New York State Testing Program

2026

Mathematics Test

Grade 6

Scoring Leader Materials

Training Set

QAI30798

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 6 Mathematics Reference Sheet

CONVERSIONS

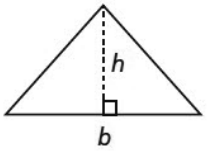
1 yard = 3 feet
1 mile = 5,280 feet

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

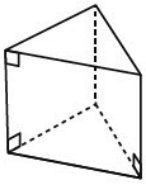
FORMULAS AND FIGURES

Triangle

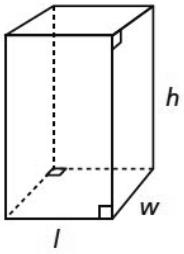


$A = \frac{1}{2}bh$

Right Triangular Prism

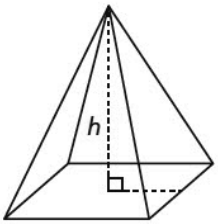


Right Rectangular Prism



$V = lwh$
$V = Bh$

Right Rectangular Pyramid



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.

38

What is the coefficient in the expression $6n^5$?

Answer _____

EXEMPLARY RESPONSE

38

What is the coefficient in the expression $6n^5$?

Answer 6

38

What is the coefficient in the expression $6n^5$?

Answer the coefficient for $6n^5$ is 6

Score Credit 1 (out of 1 credit)

A correct answer is provided.

38

What is the coefficient in the expression $6n^5$?

Answer 6

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

38

What is the coefficient in the expression $6n^5$?

Answer the coefficient in this expression is 6n

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

39

Write a numerical statement using >, <, or = that compares the two temperatures −5° Fahrenheit and −9° Fahrenheit.

Answer _____

EXEMPLARY RESPONSE

39

Write a numerical statement using >, <, or = that compares the two temperatures −5° Fahrenheit and −9° Fahrenheit.

Answer $-9° < -5°$ *OR* $-5° > -9°$
OR other valid response

GUIDE PAPER 1

39

Write a numerical statement using >, <, or = that compares the two temperatures −5° Fahrenheit and −9° Fahrenheit.

Answer -5 > -9 Fahrenheit

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

39

Write a numerical statement using >, <, or = that compares the two temperatures −5° Fahrenheit and −9° Fahrenheit.

Answer $-9 < -5$

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

39

Write a numerical statement using >, <, or = that compares the two temperatures −5° Fahrenheit and −9° Fahrenheit.

Answer i say -5 is greater than -9 because -5 is closer to 0 but -9 is far away and is the bigger number but i say -5 < -9

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, c, Dan has.

Show your work.

Answer _____ cards

EXEMPLARY RESPONSE

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, c, Dan has.

Show your work.

$$\begin{aligned} 43 + c &= 150 \\ -43 \quad &= -43 \\ \hline c &= 107 \end{aligned}$$

OR other valid response

Answer 107 cards

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

First I set up the equation:
$150 = c + 43$
Then I made sure the variable was by itself by subtracting 43
$- 43 = 0$
Then I had to do the same on the opposite side so I subtracted
$150 - 43 = 107$
So $c = 107$
Dan has 107 baseball cards

Answer 107 cards

Score Credit 2 (out of 2 credits)

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

- An equation is provided that represents the situation using the given variable for the unknown number of cards that Dan has, and a mathematically sound procedure is used to determine the solution.

This response is complete and correct.

GUIDE PAPER 2

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

c+43=150
150-43=107

Answer 107 cards

Score Credit 2 (out of 2 credits)

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

- An equation is provided that represents the situation using the given variable for the unknown number of cards that Dan has, and a mathematically sound procedure is used to determine the solution.

This response is complete and correct.

GUIDE PAPER 3

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

150-43=c

Answer 107 cards

Score Credit 2 (out of 2 credits)

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

- An equation is provided that represents the situation using the given variable for the unknown number of cards that Dan has, and it is solved correctly.

This response contains sufficient work to show a thorough understanding.

GUIDE PAPER 4

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

Answer  cards

Score Credit 1 (out of 2 credits)

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

- The solution for the total number of baseball cards Dan has is determined by a mathematically sound process; however, an equation that represents the situation using the given variable for the unknown is not provided.

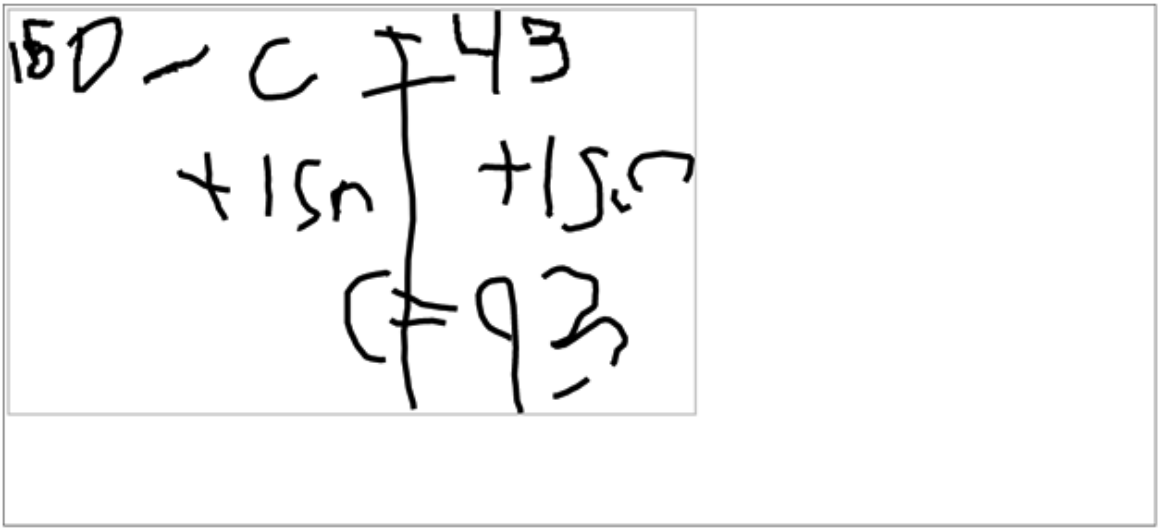
This response contains the correct solution, but the required work is incomplete.

