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

49/3 x25/2 =343/6 =57 3/6

Answer 57 3 - 6 square feet

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- A correct expression is written to determine the area of the garden.
- However, a calculation error results in an incorrect product, and it is incorrectly converted to a mixed number.

This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 7

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$$16\frac{1}{3} \times \frac{2}{2} = 16\frac{2}{6} = \frac{96}{6} \times \frac{48}{6} = \frac{1152}{6}$$

Answer $\frac{1152}{6}$ square feet

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- Errors are made when converting the improper fractions to mixed numbers, and these fractions are incorrectly multiplied.

This response is incorrect and is insufficient to show any understanding.

41

Bill has a rectangular-shaped garden that is $16\frac{1}{3}$ feet long and $12\frac{1}{2}$ feet wide. What is the area, in square feet, of Bill's garden?

Show your work.

$\frac{1}{3} \times \frac{1}{2} = \frac{1}{3}$

16 x 12 = 32

Answer 32 square feet

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- Whole parts and fraction parts are incorrectly multiplied, and an incorrect solution is provided.

Holistically, this response is insufficient to show any understanding.

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

EXEMPLARY RESPONSE

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

One value that will make the number sentence true is 6.
I know $^5/_5$ is the same as one whole,
so when 8 is multiplied by $^5/_5$, the product is 8.
The fraction $^6/_5$ is larger than $^5/_5$,
so when 8 is multiplied by $^6/_5$,
the product will be greater than 8.
$8 \times {}^6/_5$
$8 \times ({}^5/_5 + {}^1/_5) = 8 \times 1\,{}^1/_5$
$(8 \times {}^5/_5) + (8 \times {}^1/_5)$
(1 of 8) + ($^1/_5$ of 8)
8 + ($^1/_5$ of 8)

OR

Since $^5/_5$ is one whole, any value greater than 5 for n would make the fraction $^n/_5$ greater than one whole.
If you multiply 8 by $^5/_5$,
it is the same as multiplying 8 by 1, which is 8.
If you multiply 8 by a fraction that is more than one whole,
you will get a product larger than 8.

OR other valid explanation

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

One value that would make the number sentence true is the n could be 9, so it would be 9/5, which is greater then one. I know im correct because if i did lower number then one for the fraction like 4/5 it would equal less then one so it would be wrong and if i did exactly number one for the fraction, 5/5, it would equal exactly 8. examples

8 x 9/5 > 8 8 x 4/5 < 8 8 x 5/5 = 8

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- A correct value for n is stated and supported with sound mathematical reasoning.

This response is complete and correct.

GUIDE PAPER 2

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

$8 \times \frac{6}{5} > 8$

I know my answer is becasue the first part of the equation is basically saying $8 \times 1\frac{1}{5}$. Since you are multiiplying 8 than more than 1, it will be greater than 8.

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- A correct value is substituted for n that makes the number sentence true and that value is supported with sound mathematical reasoning.

This response is complete and correct.

GUIDE PAPER 3

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

The value of n that can make the number sentence true is 45, I know this is correct becuase 8 x 45 = 360, and 360 ÷ 5 = 72. Since 72 is greater than 8, my answer is correct.

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- A correct value for n is stated and supported with sound mathematical reasoning.

This response is complete and correct.

GUIDE PAPER 4

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

One value that will make it true is $\frac{7}{5}$ because if the numerator is greater than the denominator, the product will be greater.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- Although the explanation suggests understanding that multiplying by a fraction whose value is greater than 1 generates a product greater than 8, an incorrect value is stated for n.

This response correctly addresses only some elements of the task.

GUIDE PAPER 5

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

6=n because 5/5x8=8 so if its 6/5x8 < 8

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- Although a correct value of 6 is stated for n and an equation showing the effect of multiplying 8 by a fraction equivalent to 1 is written, no further reasoning is provided and an incorrect relationship using 6 as the numerator is stated.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

$8 \times \frac{6}{5}$ I know this because for a number to be greater then itself it must be greater than one.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

- Although a correct value of 6 is substituted for n, the reasoning provided is insufficient.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

$$8 \times \frac{6}{5} > 8$$

$$n = 6$$

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- Although a correct value for n is stated, no further explanation is provided.

