3MA SLM-T



2017 Common Core

Mathematics Test



Scoring Leader Materials

Training Set

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2-Point Holistic Rubric

| 2 Point | A two-point 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 Point | A one-point 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 Point* | A zero-point 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).

| Score Point | ts: |
|-------------|--|
| 3 Point | A three-point 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 |
| | 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 Point | A two-point 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 Point | A one-point 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 Point* | A zero-point 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. |
| | |

3-Point Holistic Rubric

*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).

2017 2- and 3-Point Mathematics Scoring Policies

Below are the policies to be followed while scoring the mathematics tests for all grades:

- 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 blank, the student should still receive full credit.
- If students are directed to show work, a correct answer with no work shown receives no credit.
- If students are **not** directed to show work, any work shown will **not** be scored. This
 applies to items that do **not** ask for any work and items 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.
- Trial-and-error responses are not subject to Scoring Policy #6 above, since crossing out is part of the trial-and-error process.
- 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.
- In questions requiring number sentences, the number sentences must be written horizontally.
- 10. 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.

| 45 | Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator. |
|----|--|
| | Answer |
| | Explain why the answer you chose is less than $\frac{1}{3}$. |
| | Answer |
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| EXEMPLARY RESPONSE |
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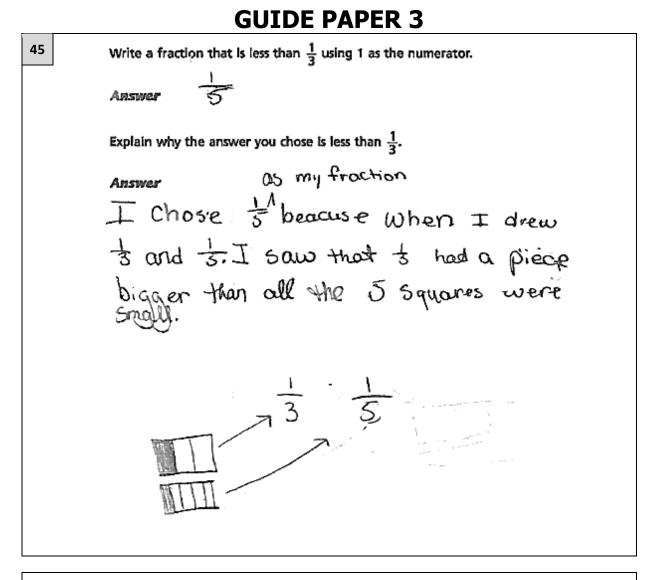
| Explain w | hy the answer you chose is less than $\frac{1}{3}$. |
|--------------------|---|
| Answer | |
| Since ¹ | /4 has a greater value in the denominator but the same numerator as $\frac{1}{3}$ |
| the wh | ole is divided into a greater number of parts, so each part is smaller. |
| Or oth | er valid response |
| | |
| | |

GUIDE PAPER 1 Additional 45 Write a fraction that is less than A using A as the numerator. Answer Explain why the answer you chose is less than(쿻 Answel First I close a consruent rectangle. Then I compared & and 3 and sch z is sreater, thank. Finally I know that to is

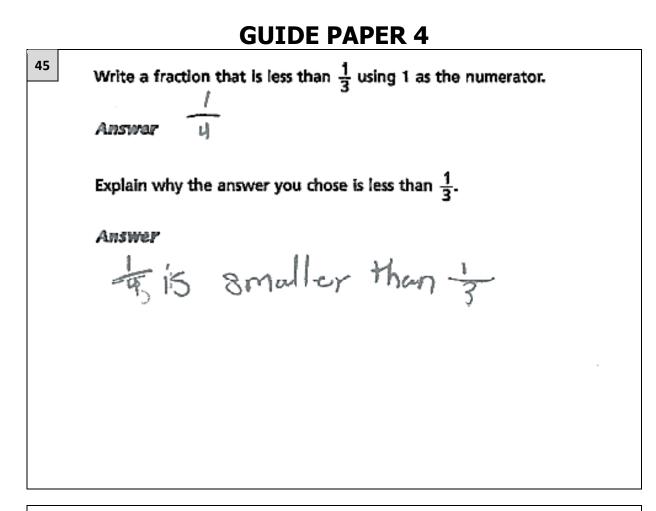
This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen and the explanation is correct.

