New York State Testing Program

2024

Mathematics Test

Grade 3

Scoring Leader Materials

Training Set

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 (2024)

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 (2024)

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.

31

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school?

Answer _____ a.m.

EXEMPLARY RESPONSE

31

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school?

Answer 8:50 a.m.

GUIDE PAPER 1

31

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school?

Answer 8:50 a.m. a.m.

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

31

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school?

$$\begin{array}{r} 15 \\ +\ 8\,35 \\ \hline 8\,50 \end{array}$$

(8 50)

Answer a.m.

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

31

It takes Heidi 15 minutes to walk from her home to school. If she leaves her home at 8:35 a.m., what time will Heidi get to school? [1]

Answer 7:49 a.m.

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

32

Write the number 3,194 in expanded form.

Answer _____

EXEMPLARY RESPONSE

32

Write the number 3,194 in expanded form.

Answer 3,000 + 100 + 90 + 4

GUIDE PAPER 1

32

Write the number 3,194 in expanded form.

Answer 3,000+100+90+4

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

32

Write the number 3,194 in expanded form. [1]

Answer 3,000+100+90+4

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

32

Write the number 3,194 in expanded form.

Answer 3,000 100 90 4

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

33

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize?

Answer _____ tickets

EXEMPLARY RESPONSE

33

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize?

Answer 8 tickets

GUIDE PAPER 1

33

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize?

Answer Each prize is 8 tickits tickets

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

33

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize? [1]

Answer 8 tickets

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

33

Gayle earns 32 tickets at an event. She uses all of her tickets to buy 4 prizes and uses the same number of tickets to buy each prize. How many tickets does Gayle use to buy each prize?

Answer

4x?=28

7 tickets

28 ÷ 7=4

÷

tickets

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

EXEMPLARY RESPONSE

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

Ms. Linsey's bulletin board has the greater area.
I know this is true because $6 \times 5 = 30$ square feet
and $7 \times 4 = 28$ square feet
and 30 is greater than 28.

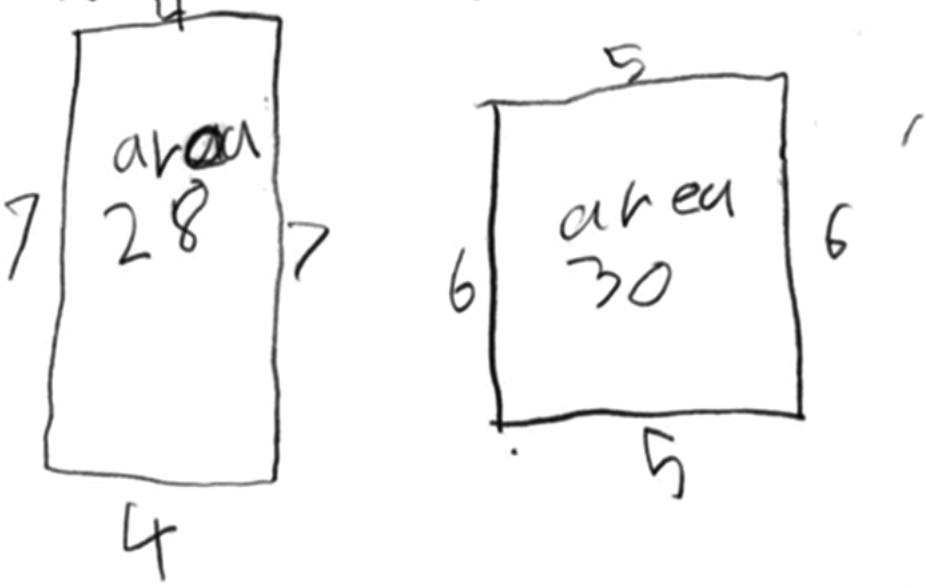
OR Other valid explanation

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

I found my answer by multiplying each number and Ms. Linsels is bigger



30 is Bigger.

Score Credit 2 (out of 2 credits)

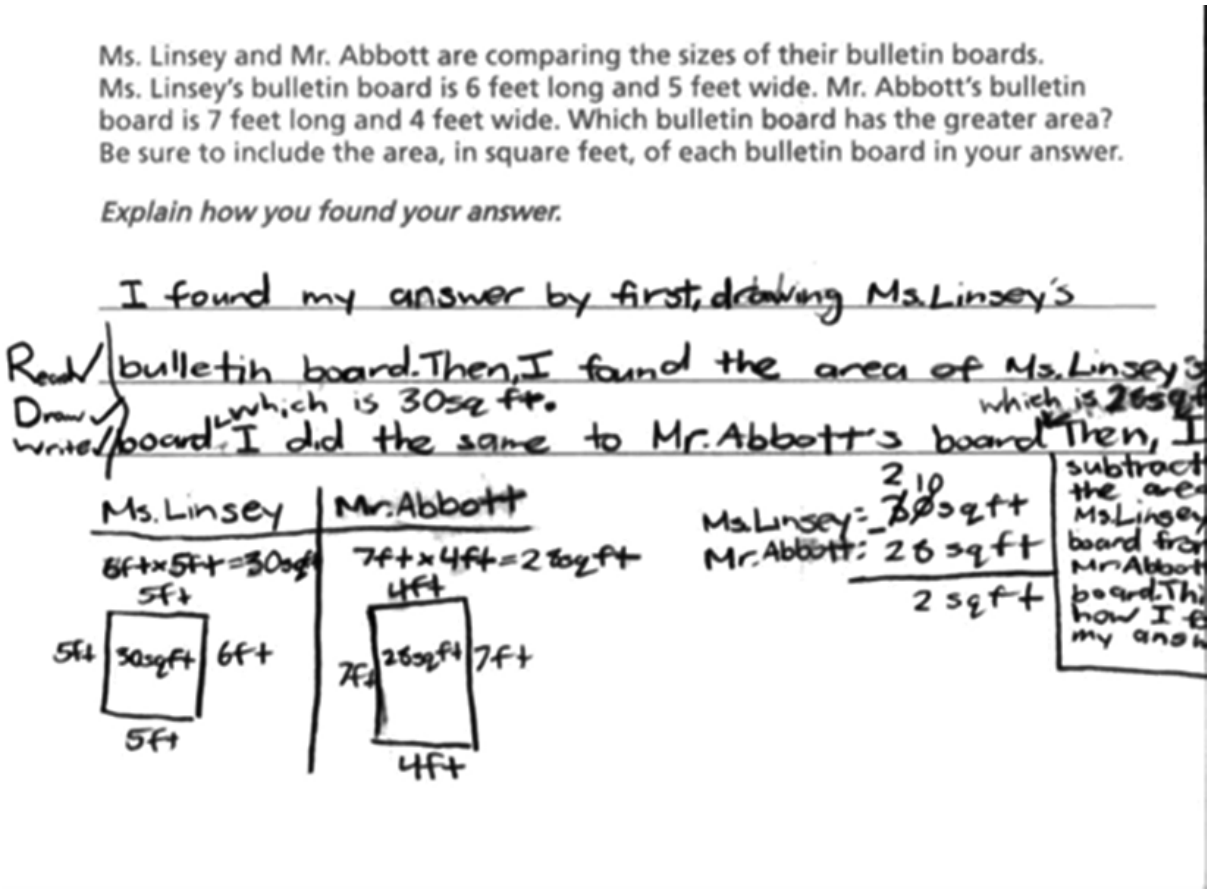
This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. The area of each bulletin board is correctly calculated, the multiplication is indicated by the diagram, and Ms. Linsey's is chosen. This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 2

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.



Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. The areas are calculated, the multiplication is shown, and subtraction is used to show that Ms. Linsey's bulletin board has the greater area. Even though the work contains a mislabeled side and incorrectly describes the subtraction, holistically, this response is sufficient to demonstrate a thorough understanding.

GUIDE PAPER 3

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

$7 \times 4 = 28$ ft. $6 \times 5 = 30$ ft. $30 > 28$

Ms. Linseys is bigger.

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 each bulletin board is correctly calculated, the multiplication is shown, the areas are compared, and Ms. Linsey's bulletin board is chosen. Although the areas are labeled in units of feet, the response contains sufficient work to demonstrate understanding.

GUIDE PAPER 4

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

so Mr. Abbott bulletin board is 28 sq units and Ms. Linsey bulletin board is 30 sq units and Ms. Linsey bulletin board is bigger than Mr. Abbott bulletin board.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The correctly-calculated area of each bulletin board is provided, and Ms. Linsey's is chosen. However, no work is shown to support the area values. This response contains the correct solution, but the required work is incomplete.

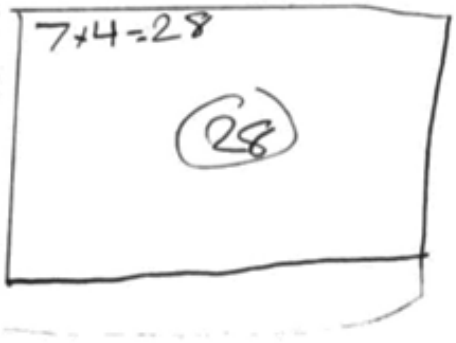
GUIDE PAPER 5

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

Mr. Abbott has a greater bulletin board because I checked each one.



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 one bulletin board is correctly calculated ($7 \times 4 = 28$) and the multiplication is shown. A transcription error (6×4 instead of 6×5) occurs in the work for the second board, but the multiplication is carried out correctly. This results in the choice of Mr. Abbott's board. This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 6

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

I did $6 \times 5 = 30$ is the area and $7 \times 4 = 28$ and that is my area for mr.abbott's bulletin board.

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 each bulletin board is correctly calculated, and the multiplication is shown. The answer to which bulletin board has the greater area, however, is not provided. This response correctly addresses only some elements of the task.

GUIDE PAPER 7

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

Ms,Linseys because Mr,Abbott has longger but smaller .

Score Credit 0 (out of 2 credits)

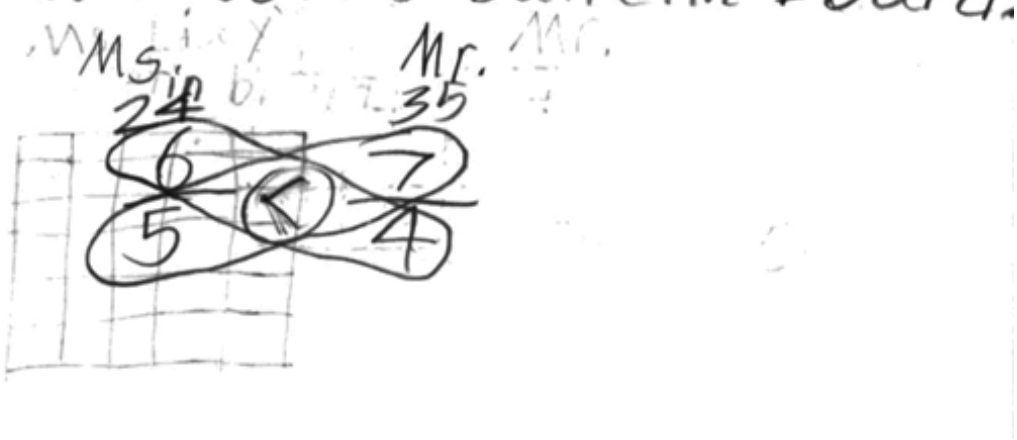
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. Although Ms. Linsey's bulletin board is chosen, the areas are not calculated and the reasoning provided is incorrect. Holistically, the response shows no overall understanding.

34

Ms. Linsey and Mr. Abbott are comparing the sizes of their bulletin boards. Ms. Linsey's bulletin board is 6 feet long and 5 feet wide. Mr. Abbott's bulletin board is 7 feet long and 4 feet wide. Which bulletin board has the greater area? Be sure to include the area, in square feet, of each bulletin board in your answer.

Explain how you found your answer.

I found my answer by usein the butterfly methoot and the greater one was Mr. Abbott+'s bulletin board.



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 comparison of the ratios of the dimensions of the boards is given, and Mr. Abbott's bulletin board is chosen based on having the larger ratio. This response is irrelevant to the task and shows no overall understanding.

35

A list of fractions is shown below.

$$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

EXEMPLARY RESPONSE

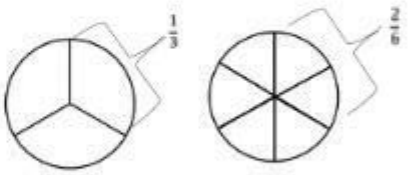
35

A list of fractions is shown below.

$$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.



The fractions $^1/_3$ and $^2/_6$ are equivalent.

If I take two circles of equal size,
and divide one circle into three equal parts
and the other circle into six equal parts,
I can see that $^2/_6$ of one circle is equal in size to $^1/_3$ of the other circle.