GUIDE PAPER 5

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.



Answer 93 cards

Score Credit 1 (out of 2 credits)

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

- An equation that represents the situation using the given variable for the unknown number of cards that Dan has is provided; however, the equation is solved incorrectly.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

$150 - 43 = x$ $\quad\quad$ $150 - 43 = 3.4$

Answer 3.4 cards

Score Credit 1 (out of 2 credits)

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

- An equation is provided that represents the situation using the variable *x*, instead of the given variable *c*, for the unknown number of cards that Dan has; however, a calculation error occurs when determining the solution.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

$$\frac{\text{More}}{\text{Fewer}} = \frac{150}{43} = \frac{1}{c}$$

$$150c = 43$$

$$\frac{150c}{150c} \quad \frac{}{150c}$$

$$C = 3$$

Answer 3 cards

Score Credit 0 (out of 2 credits)

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

- An incorrect equation is written, and it is incorrectly solved.

This response is insufficient to show any understanding.

41

Bella has a collection of 150 baseball cards. Dan has 43 fewer baseball cards in his collection than Bella has. Write and solve an equation to determine how many baseball cards, *c*, Dan has.

Show your work.

Bella 150 cards. dan has 43 fewer cards than bella.
That means dan has 193 because 150+43=193

Answer Dan has 193. dan has 43 fewer cards than bella. cards

Score Credit 0 (out of 2 credits)

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

- The relationship between the number of cards that Dan has and the number of cards that Bella has is misinterpreted and used incorrectly to determine an incorrect solution.

Holistically, this response is insufficient to show any understanding.

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

EXEMPLARY RESPONSE

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

x: 2, 4, 6, 8, 10
y: 4, 8, 12, 16, 20
Each value of y is twice the value of the corresponding x.

OR other valid response

42

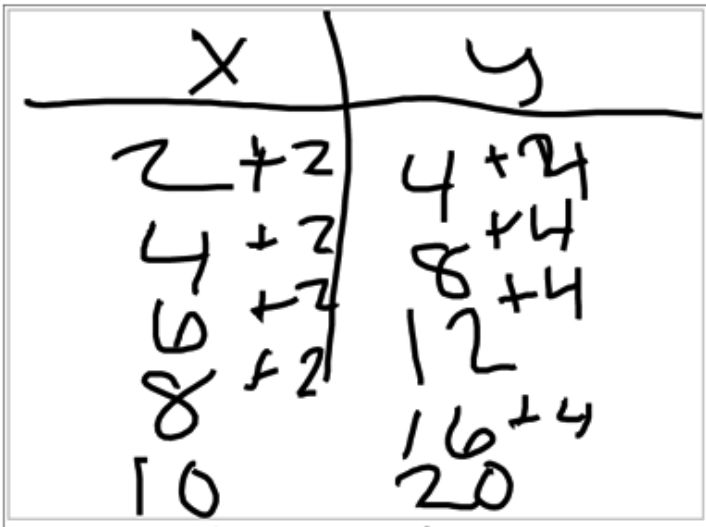
The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.



Y is twice the amout of x

Score Credit 2 (out of 2 credits)

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

- The relationship between the corresponding values of x and y is stated and supported by sound reasoning that includes showing the first 5 numbers in both numerical patterns.

This response is complete and correct.

GUIDE PAPER 2

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

The corresponding values of x and y relate to each other since the value of y is always 2 times greater than x.

Values of X: 2, 4, 6, 8, 10
Values of Y: 4, 8, 12, 16, 20

As you can see, X is always one half of Y, and Y is always two times greater than X.

Score Credit 2 (out of 2 credits)

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

- The relationship between the corresponding values of x and y is stated and supported by sound reasoning that includes showing the first 5 numbers in both numerical patterns.

This response is sufficient to demonstrate understanding.

GUIDE PAPER 3

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

x=2,4,6,8,10
y=4,8,12,16,20
y is alaways 2 times x

Score Credit 2 (out of 2 credits)

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

- The relationship between the corresponding values of x and y is stated and supported by sound reasoning that includes showing the first 5 numbers in both numerical patterns.

This response is sufficient to demonstrate understanding.

GUIDE PAPER 4

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

X and Y relate to eachother because x relates to y as in y is 4, 8, 12, 16, 20,... are all in x. Y relates to x as in take the first 5 numbers for instance and divide them by 2 to get the first 5 numbers of x.

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 relationship between the corresponding values of x and y is stated, no additional reasoning is provided to show how or explain why pattern x generates numbers that support the stated relationship.

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

GUIDE PAPER 5

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

2 4 6 8 10
4 8 12 16 20 2 is half of 4 in
most multiples

Score Credit 1 (out of 2 credits)

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

- The first 5 numbers in both numerical patterns are shown; however, the relationship between the corresponding values of x and y is not clearly stated, and insufficient reasoning is provided.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

2,4,6,8,10,12
4,8,12,16,20
they would be simaler because they are adding the first nummber to the orriganal nuber and 2 add 2 will evenchuly get to 4 add4

Score Credit 1 (out of 2 credits)

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

- The first 5 numbers in both numerical patterns are shown; however, insufficient reasoning is provided to support a relationship between the corresponding values of x and y.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

2,4,6,8,10
4,8,16,20,24

Score Credit 0 (out of 2 credits)

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

- Although the first 5 numbers of pattern x are correct, a calculation error occurs when generating the first 5 numbers of pattern y and no relationship between corresponding values is stated or explained.