GUIDE PAPER 2 Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator. 45 Answer Explain why the answer you chose is less than $\frac{1}{3}$. Answer If the numerators are the same, look at the denomanatorithe smaller the denomanator the bigger the Fraction.

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen as an answer. The response correctly compares denominators of fractions to explain the answer.



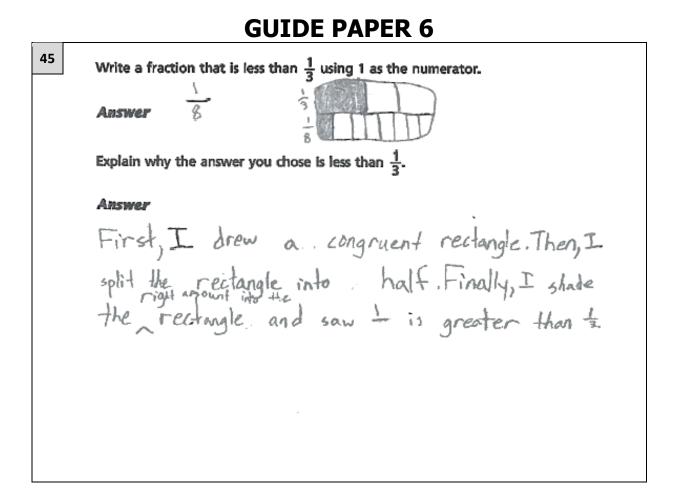
This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen, and a correct comparison of fractions in terms of parts of the whole is provided.



This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the explanation is incomplete: no explanation of why $\frac{1}{4}$ is less than $\frac{1}{3}$ is provided. The response addresses only some elements of the task correctly.

GUIDE PAPER 5 45 Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator. Answer Explain why the answer you chose is less than $\frac{1}{3}$. Answer to is bigger than is because the bigger the numerator the smaller the size.

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the explanation is incorrect. The response addresses only some elements of the task correctly.



This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the required work is incomplete: no explanation of why $\frac{1}{8}$ is less than $\frac{1}{3}$ is provided. The response addresses only some elements of the task correctly.

GUIDE PAPER 7 45 Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator. Answer Explain why the answer you chose is less than $\frac{1}{2}$. Answer + is less than & because 3 is greater than 1.

Score Point 0 (out of 2 points)

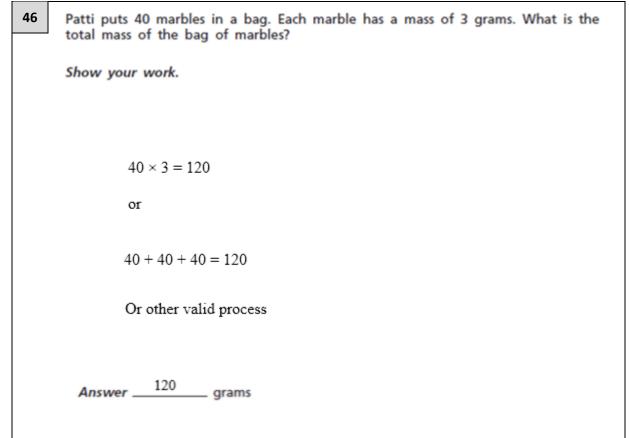
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. A fraction greater than $\frac{1}{3}$ is incorrectly chosen as an answer and an incorrect explanation is provided.

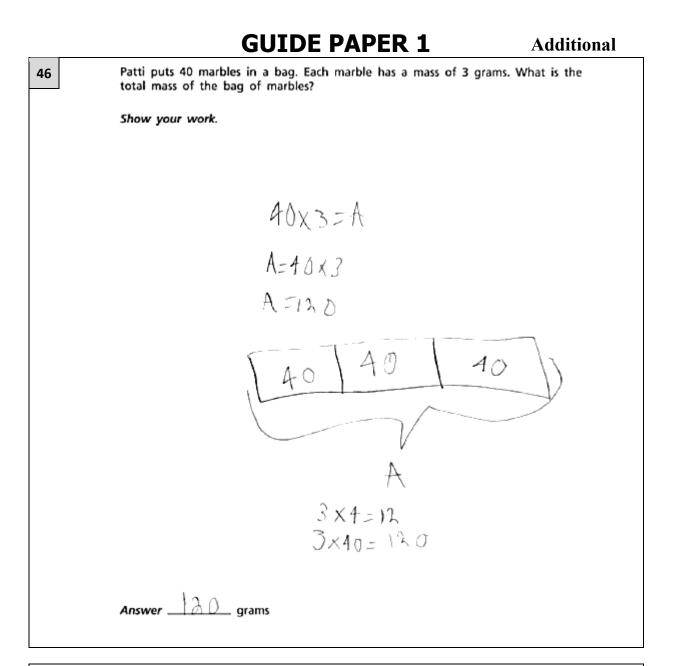
GUIDE PAPER 8 Additional 45 Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator. Answer Explain why the answer you chose is less than $\frac{1}{3}$. Answer I is less than 3 because 3 is preater than 2.