Per Scoring Policy #3 for 2- and 3-credit responses, this response receives no credit.

42

A number sentence is shown below.

$$8 \times \frac{n}{5} > 8$$

What is one value of n that will make the number sentence true?

Explain how you know your answer is correct.

The value of n is=40. I know this because 8 × 5 = 40. 40 > 8.

Score Credit 0 (out of 2 credits)

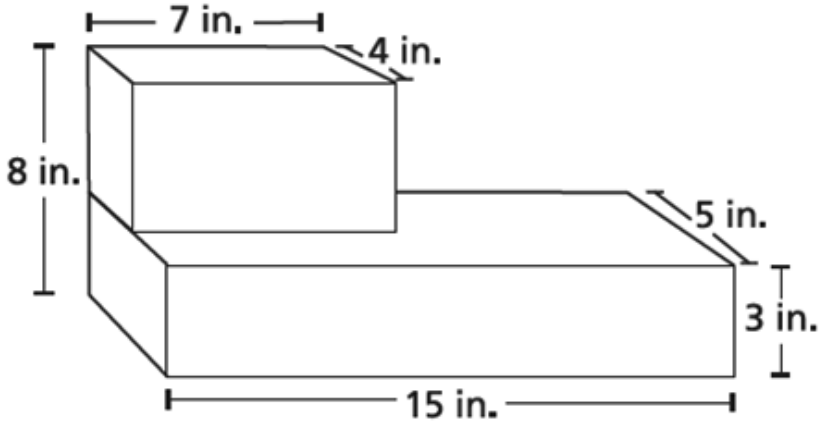
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- Although a correct value for n is stated, an incorrect procedure is used to explain the answer.

This response is insufficient to show any understanding.

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

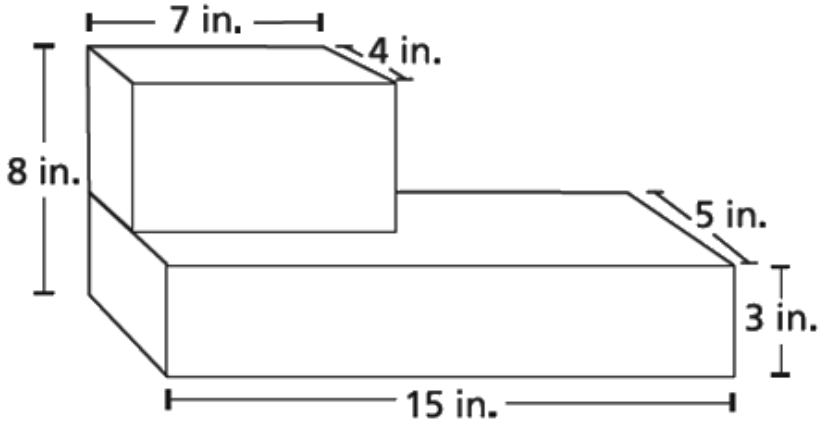
Show your work.