Holistically, this response is insufficient to demonstrate any understanding.

42

The rules for creating two number patterns are shown below.

x: Start at 2, add 2

y: Start at 4, add 4

How do the corresponding values of x and y relate to each other? Be sure to include the first 5 numbers in both numerical patterns.

Explain your answer.

2+ 2 = 4+ 4 = 8+ 8 = 16
4+ 4 = 8+ 8 = 16

they will both always equal the same when aded my the same numder

Score Credit 0 (out of 2 credits)

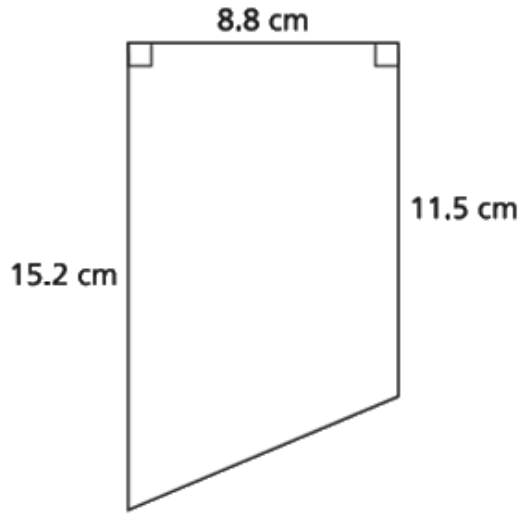
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts and procedures in the task.

- The first 5 numbers of both numerical patterns are not included, and an incoherent explanation of a relationship is provided.

Holistically, this response is insufficient to demonstrate any understanding.

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

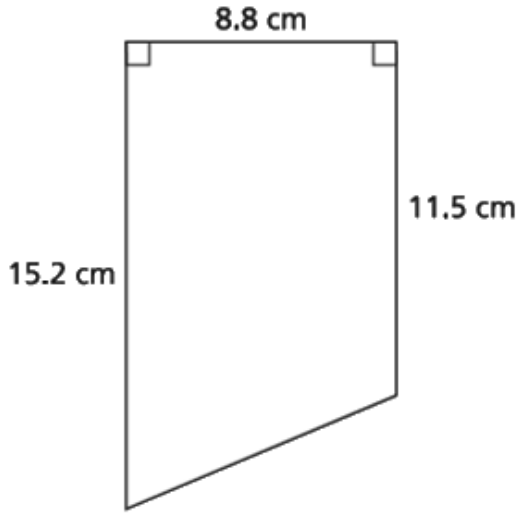
Show your work.

Answer _____ square centimeters

EXEMPLARY RESPONSE

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

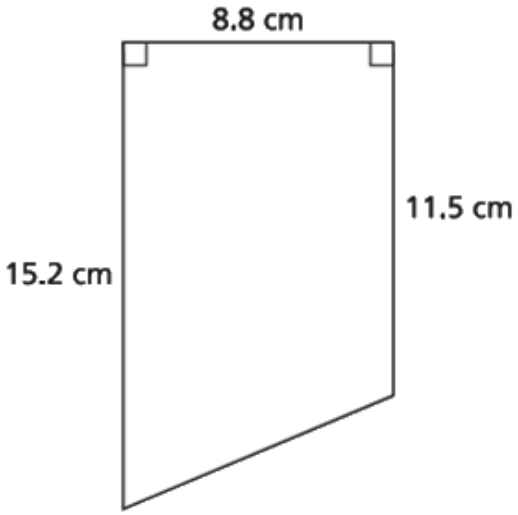
Area of rectangle:
$11.5 \times 8.8 = 101.2$
Area of triangle:
$15.2 - 11.5 = 3.7$
$(3.7 \times 8.8) \div 2 = 16.28$
Total: $101.2 + 16.28 = 117.48$ sq cm

OR other valid process

Answer **117.48** square centimeters

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

15.2-11.5=3.7

3.7 × 8.8 ÷ 2= 16.28

$$\begin{array}{r} 3.7 \\ \times\ 8.8 \\ \hline 32.56 \end{array}$$

11.5 × 8.8=101.2

101.2+16.28=117.48

Answer 117.48 square centimeters

Score Credit 2 (out of 2 credits)

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

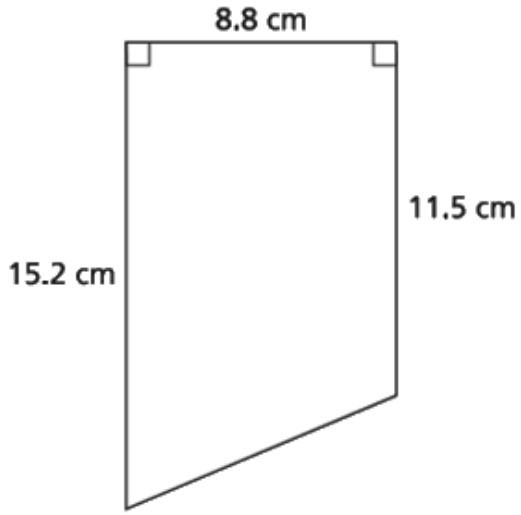
- The area of the trapezoid is determined and supported by sound procedures.

This response is complete and correct.