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.

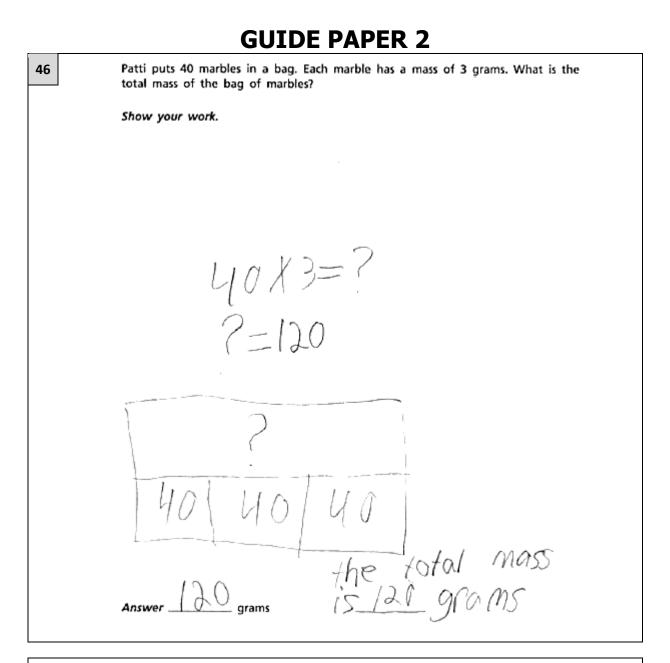
| 46 | Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles? |
|----|--|
| | Show your work. |
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| | Answer grams |
| | |

EXEMPLARY RESPONSE





This response demonstrates a thorough understanding of the mathematical concepts in the task. The total mass of the bag of marbles is correctly determined using a mathematically sound procedure.



This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the total mass of the bag of marbles.

| Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles? |
|--|
| Show your work. |
| |
| 40 |
| +40 |
| |
| $7 \circ$ |
| 120 |
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Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure of repeated addition is applied to determine the correct solution.

GUIDE PAPER 4 Patti puts (40 marbles) in a bag. Each marble has a mass of 3 grams. What is the 46 total mass of the bag of marbles? Show your work. 40x3=70 The total mass of marbles in each bag is 70. Answer 70 grams

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct process is followed, the solution is incorrect. The response correctly addresses only some elements of the task.

GUIDE PAPER 5 Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the 46 total mass of the bag of marbles? Show your work. 3×40= (2×40)+'(1×40)=150 (2×40)+'(1×40)=150 80 +80 Answer 160 grams

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the work contains a correct multiplication procedure, a calculation error (1×40) results in an incorrect answer. The response contains an incorrect solution but applies a mathematically appropriate process.

| | GUIDE PAPER 6 |
|----|--|
| 46 | Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles? |
| | Show your work. |
| | |
| | |
| | Answer G grams |