Answer _____ cubic inches

EXEMPLARY RESPONSE

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

$V = l \times w \times h$

$7 \times 4 \times 5 = 140$

$15 \times 5 \times 3 = 225$

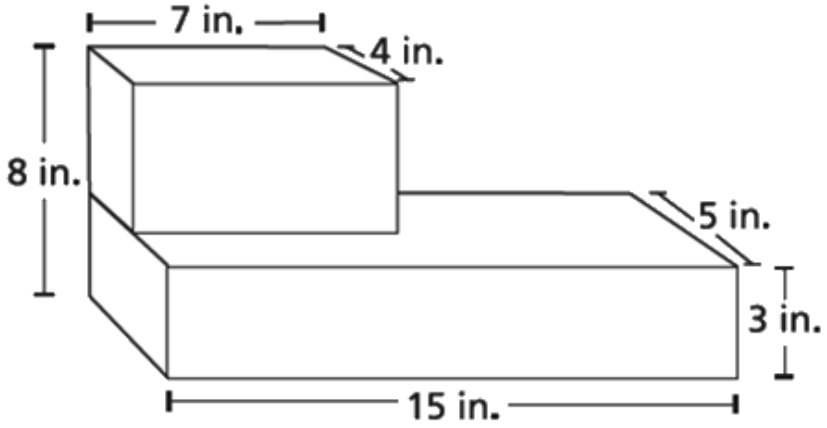
$140 + 225 = 365$ cubic inches

OR other valid process

Answer 365 cubic inches

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

Prism A
A= LxWxH
A= 7x4x5
A= 140 cubic inches

Prism B
A= LxWxH
A= 15x5x3
A=225 cubic inches

225+140=365 cubic inches

Answer 365 cubic inches

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

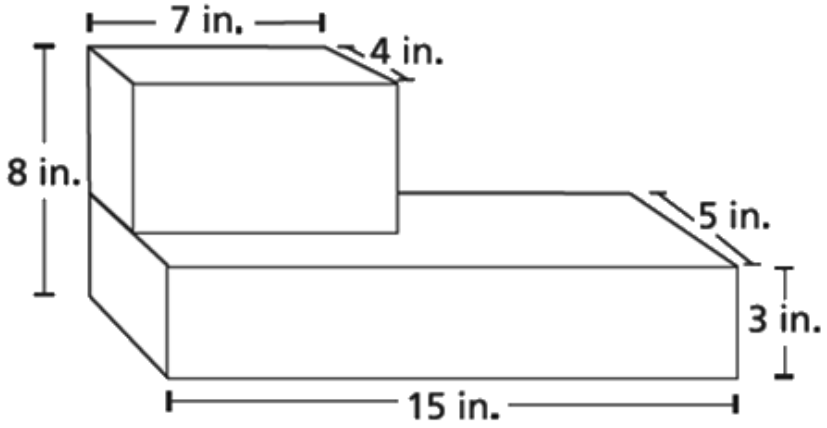
- The volume of each prism and the total volume are correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 2

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

15 × 3 × 5 = 225 5 × 7 × 4 = 140 225 + 140

Answer 365 cubic inches

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

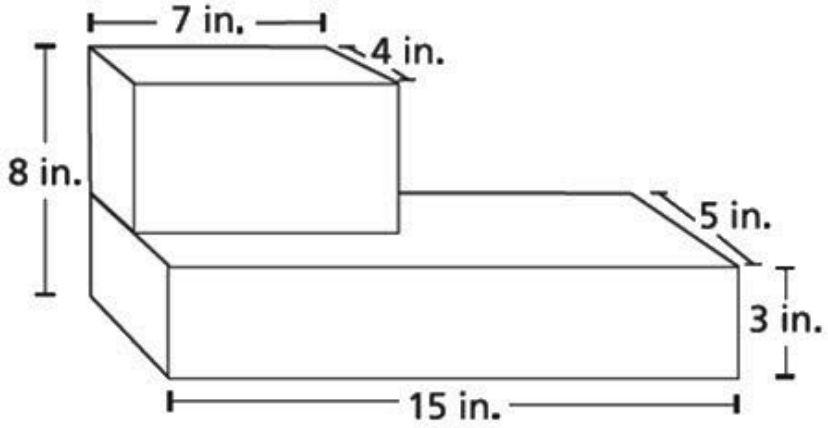
- The volume of each prism and the total volume are correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 3

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

$15 \times 3 \times \quad \times 5 = 225 \qquad 5 \times 7 \times 4 = 140$

Answer 365 cubic inches

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

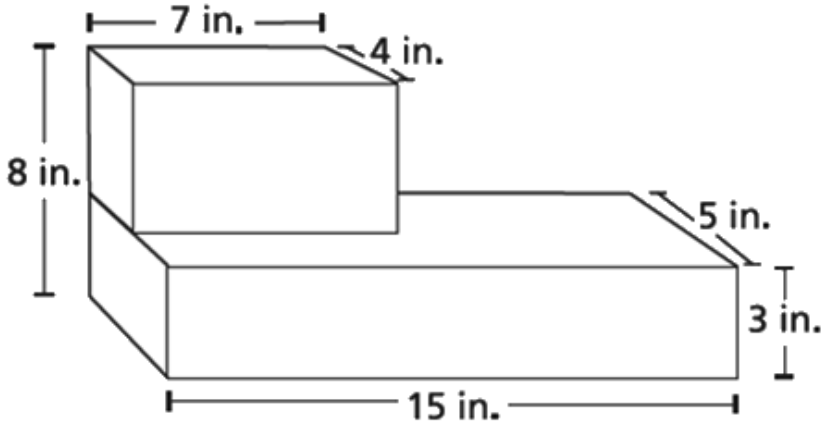
- The volume of each prism and the total volume are correctly determined using sound procedures.
- Although the last step of adding the two volumes is not shown, this does not detract from the demonstration of a thorough understanding.