OR other valid explanation

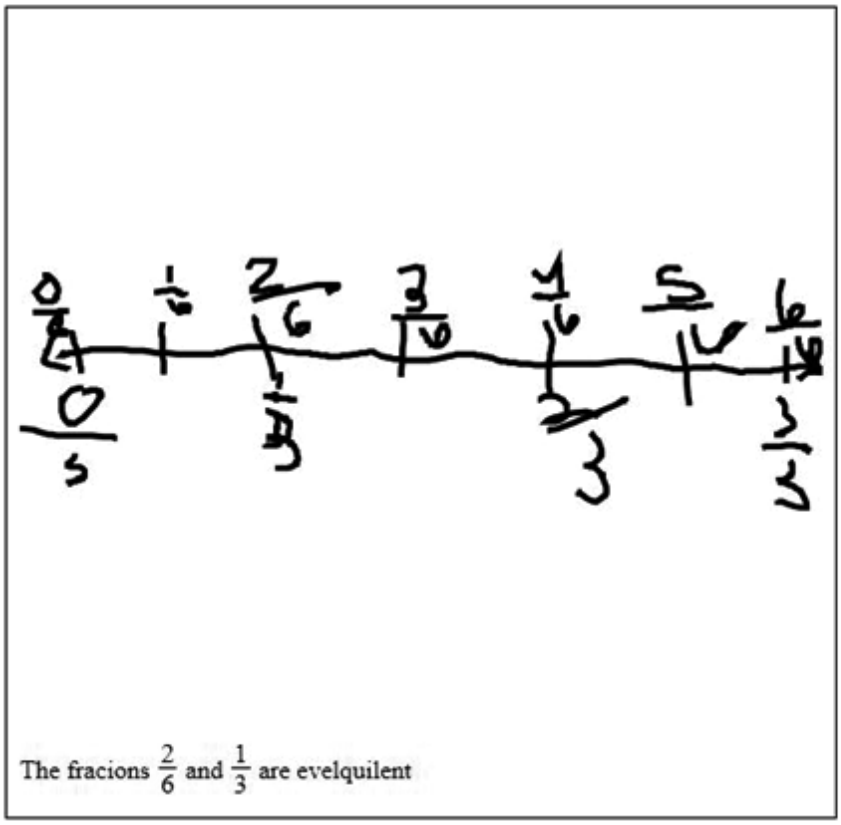
35

A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.



The fracions $\frac{2}{6}$ and $\frac{1}{3}$ are evelquilent

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. The equivalent fractions are identified. The drawing of the number line is a valid explanation. This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 2

35

A list of fractions is shown below.

$\frac{2}{8}$, $\frac{1}{3}$, $\frac{3}{4}$, $\frac{2}{6}$

Which two fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

$\frac{1}{3}$ and $\frac{2}{6}$ are equivalent because in frations the bigger the denomonator the smaller the fration so $\frac{1}{6}$ is half of $\frac{1}{3}$ which means $\frac{1}{3}$ and $\frac{2}{6}$ are equal because half + half = whole

$\frac{1}{6}+\frac{1}{6}=\frac{1}{3}$ or $\frac{2}{6}$

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The equivalent fractions are identified and supported using the reasoning that ⅙ is half of ⅓. This response is complete and correct.

GUIDE PAPER 3

35

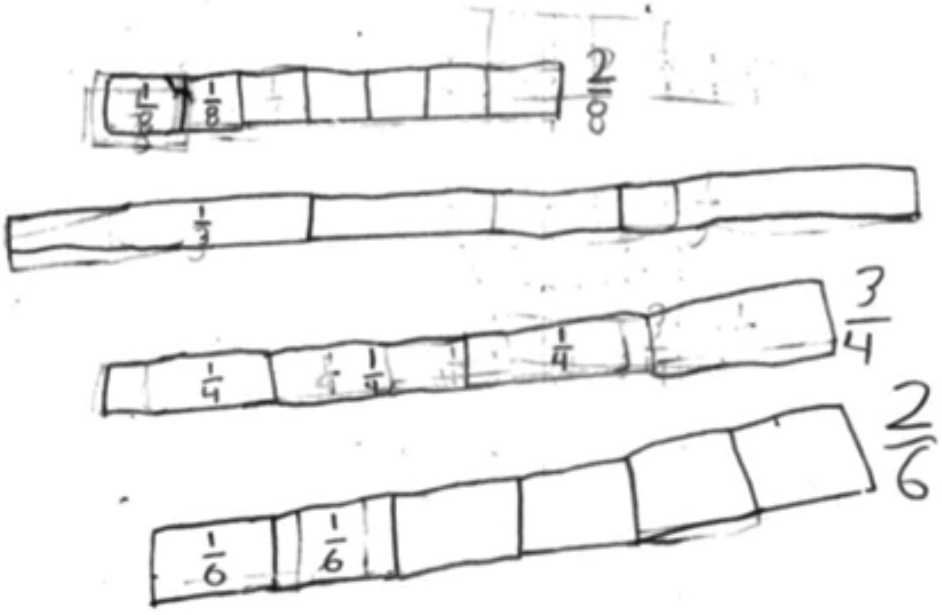
A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

My answer is $\frac{1}{3}$ and $\frac{2}{6}$ are the equivalent because I compare and it the same.



Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The equivalent fractions are identified and supported using diagrams to show equal size. This response is complete and correct.

GUIDE PAPER 4

35

A list of fractions is shown below.

$$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

I figuerd it out by doing fration number lines and ploted points. Th e equal fractions are 2 / 6 1 /3.

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The equivalent fractions are identified; however, the explanation is insufficient. This response contains the correct solution, but the required explanation is incomplete.

GUIDE PAPER 5

35

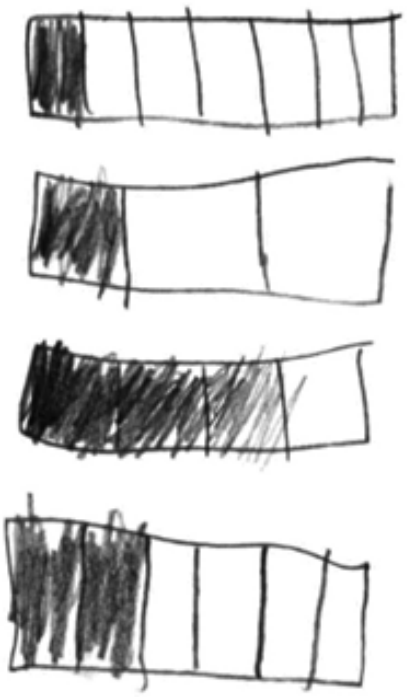
A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

2/8 is equivalent to 1/3



Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The equivalent fractions are incorrectly identified (⅜ is equivalent to ⅓). The drawings of the four fractions for size comparison are correct, but are misinterpreted, leading to an incorrect answer. This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 6