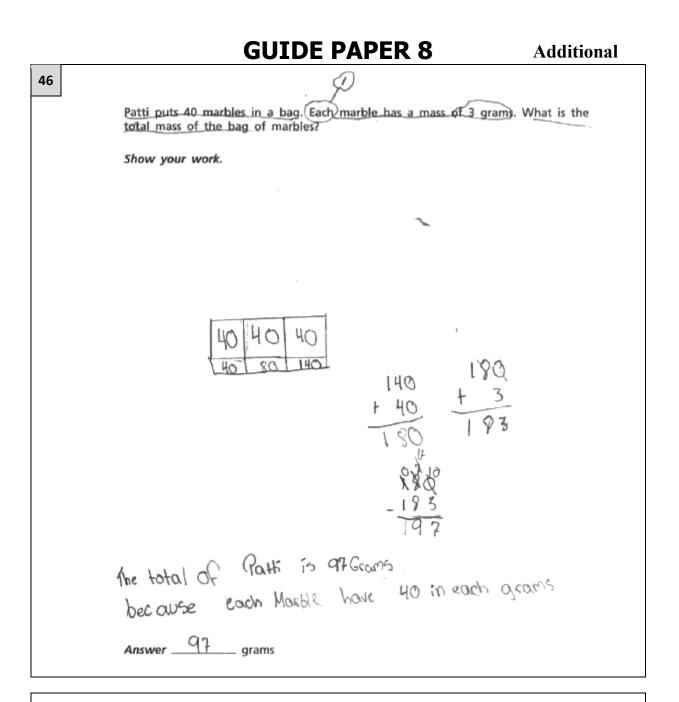
DADI

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. A procedure of repeated addition is followed to determine the solution; however, the extra addition of another 40 marbles results in an incorrect total mass of the bag of marbles. The response contains an incorrect solution but applies a mathematically appropriate process.

GUIDE PAPER 7 Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the 46 total mass of the bag of marbles? Show your work. 40minabag Byrams 3,6,9,12,15,1821,24,27,30,33, 36,39,00 Answer grams

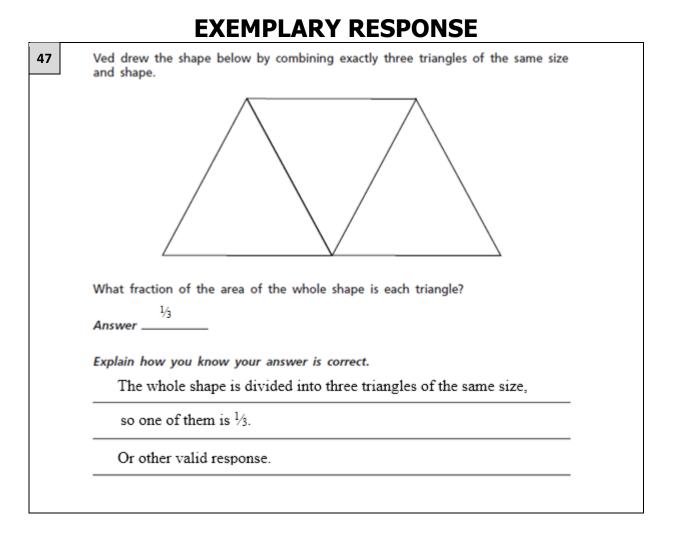
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The work shows counting by three's and suggests no understanding.



Although the response has three groups of 40, holistically, this is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. Extra additions and subtraction show no understanding of the process.

| Ved drew the shape below by combining exactly three triangles of the same size and shape. |
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| |
| What fraction of the area of the whole shape is each triangle? |
| Answer |
| Explain how you know your answer is correct. |
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| | GUIDE PAPER 1 | Additional |
|---|---|--------------------|
| 7 | Ved drew the shape below by combining exactly three triangle and shape. | s of the same size |
| | | |
| | What fraction of the area of the whole shape is each triangle Answer 3 | 2 |
| | Explain how you know your answer is correct. | |
| | T Know my amuser is correct to | ecause |
| | this trapezoid & cit Enlo | thirds |
| | and I think that each of | - Chem |
| | are one third. | |
| | | |

This response demonstrates a thorough understanding of the mathematical concepts in the task. The fraction is identified correctly and a correct explanation is provided.

| Ved drew the shape below by combining exactly three triangles of the same size and shape. |
|---|
| |
| What fraction of the area of the whole shape is each triangle? |
| Answer _1/2 |
| Explain how you know your answer is correct. |
| |
| Know my answer is correct because |

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct answer and explanation are provided.

| | GUIDE PAPER 3 |
|----|---|
| 47 | Ved drew the shape below by combining exactly three triangles of the same size and shape. |
| | |
| | What fraction of the area of the whole shape is each triangle? Answer $-\frac{1}{2}$ |
| | Explain how you know your answer is correct. |
| | There are three parts and one part is 1/2. |
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Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The fraction is identified correctly and a correct explanation is provided.