This response contains sufficient work to show a thorough understanding.

GUIDE PAPER 4

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

Volume of A:

Volume of B:

Volume in all:

V = L x W x H

V = L x W x H

375 + 140 = 515 cubic inches

V = 15 x 5 x 3

V = 7 x 4 x 5

V = 375 cubic inches

V = 140 cubic inches

Answer The total volume of the cake is 515 cubic inches. cubic inches

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

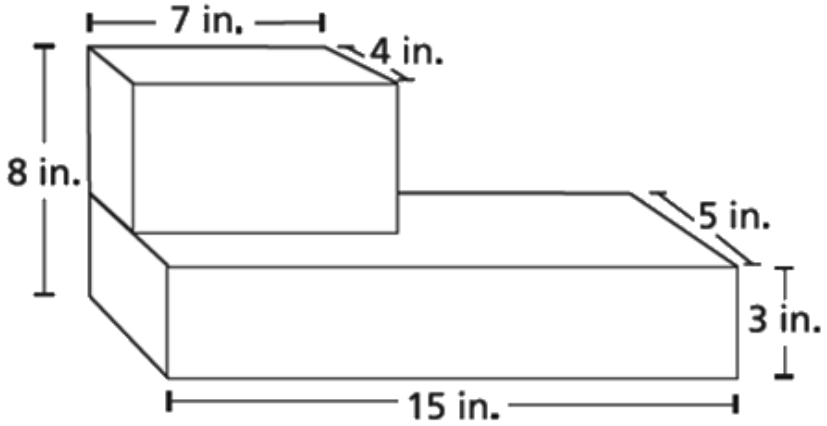
- Sound procedures are used to determine the total volume.
- However, a multiplication error when calculating the volume of the bottom prism results in an incorrect solution.

This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 5

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

V = L x W x H A = 7 x 4 x 4 = 112 B = 15 x 5 x 3 = 225

112 + 225 = 337 cubic inches

Answer 337 cubic inches cubic inches

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

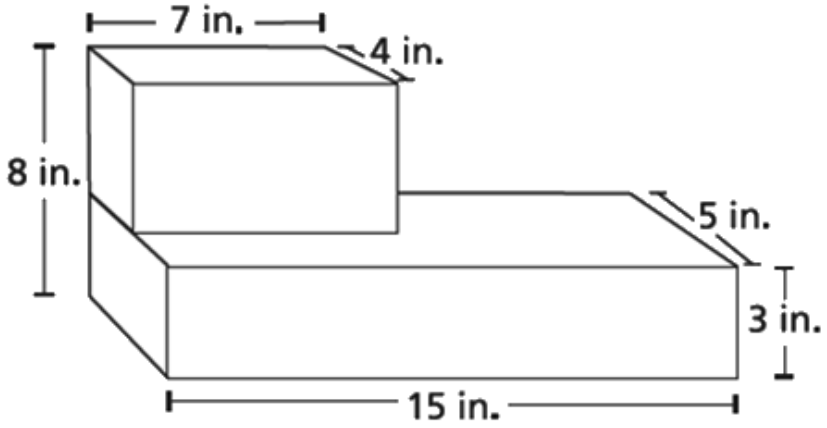
- The volume of the bottom prism is correctly determined.
- However, an incorrect dimension of 4 instead of 5 is used to calculate the volume of the top prism, resulting in an incorrect solution.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

$140 + 225 = 365$

Answer 365 cubic inches

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task.