35

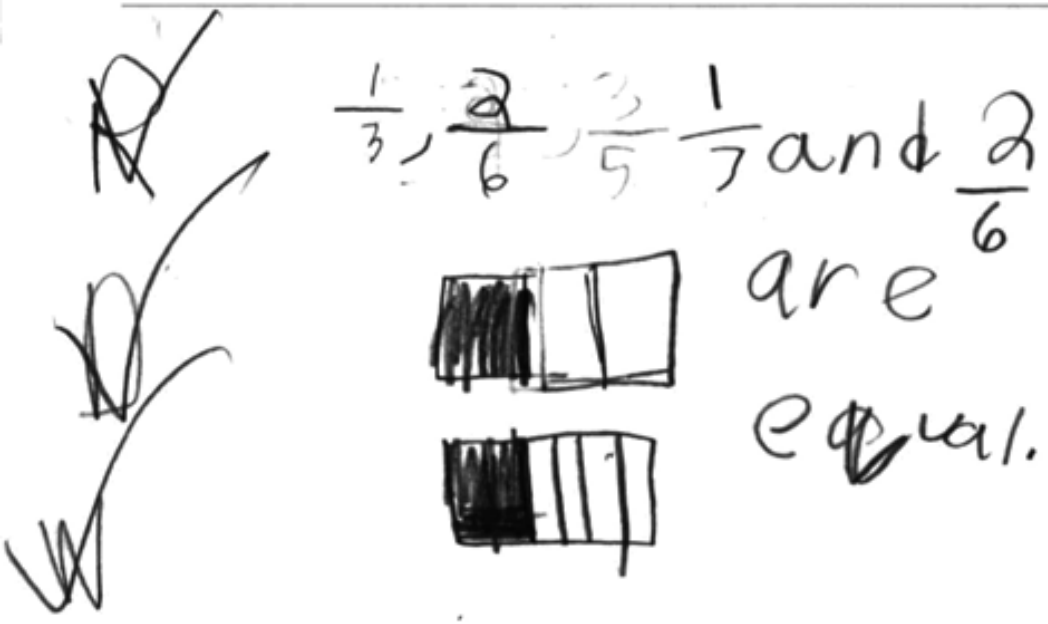
A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

$\frac{1}{3}$ and 2 sixths because $\frac{1}{3}$ and $\frac{1}{3} = \frac{2}{6}$.



Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The equivalent fractions are identified (⅓ and 2 sixths). The drawing is correct and would be a sufficient explanation; however, the statement "because ⅓ and ⅓ = ⅔" is incorrect. This response correctly addresses only some elements of the task.

GUIDE PAPER 7

35

A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

$\frac{2}{8}$ $\frac{1}{3}$ are equal because they are both in the same spot on the number line

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 response incorrectly identifies the equivalent fractions (⅜ ⅓) and incorrectly states that "they are both in the same spot on the number line" with no supporting work. This response is incorrect and, holistically, is insufficient to show any understanding.

35

A list of fractions is shown below.

$\frac{2}{8}, \frac{1}{3}, \frac{3}{4}, \frac{2}{6}$

Which **two** fractions from the list are equivalent? Be sure to include what you know about fractions in your answer.

Explain how you know your answer is correct.

$\frac{1}{3}$, $\frac{2}{8}$ becuse it becomes $\frac{1}{2}$ and $\frac{1}{2}$ it ewila to evey thing.

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 equivalent fractions are incorrectly identified (⅓, ⅜). The explanation that "it becomes ½ and ½ it ewila to eveything" is incoherent. Holistically, this response shows no overall understanding of the task.

36

A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.

Answer $ _____

EXEMPLARY RESPONSE

36

A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.

$5 \times 20 = 100$; $6 \times 30 = 180$; $8 \times 10 = 80$
$100 + 180 + 80 = 360$
$360

OR

$20 + 20 + 20 + 20 + 20 = 100$
$30 + 30 + 30 + 30 + 30 + 30 = 180$
$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 80$
$100 + 180 + 80 = 360$
$360

OR Other valid process

Answer $ $360

36

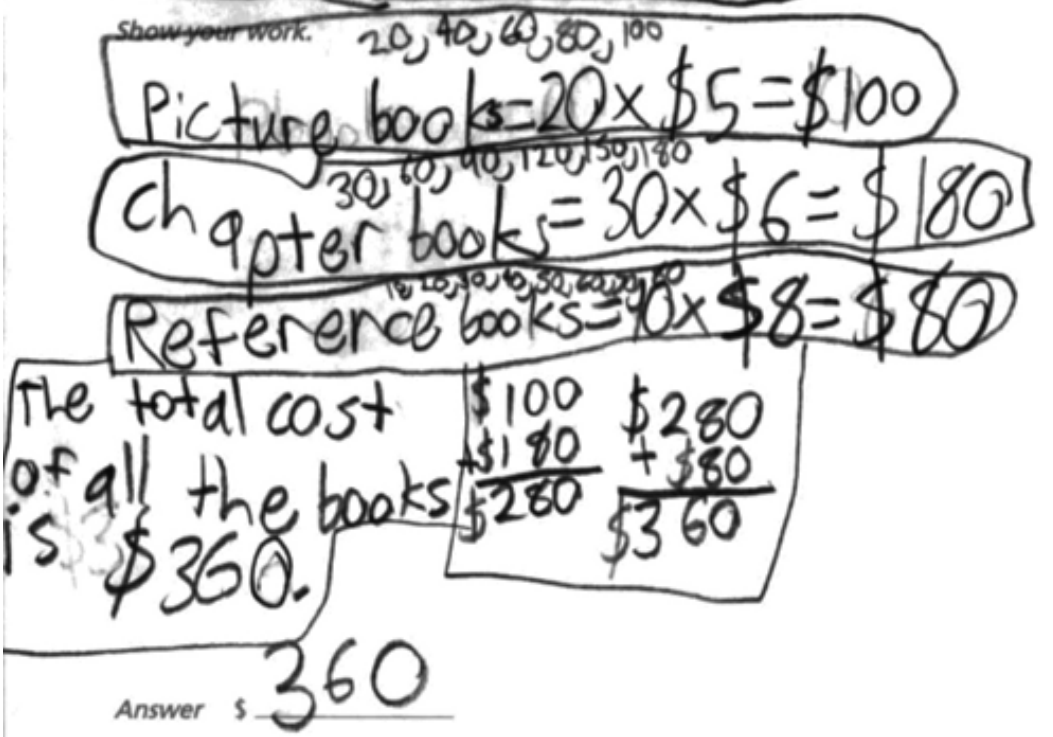
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 0 reference books.
What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 360

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. Multiplication is used to calculate the total costs of each type of book, and these are added together to calculate the total cost of all the books. This response is complete and correct.