GUIDE PAPER 2

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

$15.2 - 11.5 = 3.7$
$3.7 \times 8.8 = 32.56$
$32.56 \div 2 = 16.28$
$15.2 \times 8.8 = 133.76$
$133.76 - 16.28 = 117.48$

Answer The trapizoid is 117.48 square centimeters

Score Credit 2 (out of 2 credits)

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

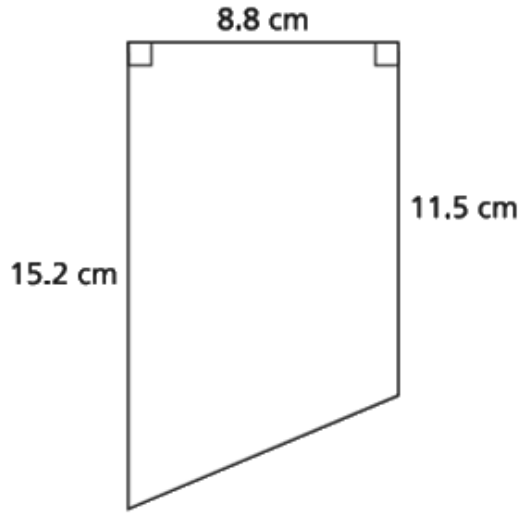
- The area of the trapezoid is determined and supported by sound procedures.

This response is complete and correct.

GUIDE PAPER 3

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

15.2 + 11.5
26.7 × 4.4 = 117.48

Answer 117.48 square centimeters

Score Credit 2 (out of 2 credits)

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

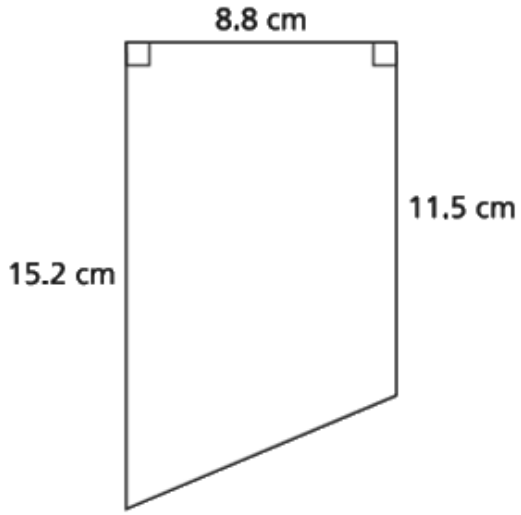
- The area of the trapezoid is determined and supported by a sound procedure.

This response contains sufficient work to show a thorough understanding.

GUIDE PAPER 4

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

15.2 − 11.5 =3.7
the rectangular part of the trapezoid is 11.5 × 8.8 which is 101.2
the triangular part of the trapezoid is 3.7 × 8.8 ÷ 2 which is 32.42
101.2 + 32.42=133.62

Answer 133.62 square centimeters

Score Credit 1 (out of 2 credits)

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

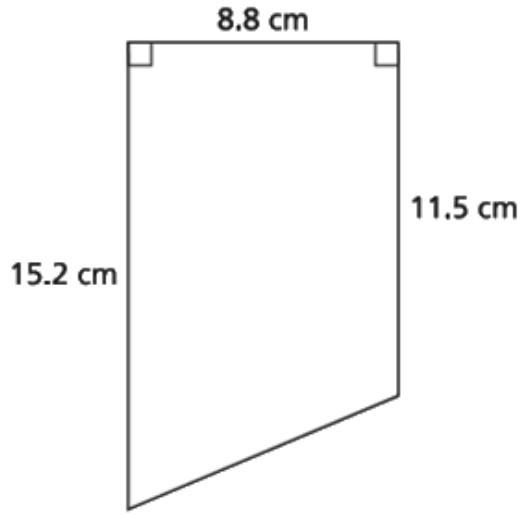
- The area of the trapezoid is determined using sound procedures; however, a calculation error occurs in computation of the area of the triangular part resulting in an incorrect solution.

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

GUIDE PAPER 5

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

8.8x3.8= 32.56
8.8x11.2=101.2
101.2+32.56=133.76

Answer 133.76 square centimeters

Score Credit 1 (out of 2 credits)

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

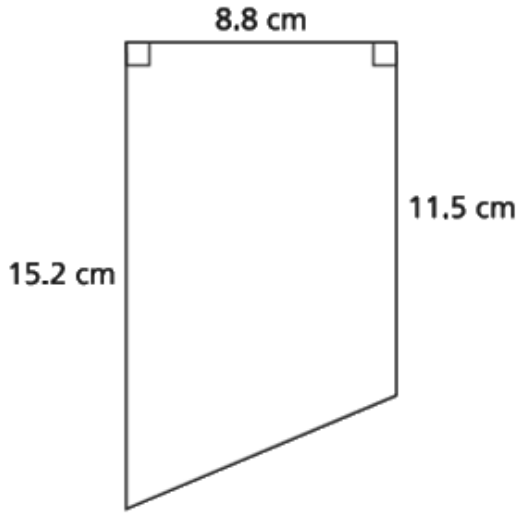
- Values are provided for an area decomposition of the trapezoid into two rectangles; however, the supporting work for those values is incorrect, and the need to use only half of the area of the smaller rectangle is not addressed, resulting in an incorrect solution.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

15.2+11.5=26.7 26.7 ÷ 2=13.35
13.35+8.8=22.15

Answer 22.15 square centimeters

Score Credit 1 (out of 2 credits)