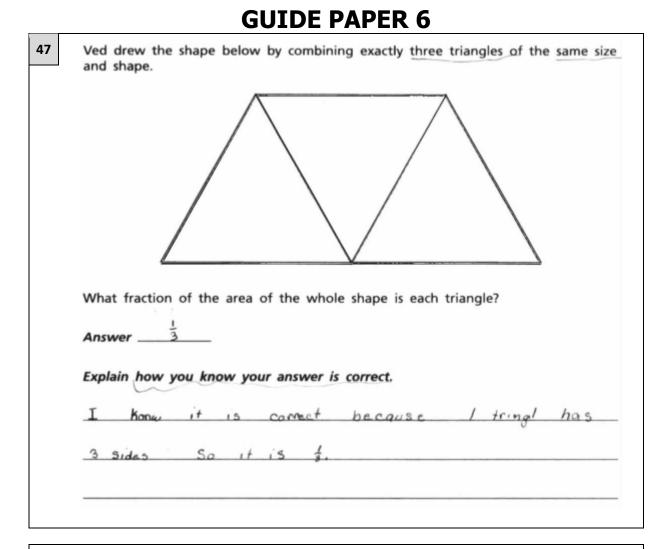
| | GUIDE PAPER 4 | |
|------------------|---|--|
| Ved dr and sh | ew the shape below by combining exactly three triangles of the same size ape. | |
| | | |
| What f | raction of the area of the whole shape is each triangle? | |
| Answe | | |
| Fundain | how you know your answer is correct. | |
| Explain | | |

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the response contains a correct explanation, the answer is incorrect. The response addresses only some elements of the task correctly.

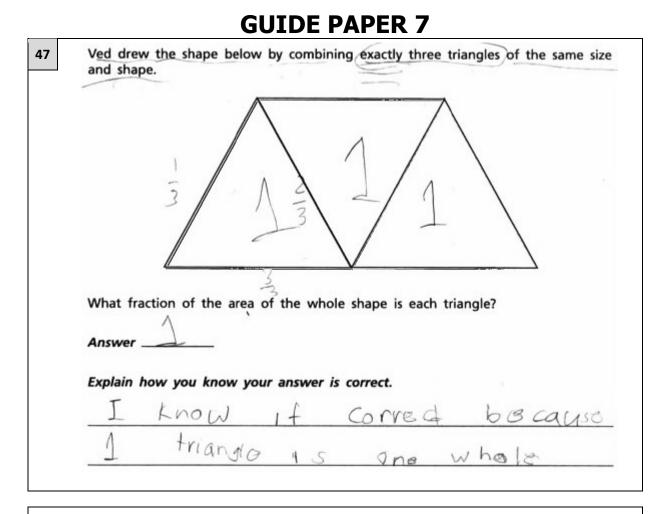
| | GUIDE PAPER 5 |
|----|---|
| 47 | Ved drew the shape below by combining exactly three triangles of the same size and shape. |
| | |
| | What fraction of the area of the whole shape is each triangle? Answer |
| | Explain how you know your answer is correct. I Know because there are 3 to a gels |
| | and they where putt to gether and |
| | 3 is=to I hole. |
| 1 | |

Score Point 1 (out of 2 points)

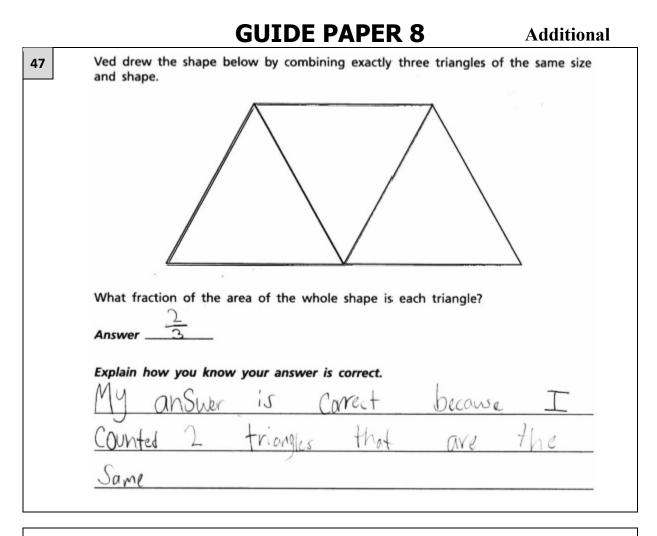
This response demonstrates only a partial understanding of the mathematical concepts in the task. The work correctly identifies thirds; however, the answer is incorrect. The response addresses only some elements of the task correctly.