GUIDE PAPER 2

36

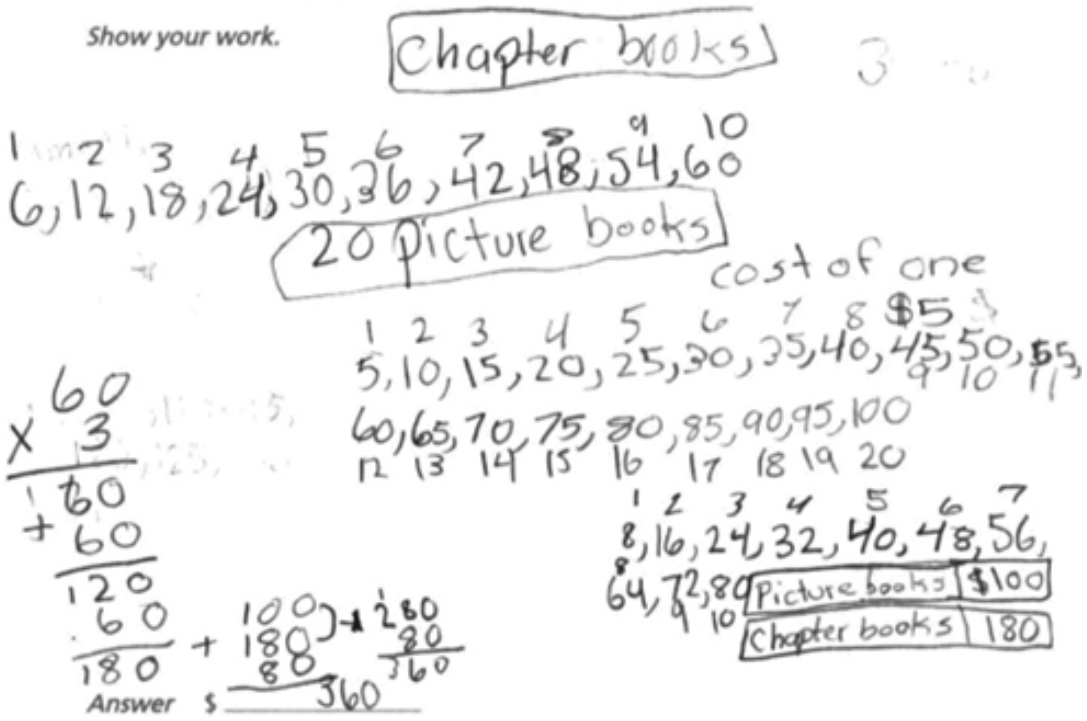
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 360

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. Skip-counting is used to calculate the total costs of each type of book, and these are added together to calculate the total cost of all the books. This response is complete and correct.

GUIDE PAPER 3

36

A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.

100+ 180 = 280+ 80=360

100 180 8o

Answer $ 360

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. The total costs of each type of book are added together to calculate the total cost of all the books. This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 4

36

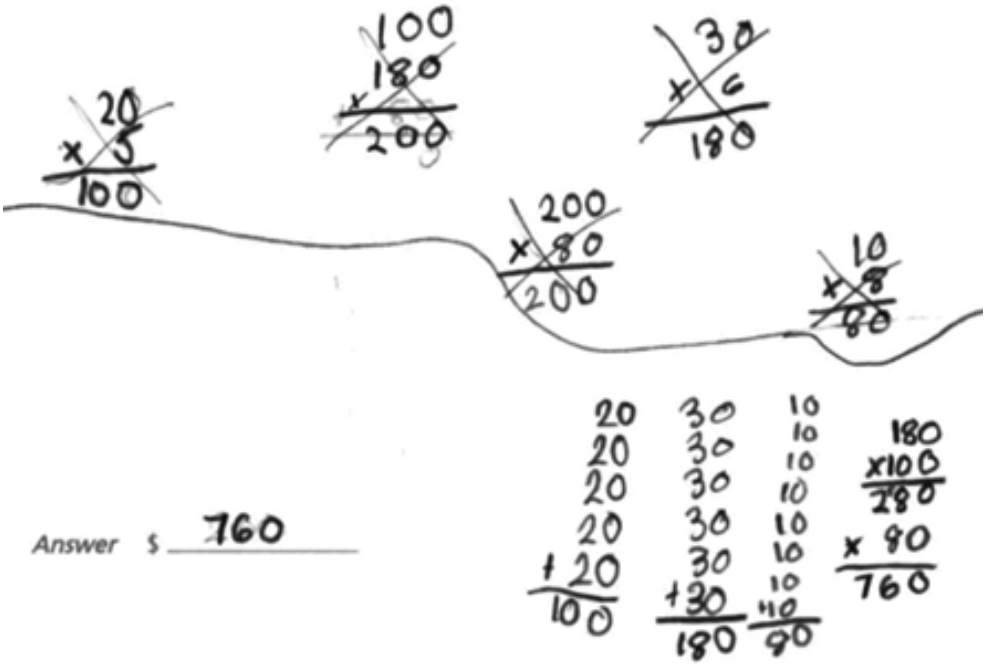
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 760

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. Repeated addition is used to calculate the total costs of each type of book. A calculation error (280 + 80 = 760) occurs when computing the total cost of all the books. This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 5

36

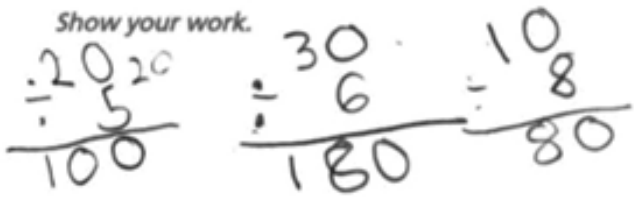
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 1,080

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The total costs of each type of book are calculated by multiplication, although the incorrect symbol (÷) is used in the work. A transcription error (800 for 80) occurs when adding the individual totals together, resulting in an incorrect answer of $1,080. This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 6