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

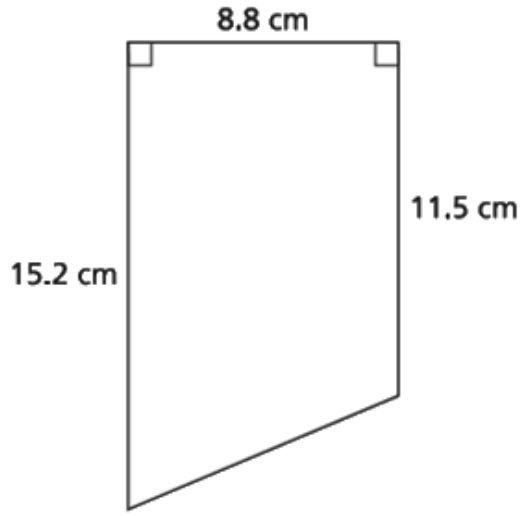
- Half of the sum of the two bases is inappropriately added to the height, instead of being multiplied, resulting in an incorrect solution.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

$15.2 \times 8.8 = 133.76$ $133.76 \div 2 = 66.88$

Answer 66.88 square centimeters

Score Credit 0 (out of 2 credits)

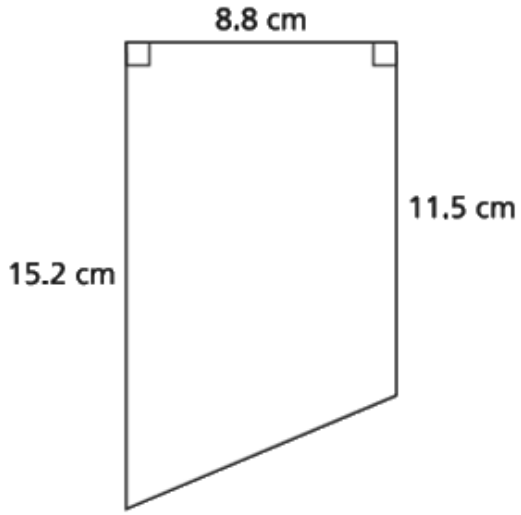
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts and procedures in the task.

- Although a triangular part of the area of the trapezoid is correctly determined, it is incorrectly provided as the solution, and no further work is shown to address the rest of the composition of the area of the trapezoid.

Holistically, this response is insufficient to show any understanding.

43

A diagram of a trapezoid with dimensions in centimeters is shown below.



What is the area, in square centimeters, of the trapezoid?

Show your work.

(b1 × b2) + h ÷
(8.8 × 8.8) + 11.5 ÷ 2

Answer 83.19 square centimeters square centimeters

Score Credit 0 (out of 2 credits)

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

- An incorrect solution is obtained using an incorrect procedure.

This response is insufficient to show any understanding.

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

EXEMPLARY RESPONSE

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

Unit price for store A is $12.24 \div 6 = \$2.04$
Unit price for store B is $19.62 \div 9 = \$2.18$
Since $\$2.04 < \$2.18$,
store A has the lower price per roll of paper towels.

Or other valid explanation

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

I can solve and explain my answer by using unit rate. The cost for 6 rolls of T.P. from store A is $12.24. I can find out the cost of 1 roll by dividing 12.24 by 6 which equals 2.04. The cost for one roll of T.P. from store A is $2.04. I can find the unit rate of store B by dividing 19.62 by 9 to get 2.18. Store A's T.P. is cheaper because $2.04<2.18.

Score Credit 2 (out of 2 credits)

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

- The solution is stated and supported by sound reasoning that includes the calculation of the price per roll for each store.

This response is complete and correct.

GUIDE PAPER 2

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

Store A. 6 rolls : 12.24

Store B. 9 rolls : 19.62

A. 12.24 ÷ 6 = 2.04

B. 19.62 ÷ 9 = 2.18

Answer: Store A

Score Credit 2 (out of 2 credits)

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

- The solution is given and supported by the calculation of the price per roll for each store.

The response is sufficient to demonstrate understanding.

GUIDE PAPER 3

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

Store A has a lower price per roll of paper towels because store A is $2.04 and store B is $2.18. What I did was I divided the rolls by how many rolls they sell so store A had six rolls so I divided six by six to have one paper towel and I did the same to the money so I divided $12.24 by six and got $2.04. For store B I did the same thing I did 9 ÷ 9 to get one and I aslo did that to the money so I did $19.62 ÷ 9 and i got 2.18 and $2.04 is less then $2.18 so store A has a lower price.

Score Credit 2 (out of 2 credits)

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

- The solution is stated and supported by sound reasoning that includes the calculation of the price per roll for each store.

This response is complete and correct.

GUIDE PAPER 4

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

Store A: 1 Roll = $2.04
Store B: 1 Roll = $2.18
Store A is cheaper than Store B

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 solution is stated, it is not clear how the supporting prices per roll are determined.

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

GUIDE PAPER 5

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

store a sells for lower price because if you divde 12.24 by 6 it gives you 2.04 for each and store b you divde 19.62 by 6 and it gives youn 3.27 for each

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 solution is stated based on the determined prices per roll; however, a divisor of 6 is incorrectly used instead of 9 for the calculation of the price per roll for store B.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

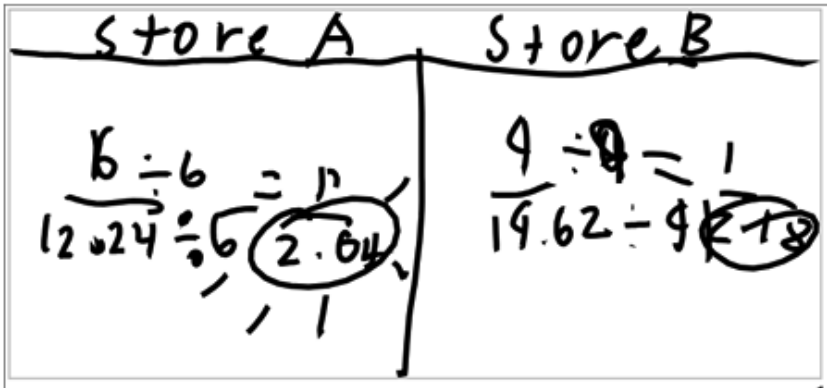
44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.