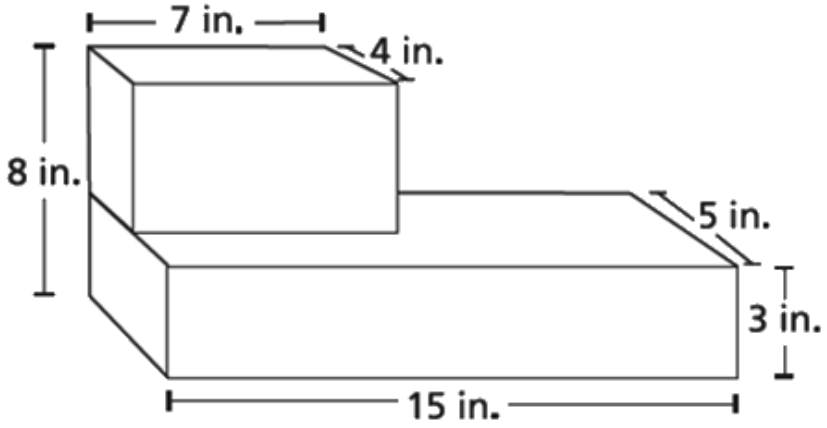
- Although the volumes of the two prisms are added to determine the correct solution, it is not clear how the volumes are obtained.

This response contains the correct solution, but the required work is incomplete.

GUIDE PAPER 7

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

$4 \times 4 \times 7 = 42$

$5 \times 15 \times 3 = 252$

$252 + 42 = 294$

Answer 294 cubic inches

Score Credit 0 (out of 2 credits)

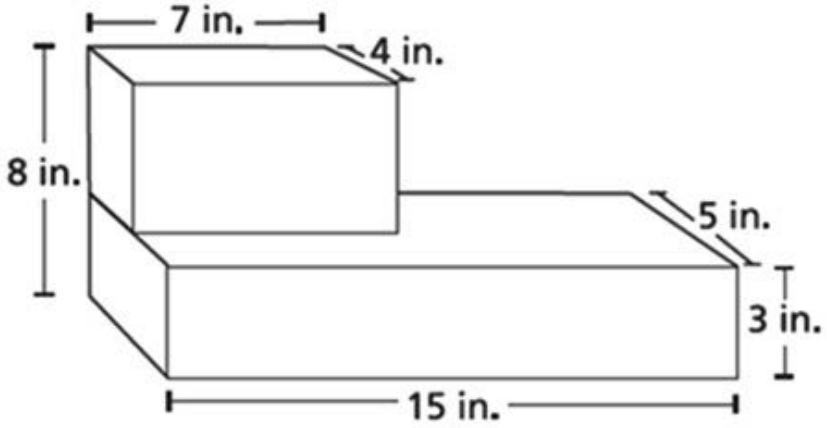
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- An incorrect dimension is used to determine the volume of the top prism, and the numbers are incorrectly multiplied.
- A correct expression is written to determine the volume of the bottom prism; however, it is incorrectly calculated.

Although this response contains some correct elements, holistically, the work is insufficient to show any understanding.

43

A baker makes a cake in the shape of two right rectangular prisms, as shown below.



What is the total volume, in cubic inches, of the cake?

Show your work.

7 + 8 + 4 + 5 + 3 + 15 + = 42

Answer 42 cubic inches

Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

- An incorrect procedure is used to determine an incorrect solution.

This response is incorrect and is insufficient to show any understanding.

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

Answer _____ binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

Answer _____ cards

EXEMPLARY RESPONSE

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

88) 3724
- 3520 $88 \times \underline{40} = 3520$
204
- 176 $88 \times \underline{2} = 176$
28

$40 + 2 = 42$

OR other valid process

Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

He will need $88 - 28 = 60$ more cards to fill an additional binder.

OR other valid process

Answer 60 cards

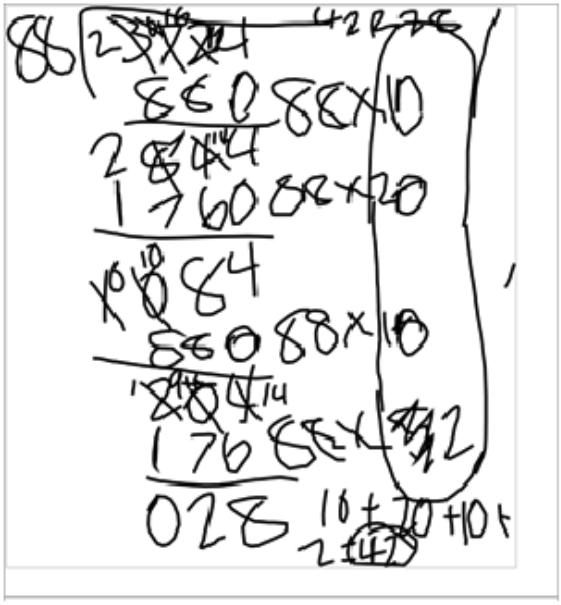
44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.



Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

88 – 28 = 60 cards

Answer 60 cards cards

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The total number of completely filled binders and the number of additional cards needed are correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 2

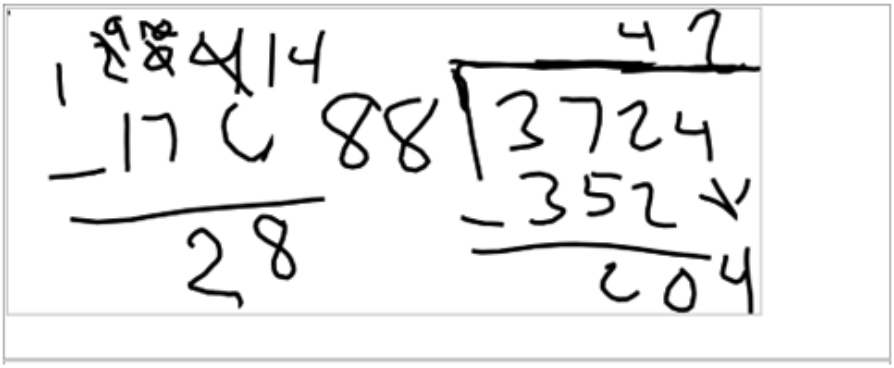
44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.



Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

Answer 60 cards

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The total number of completely filled binders and the number of additional cards needed are correctly determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 3

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

3,724 ÷ 88 = 42r28

Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

88 − 28 = 60

Answer 60 cards

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task.

- The total number of completely filled binders and the number of additional cards needed are correctly determined using sound procedures.

This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 4

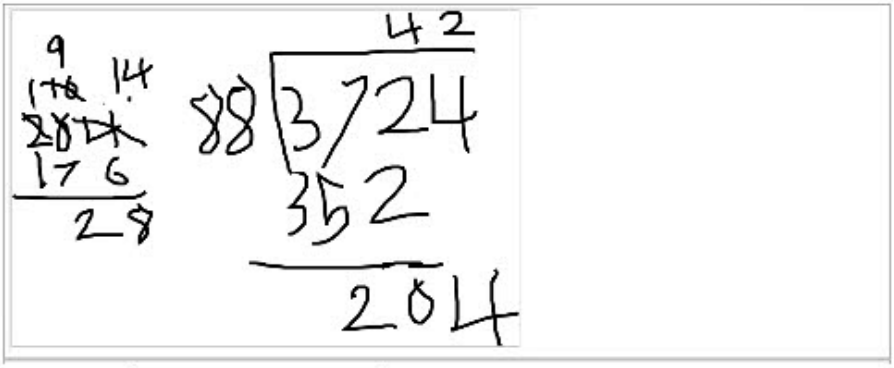
44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.



Answer 43 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

Answer 60 cards

Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts and procedures in the task.

- Appropriate procedures are used to determine the total number of completely filled binders and the number of additional cards needed.
- However, the value provided as the solution for the number of completely filled binders is incorrect.

This response contains an incorrect solution, but provides sound procedures.

GUIDE PAPER 5

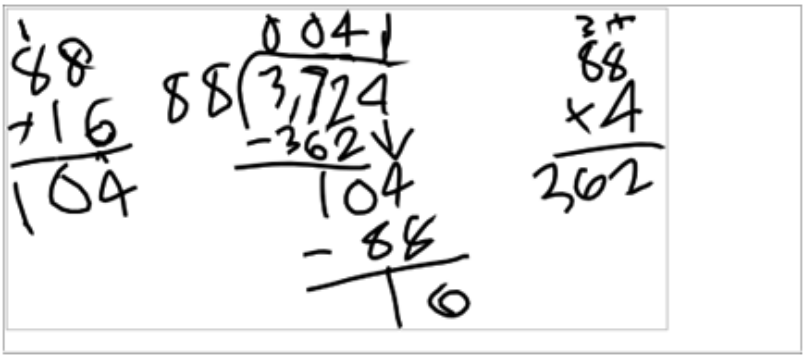
44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.