36

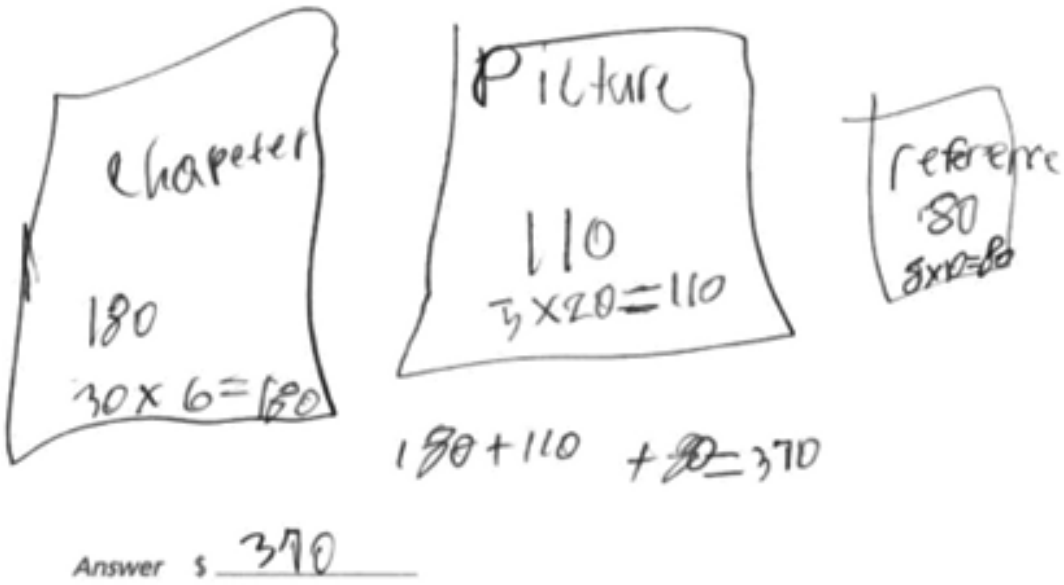
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 370

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. Multiplication is used to calculate the total costs of each type of book, and these are added together to calculate the total cost of all the books. A calculation error ($5 \times 20 = 110$) results in an incorrect answer of $370. This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 7

36

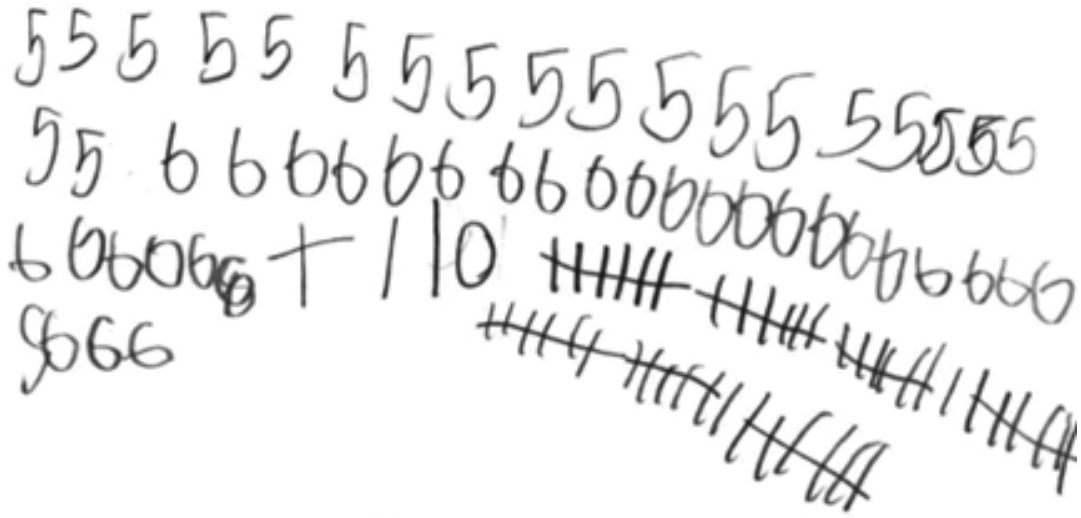
A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.



Answer $ 560

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. While an attempt is made to use repeated addition to calculate the total cost, this is not done correctly. This response is incorrect and, holistically, is insufficient to show any understanding.

36

A librarian is ordering new books. The cost of one book of each type is shown below.

BOOK COST

Type of Book	Cost
Picture book	$5
Chapter book	$6
Reference book	$8

The librarian orders 20 picture books, 30 chapter books, and 10 reference books. What is the total cost of all the books the librarian orders?

Show your work.

5 19 × 20 = 360
6
8
+

19

Answer $ 360

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 correct solution of $360 is obtained using an obviously incorrect procedure. The response is insufficient to show any understanding.

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get?

Show your work.

Answer _____ pounds of clay

EXEMPLARY RESPONSE

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get?

Show your work.

$25 \div 5 = 5$ so 5 pounds of clay per package for each group
$3 \times 5 = 15$ so each group gets 15 pounds of clay total

OR other valid process

Answer 15 pounds of clay

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.

$25 \div 5 = 5 \times 3 = 15$

Answer 15 pounds of clay

Score Credit 2 (out of 2 credits)

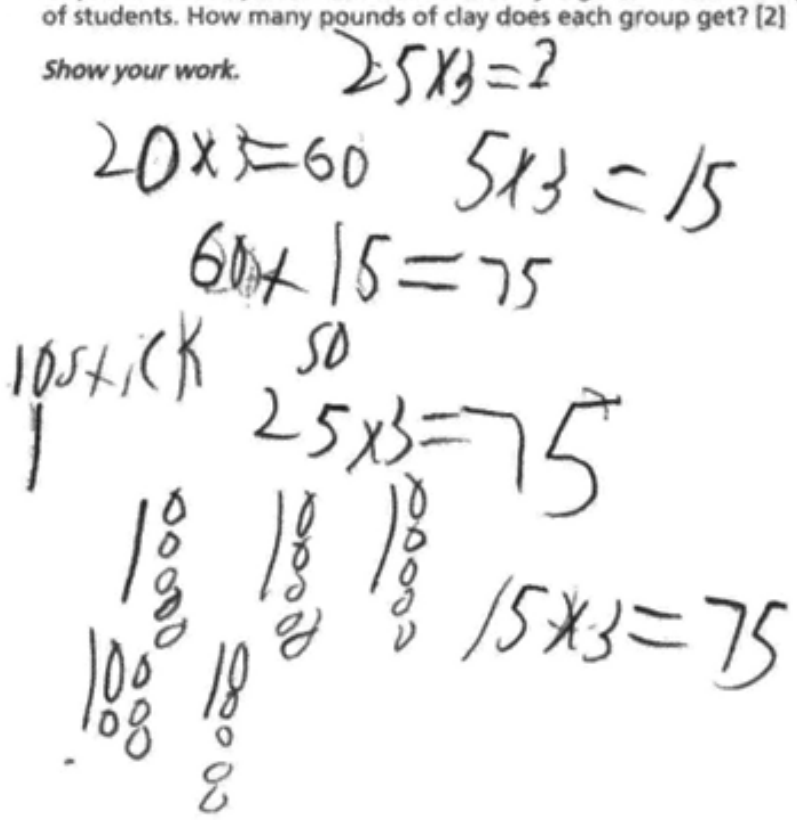
This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. A correct process is shown of taking 25 pounds of clay per package divided by 5 to find the number of pounds of clay per package for each group, and then multiplying by 3 packages to calculate the total number of pounds of clay given to each group. The correct answer of 15 is provided. Although the work contains a run-on equation, this response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 2

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.