Store A has the lowest price per roll with $\frac{1}{2.04}$. Store B does not as Store B's unit rate is $\frac{1}{2.18}$.

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 price per roll for each store; however, faulty reasoning is then provided to support Store A having the lower price per roll due to the incorrect use of the reciprocal values of the prices per roll for both stores as the actual prices per roll.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

Store a has A lower price per roll because store A made it $2.03 per roll and store made it 3.48 per roll.

Score Credit 0 (out of 2 credits)

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

- Although store A is identified as the store with the lower price per roll, incorrect unit prices are stated, and no further supportive reasoning or work is provided.

This response is insufficient to demonstrate any understanding.

44

Two stores sell the same size rolls of paper towels in different packages.

- Store A sells 6 rolls for $12.24
- Store B sells 9 rolls for $19.62

Which store has the lower price per roll of paper towels? Be sure to include the unit rate for each store in your answer.

Explain your answer.

12.24 ÷ 12.24 = 1
19.62 ÷ 12.24 = 1.6 12.24 rolls are cheaper than the 19.62 rolls.

Score Credit 0 (out of 2 credits)

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

- Two division statements are written to show a relationship between the two given total prices, and no further explanation surrounding the price per roll at each store is provided.

This response is insufficient to demonstrate any understanding.

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

Answer _____

EXEMPLARY RESPONSE

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

$3(4^3 - 6^2) + 7(2 + 1)^3 =$
$3(64 - 36) + 7(3)^3 =$
$3(28) + 7(27)$
$= 84 + 189$
$= 273$

OR other valid process

Answer 273

45

Evaluate the expression $3(4^3 - 6^2) + 7(2+1)^3$.

Show your work.

$3\left(4^3 - 6^2\right) + 7(2+1)^3$

$3\left(64 - 36\right) + 7(3)^3$

$3\left(28\right) + 7\left(27\right)$

84+189

273

Answer 273

Score Credit 2 (out of 2 credits)

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

- The value of the expression is determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 2

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

First I multipied 4 by 4 by 4 to get a answer of 64, then I multiplied 6 by 6 to get 36, then I had to subtract to get 28 then I multiplied that by 3 to get 84. Then I went to my next problems. I added 2 with 1 to get 3 to then multiply by 3 and 3, to get a answer of 27 so then I multiplied that by 7 to get 189, then I had to add 189 to 84 to get my answer.

Answer 273

Score Credit 2 (out of 2 credits)

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

- The value of the expression is determined using sound procedures.

This response is complete and correct.

GUIDE PAPER 3

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

84 left
189 right
$3(28) + 7(3)^3$
$3(28) + 7(27)$
$84 + 189$

Answer 273

Score Credit 2 (out of 2 credits)

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

- The value of the expression is determined using sound procedures.

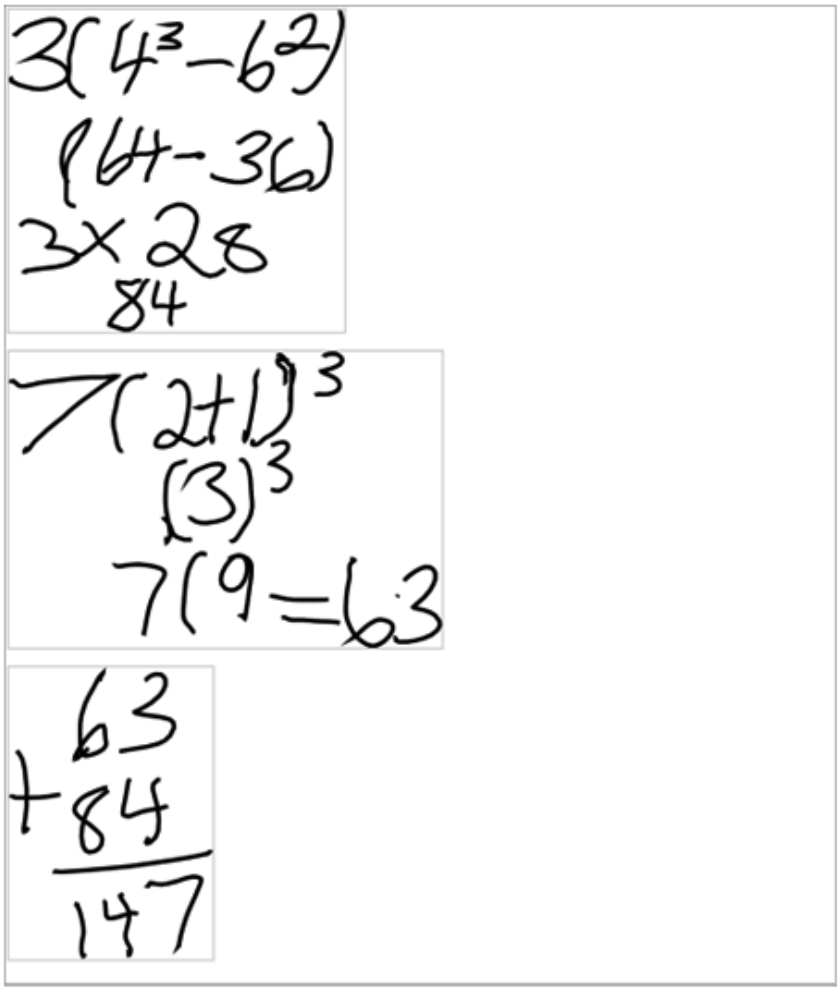
This response contains sufficient work to show a thorough understanding.

GUIDE PAPER 4

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.



Answer 147

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 value of the expression; however, a calculation error when evaluating 3^3 results in an incorrect solution.