Answer 41 binders. binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

Answer 72 cards

Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts and procedures in the task.

- Correct procedures are used to determine the total number of completely filled binders and the number of additional cards needed.
- However, a calculation error (362 instead of 352) results in an incorrect number of completely filled binders and an incorrect remainder.

This response contains incorrect solutions but provides sound procedures.

GUIDE PAPER 6

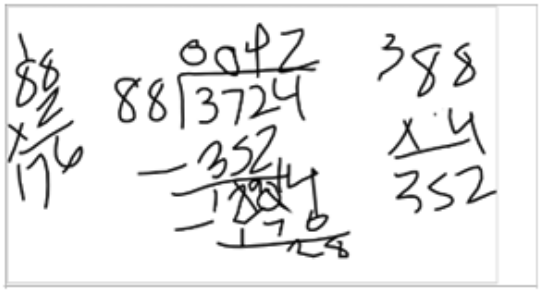
44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.



Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

Answer 46 cards

Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts and procedures in the task.

- The total number of completely filled binders is correctly determined using sound procedures; however, this total is inappropriately used to determine the number of additional cards needed to fill one more binder.

This response reflects some minor misunderstanding of the underlying mathematical concepts and procedures.

GUIDE PAPER 7

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

3,724 divided by 88= 41.16=41

Answer 41 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

41.16, 16= leftover cards. 16+72= 88.

Answer 72 cards

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts and procedures in the task.

- A correct expression is written to determine the total number of completely filled binders, but the expression is incorrectly evaluated. An appropriate number of binders is stated based on the work shown.
- The decimal part of the obtained value is inappropriately used to determine the number of additional cards needed to fill one more binder.

This response addresses some elements of the task correctly but exhibits multiple flaws related to misunderstanding of important aspects of the task.

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

3,724 ÷ 88=33 r24

Answer 89 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

88 – 24=64

Answer 64 cards

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts and procedures in the task.

- Although a correct expression is written to determine the total number of completely filled binders, it is incorrectly evaluated.
- An incorrect solution for the total number of completely filled binders is provided, and it is not clear how it is obtained.
- A correct procedure is used to determine the number of additional cards needed to completely fill one more binder.

This response addresses some elements of the task correctly but provides reasoning that is faulty or incomplete.

GUIDE PAPER 9

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

3,724 ÷ 88 = 42

Answer 42 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

3,724 ÷ 42 = 7

Answer 7 cards

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts and procedures in the task.

- A correct expression is written, and a correct total number of completely filled binders is determined; however, the written equation is incorrect and does not include the remainder.
- An incorrect procedure is used to determine the number of additional cards needed to completely fill one more binder, and the solution obtained is incorrect.

This response addresses some elements of the task correctly but provides reasoning that is faulty or incomplete.

GUIDE PAPER 10

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

$3{,}724 \div 88 = 41.66$

Answer 41.66 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

$88 - 41.66 = 47.22$

Answer 47.22 cards

Score Credit 0 (out of 3 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts and procedures in the task.

- Although a correct expression is written to determine the total number of completely filled binders, it is incorrectly evaluated, and the remainder is incorrectly addressed.
- The obtained value instead of the remainder is inappropriately used to determine the number of additional cards needed, and the solution obtained is incorrect.

Although this response contains some correct elements, holistically, the work is insufficient to show any understanding.

44

Marcus is storing his football card collection in binders.

- He has 3,724 cards.
- Each binder can hold 88 cards.

What is the total number of binders Marcus can completely fill with his card collection?

Show your work.

3724 ÷ 8= 882

Answer 882 binders

How many **more** cards will Marcus need to completely fill one more binder?

Show your work.

63

Answer 63 cards

Score Credit 0 (out of 3 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts and procedures in the task.

- An incorrect procedure is used to obtain an incorrect solution.

This response is insufficient to show any understanding.

Grade 5
Mathematics

Scoring Leader Materials
2026 Training Set