Answer 15 pounds of clay

Score Credit 2 (out of 2 credits)

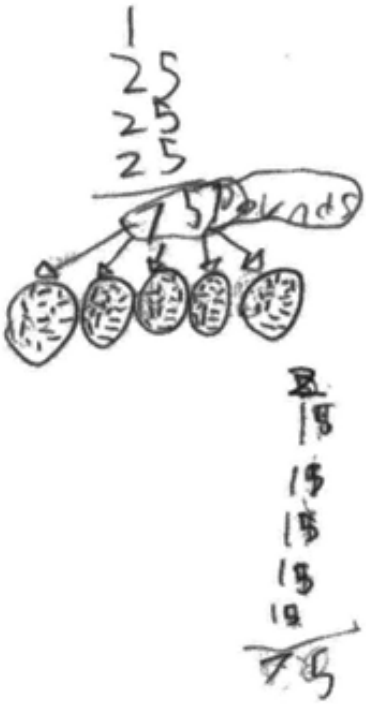
This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. Separate multiplications are used to determine the total number of pounds of clay amongst the 3 packages. A drawing including 10-sticks is used to divide the 75 pounds into 5 groups of 15. The correct answer of 15 is provided. Although an incorrect equation $15 \times 3 = 75$ is written in the work, holistically, this response is sufficient to demonstrate a thorough understanding.

GUIDE PAPER 3

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.



Answer 15 pounds of clay

Score Credit 2 (out of 2 credits)

This response demonstrates a thorough understanding of the mathematical concepts and procedures in the task. Repeated addition of 25 pounds per package for three packages is used to calculate the 75 total pounds of clay and then to calculate the number of pounds of clay given to each of the five groups. The correct answer of 15 is provided. This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 4

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.

Answer 5 pounds of clay

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. One 25-pound package is divided by 5 groups; however, although the drawing shows three packages, the necessary multiplication is not performed. An incorrect answer of 5 is provided. This response correctly addresses only some elements of the task.

GUIDE PAPER 5

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get?

Show your work.

$3 \times 25 = 75$ pounds of clay.
Each group will get 15 pounds of clay.

Answer 15 pounds of clay

Score Credit 1 (out of 2 credits)

This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. The 3 packages of clay are multiplied by 25 pounds per package to calculate 75 total pounds of clay. The correct answer of 15 is provided; however, it is unclear how this value is obtained. This response contains the correct solution, but the required work is incomplete.

GUIDE PAPER 6

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get?

Show your work.

$$\begin{array}{r} 25 \\ +\ 25 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 50 \\ +\ 25 \\ \hline \end{array}$$

75 dived by 5 = 15 but it has to be 14 becuse its says even

Answer 14 pounds of clay

Score Credit 1 (out of 2 credits)

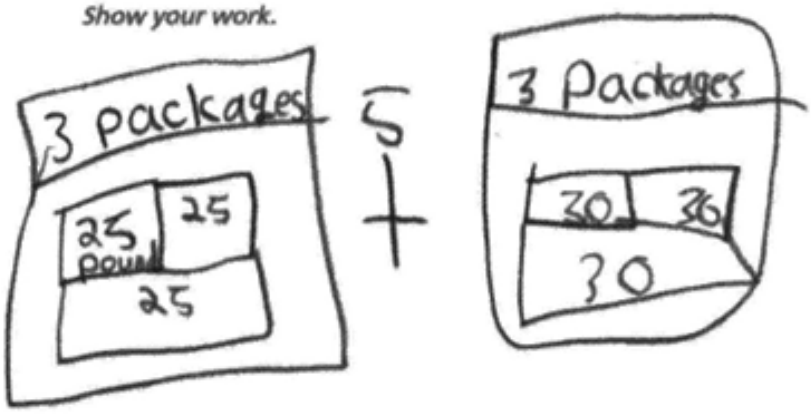
This response demonstrates only a partial understanding of the mathematical concepts and procedures in the task. Repeated addition (in two steps) is used to calculate the 75 total pounds of clay, which are then divided by 5. This results in the correct answer of 15; however, a final answer of 14 is provided, due to the misunderstanding that "it has to be 14 becuse its says even." This response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 7

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.



Answer 30 pounds of clay

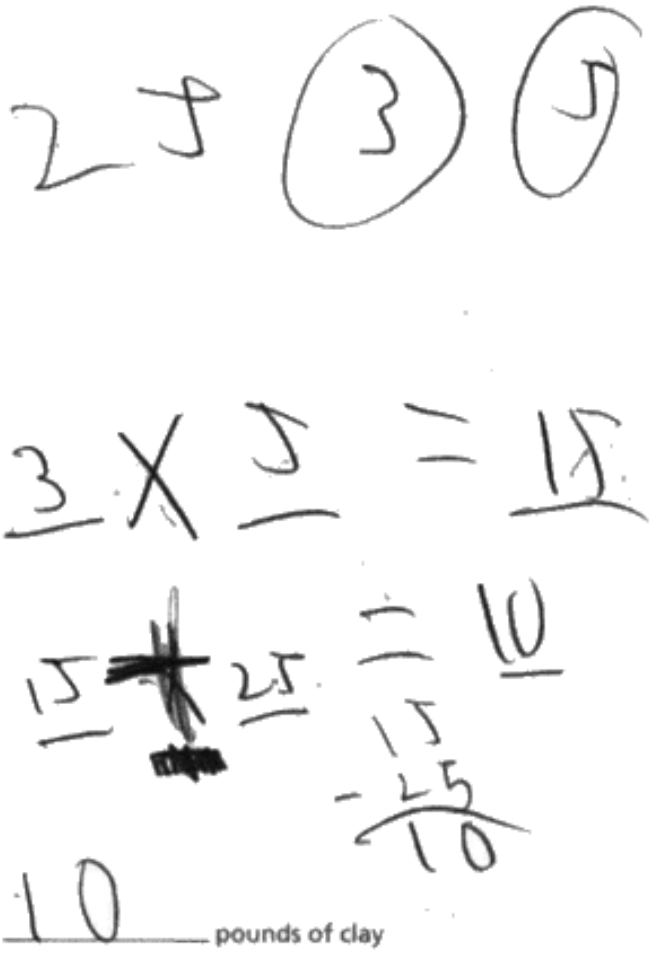
Score Credit 0 (out of 2 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. Holistically, this response shows no overall understanding of the task.