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

GUIDE PAPER 5

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

4 to the third power = 64, 64 - 6 squared, 6 squared = 36. 64 - 36 = 28. 3 × 28 = 84.
2 + 1 = 3, 3 to the third power equals 27, 27 + 7 = 34 .

So, 84 + 34 = 118

Answer 118

Score Credit 1 (out of 2 credits)

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

- An incorrect value of the expression is determined due to 27 being inappropriately added to 7 instead of being multiplied; however, the rest of the work needed to evaluate the expression is carried out correctly using sound procedures.

This response correctly addresses only some elements of the task.

GUIDE PAPER 6

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

3(64-36) 7 x 27
192-36 = 156 = 189

156+189 = 345

The expression equal 345.

Answer 345

Score Credit 1 (out of 2 credits)

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

- Although an incorrect value for the expression is determined due to the incorrect distribution of the 3, the rest of work needed to evaluate the expression is carried out correctly using sound procedures.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

45

Evaluate the expression $3(4^3 - 6^2) + 7(2 + 1)^3$.

Show your work.

4x4x4=64
64x3=192
192-36=156
156+21=177 6x6=36
7x3=21

Answer 177

Score Credit 0 (out of 2 credits)

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

- Although this response contains some correct elements, incorrect procedures are used to evaluate the expression.

Holistically, this response is insufficient to show any understanding.

45

Evaluate the expression $3(4^3 - 6^2) + 7(2+1)^3$.

Show your work.

$3(4^3 - 6^2)+7(2+1)^3 =?$

Answer 273

Score Credit 0 (out of 2 credits)

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

- The correct value of the expression is provided with no work.

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

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

EXEMPLARY RESPONSE

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

$4^3/_4 \div {}^1/_3 = {}^{19}/_4 \div {}^1/_3 = {}^{19}/_4 \times {}^3/_1 = {}^{57}/_4 = 14^1/_4$

Since she can't make a full batch out of the part left, she only has enough for 14 full batches.

OR other valid explanation

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

$4\frac{3}{4} = \frac{19}{4}$ $\frac{19}{4} \div \frac{1}{3} = \frac{19}{4} \times \frac{3}{1} = \frac{57}{4} = 14\frac{1}{4}$

So Jackie can make 14 full batches of trail mix.

Score Credit 3 (out of 3 credits)

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

- The number of batches of trail mix that can be made with the bananas is correctly determined using a sound procedure and interpreted correctly for the final solution.

This response is complete and correct.

GUIDE PAPER 2

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

The maximum number is 14 batches

$\frac{19}{4} \times \frac{3}{1} = \frac{57}{4} = 14.25$

Score Credit 3 (out of 3 credits)

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

- The number of batches of trail mix that can be made with the bananas is correctly determined using a sound procedure and interpreted correctly for the final solution.

This response is sufficient to demonstrate a thorough understanding.

GUIDE PAPER 3

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

$4\frac{3}{4} = \frac{19}{4}$

$\frac{19}{4} = \frac{57}{12}$

$\frac{1}{3} = \frac{4}{12}$

$57 \div 4 = 14.25$

jackie can make 14 full batches of trail mix

Score Credit 3 (out of 3 credits)

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

- The number of batches of trail mix that can be made with the bananas is correctly determined using a sound procedure and interpreted correctly for the final solution.

This response is complete and correct.

GUIDE PAPER 4

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

The maximum number of full batches of trail mix jackie can make with the dried bananas she has is 14 because you have to divide $4\frac{3}{4}$ by $\frac{1}{3}$ to see how many times $\frac{1}{3}$ can go into $4\frac{3}{4}$. which is $14\frac{1}{4}$ but in full batches it would be 14.

Score Credit 2 (out of 3 credits)

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

- The number of batches of trail mix Jackie can make with the bananas is determined and interpreted correctly for the final solution; however, the explanation as to how the division results in 14¼ is insufficient.

This response appropriately addresses most, but not all, aspects of the task.

GUIDE PAPER 5

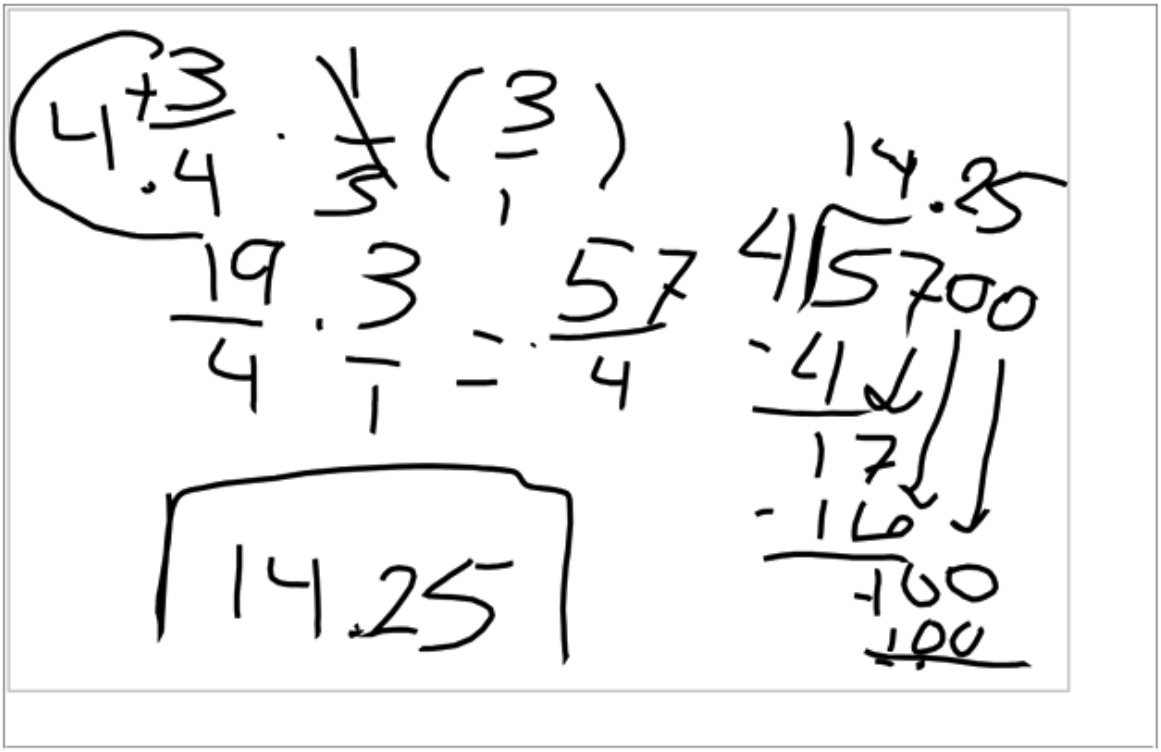
46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.



Score Credit 2 (out of 3 credits)

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

- The number of batches of trail mix Jackie can make with the bananas is determined using a sound procedure; however, this number is not interpreted and is incorrectly provided as the final solution.

This response appropriately addresses most, but not all, aspects of the task.

GUIDE PAPER 6

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

Jakie can make 14 full batches with the dried bananas she has because when you turn $4\frac{3}{4}$ into an improper fraction, and then make $\frac{1}{3}$ and $\frac{19}{4}$ have a same denominator, $\frac{4}{12}$ can go into $\frac{57}{12}$ 14 times smoothly.

Score Credit 2 (out of 3 credits)

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

- The maximum number of full batches of trail mix Jackie can make with the bananas is given; however, the stated reasoning does not fully support the final solution due to the lack of clearly addressing the fractional remainder of ¼ that results from the division.

This response appropriately addresses most, but not all, aspects of the task.

GUIDE PAPER 7

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

$$4\frac{3}{4} \div \frac{1}{3} = 14\frac{1}{4}$$

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 equation is written that shows a process that can be used to determine the number of batches of trail mix Jackie can make with the bananas; however, no further explanation or work is provided to support the value of 14¼.
- The number of batches of trail mix Jackie can make is not interpreted and incorrectly provided as the final solution.

This response addresses some elements of the task correctly but reaches an inadequate solution and provides reasoning that is faulty or incomplete.

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

She can make 4 9/4 full batches

$4\frac{3}{4} \times \frac{3}{1} = 4\frac{9}{4}$

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 multiplication process is shown in the equation written that can be used to determine the number of batches of trail mix Jackie can make with the bananas; however, the multiplication is performed incorrectly.
- The determined number of batches of trail mix Jackie can make is not interpreted and incorrectly provided as the final solution.

This response addresses some elements of the task correctly but reaches an inadequate solution and provides reasoning that is faulty or incomplete.

GUIDE PAPER 9

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

its 14 because if you do the amount she has divevided by how much batches she uses it equals 14

Score Credit 1 (out of 3 credits)

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

- A sound division process is described that can be used to determine the number of batches of trail mix Jackie can make with the bananas; however, no further explanation or work of the division process is provided.
- Although the correct solution is given, the division process described does not fully support the solution due to the lack of addressing the fractional remainder of ¼.

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

GUIDE PAPER 10

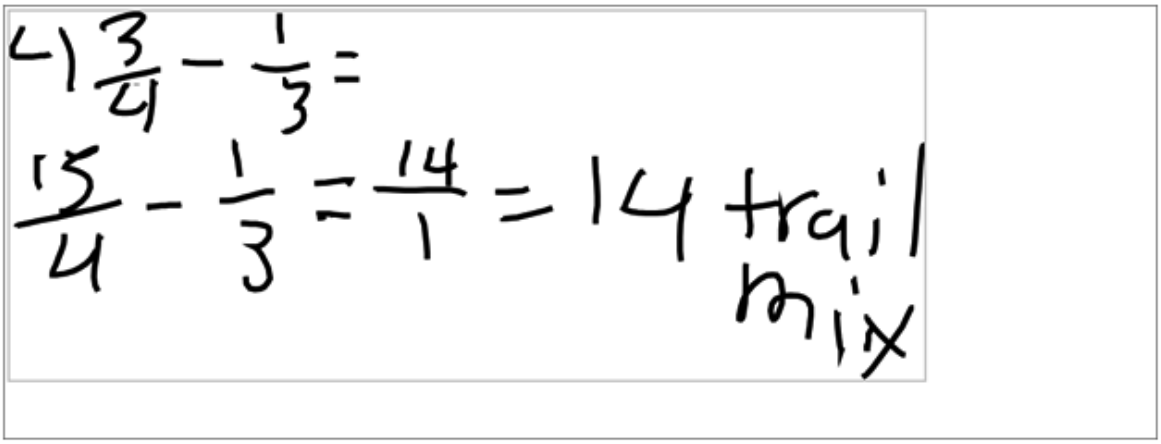
46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.



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.

- The correct solution is obtained using an obviously incorrect procedure.

This response is insufficient to demonstrate any understanding.

46

Jackie is making batches of trail mix based on the information listed below.

- She has $4\frac{3}{4}$ cups of dried bananas.
- She uses $\frac{1}{3}$ cup of dried bananas in each full batch of trail mix.

What is the maximum number of full batches of trail mix Jackie can make with the dried bananas she has?

Explain your answer.

14 batches of trail mix.

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.

- The correct solution is provided with no explanation.

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

Grade 6
Mathematics

Scoring Leader Materials
2026 Training Set