37

Ms. Thompson buys 3 packages of clay for a project. Each package weighs 25 pounds. An equal amount of all the clay is given to each of 5 groups of students. How many pounds of clay does each group get? [2]

Show your work.



Answer 10 pounds of clay

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 work shown is incoherent, and holistically, this response shows no overall understanding of the task.

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

EXEMPLARY RESPONSE

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park.
I know this is true because the fractions have the same numerator,
so the fraction with the larger denominator has a lesser value.
$^3/_8$ is less than $^3/_4$, so the park is closer to Manny's house.

OR Other valid explanation

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park.
I know this is true because the fractions have the same denominator,
so the fraction with the smaller numerator has a lesser value.
$^3/_8$ is less than $^5/_8$, so the park is closer to Manny's house.

OR Other valid explanation

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park because three fourths is a lot more than three eighths because three fourths is one over a half of a whole and three eighths is one less than a half of a whole.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny, because five eighths is closer to a whole than three eighths, because five eighths is one more eighth than a half of a whole and three eighths is one less than a half of a whole.

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts in the task. Correct answers are given and supported by comparing the size of the fractions to the benchmark fraction of one half. The reference to one less instead of one less eighth in the explanation is sufficient to show a thorough understanding.

GUIDE PAPER 2

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

$\frac{3}{4} > \frac{3}{8}$

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

To the park because the bigger the denominator the smaller the piece, and the distance has 8 as th denominator so he lives a less amount to the par

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

$\frac{5}{8} > \frac{3}{8}$

Explain your answer.

Manny because since the numerator is greater, Pilar lives farther, so Manny lives the least amount away.

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts in the task. Correct answers are given and supported by comparing the size of the denominators and the size of the numerators of the fractions. This explanation is complete and correct.

GUIDE PAPER 3

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park. I know this because 3/8 is shorter.Also, 8ths is cut into smallar pieaces than fourths and the bigger the denomanator the smallar the pieace and the smallar the denomanator the bigger the pieace you will have.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny sill lives closer because 3/8ths is a shorter distance than 5/8ths.Also you just have to walk 3 of 8ths and pilar has to walk 5 of 8ths.

Score Credit 3 (out of 3 credits)

This response demonstrates a thorough understanding of the mathematical concepts in the task. Correct answers are given and supported by comparing the size of the denominators and the size of the numerators of the fractions. This explanation is complete and correct.

GUIDE PAPER 4

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

the park because the bigger the denominator the smaller the fracti

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny because the bigger the nemerator the closer to a whole

Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts in the task. Correct answers are given. Correct answers are given, however the reasonings provided reflect minor misunderstandings when comparing fractions. This response appropriately addresses most, but not all, aspects of the task.

GUIDE PAPER 5

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives close to his school than the park. I know this because 4 is greater than 8 in fraction so $\frac{3}{4} > \frac{3}{8}$.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park. I know this because $\frac{5}{8}$ is greater than $\frac{3}{8}$ and that means in this case $\frac{5}{8}$ is a longer distance than $\frac{3}{8}$.

Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts in the task. For the first answer, a correct comparison statement is provided; however, misinterpreted, leading to an incorrect conclusion. A correct second answer is given, but the supporting statement is not sufficiently explained. This response reflects some minor misunderstanding of the underlying mathematical concepts and procedures.

GUIDE PAPER 6

38

The list below describes the distances between Manny's home, his school, and a park.

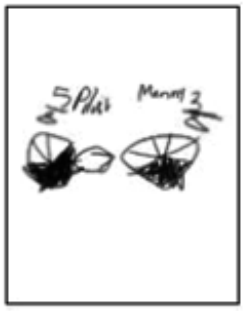
- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.



Score Credit 2 (out of 3 credits)

This response demonstrates a partial understanding of the mathematical concepts in the task. Sufficient reasoning is provided for comparing the fractions through the use of diagrams; however, the final answers to the questions are not provided. This response appropriately addresses most, but not all, aspects of the task.

GUIDE PAPER 7

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny lives closer to the park because $\frac{3}{8}$ is smaller than $\frac{3}{4}$ so if we are doing distance it will be the same $\frac{3}{8}$ is bigger

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Pilar lives closer to the park because $\frac{3}{8}$ is small but the $\frac{5}{8}$ is smaller.

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts in the task. A correct first answer is given, however, the supporting statement is not sufficiently explained. The second answer and reasoning are incorrect. This response addresses some elements of the task correctly but reaches an inadequate solution and provides reasoning that is faulty and incomplete.

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

$\frac{3}{4} > \frac{3}{8}$.

School because School and Park both have the same numerator. the little the more you get.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

$\frac{3}{8} < \frac{5}{8}$

Pilar lives closer because ther both have the same denamenator the bigger number ythe bigger you get.

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Two correct comparison statements are provided; however, they both are misinterpreted, leading to incorrect answers. Both supporting statements are not sufficiently explained. This response addresses some elements of the task correctly but reaches an inadequate solution and provides reasoning that is incomplete.

GUIDE PAPER 9

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

he lives closer to the park because the smaller the denominator,the bigger the piece is.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

pilar because the bigger the denominator, the smaller the piece is.

Score Credit 1 (out of 3 credits)

This response demonstrates only a limited understanding of the mathematical concepts in the task. A correct first answer is given and supported by comparing the size of the denominators of the fractions. The second answer and reasoning are incorrect. This response addresses some elements of the task correctly but reaches an inadequate solution and provides reasoning that is faulty and incomplete.

GUIDE PAPER 10

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

He is closer to the park then the school.

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

Manny is closer to the park then Pilar.

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

38

The list below describes the distances between Manny's home, his school, and a park.

- The distance between his home and his school is $\frac{3}{4}$ mile.
- The distance between his home and the park is $\frac{3}{8}$ mile.

Does Manny live closer to the school or closer to the park? Be sure to include what you know about fractions in your answer.

Explain your answer.

school because $\frac{3}{4}$ is closer then $\frac{3}{8}$

The distance between Pilar's home and the same park is $\frac{5}{8}$ mile. Who lives closer to the park, Manny or Pilar? Be sure to include what you know about fractions in your answer.

Explain your answer.

manny because $\frac{3}{8}$ is closer

Score Credit 0 (out of 3 credits)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The first answer is incorrect, and although the second answer is correct, the supporting statement is incomplete. Holistically, this response shows no understanding.

Grade 3
Mathematics

Scoring Leader Materials
2024 Training Set