This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the fraction is identified correctly, the explanation is faulty. The response addresses only some elements of the task correctly.



Although the work contains correct fractions $\frac{1}{3}$, $\frac{2}{3}$, $\frac{3}{3}$, holistically the response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.



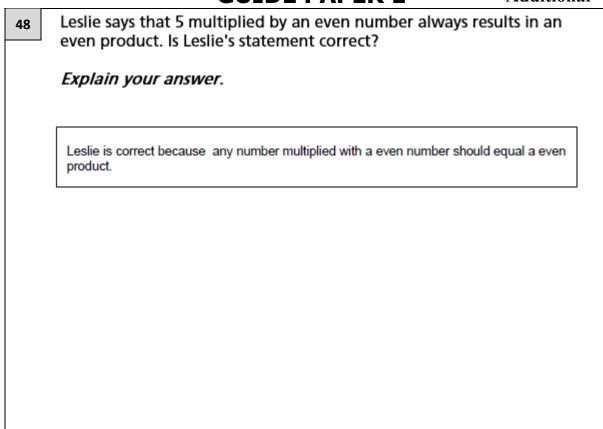
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.

| 18 | Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct? |
|----|---|
| | Explain your answer. |
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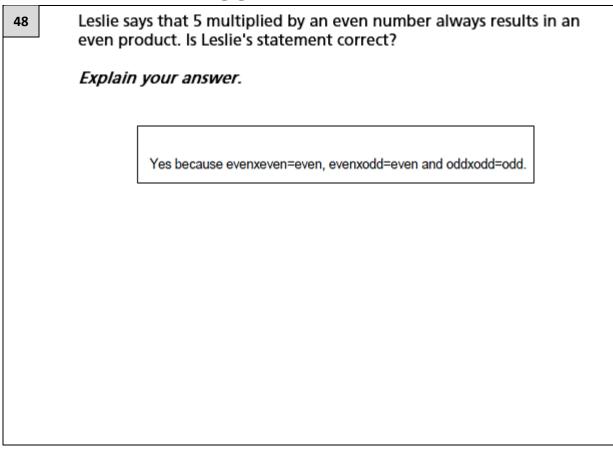
EXEMPLARY RESPONSE

| 48 | Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct? |
|----|--|
| | Explain your answer. |
| | Yes, the product of an even or odd number and an even number will always be |
| | an even number. |
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| | |
| | Or other valid response |
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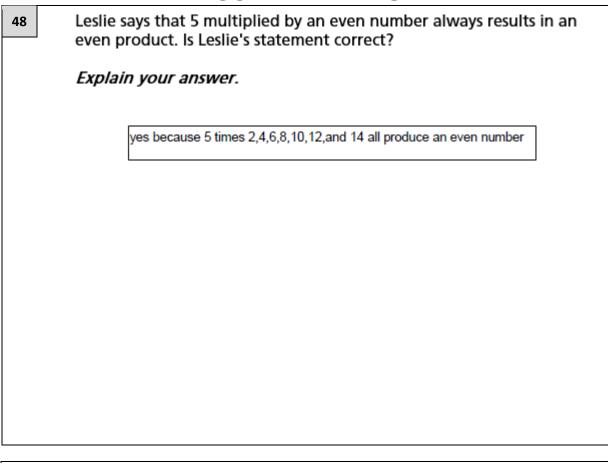
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct pattern is established to support the answer.



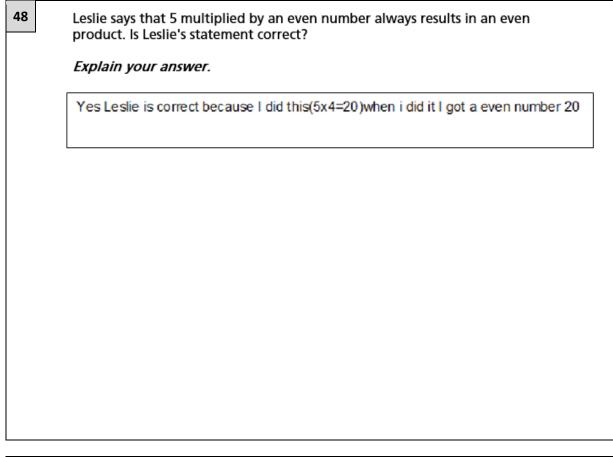
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct pattern is established to support the answer.



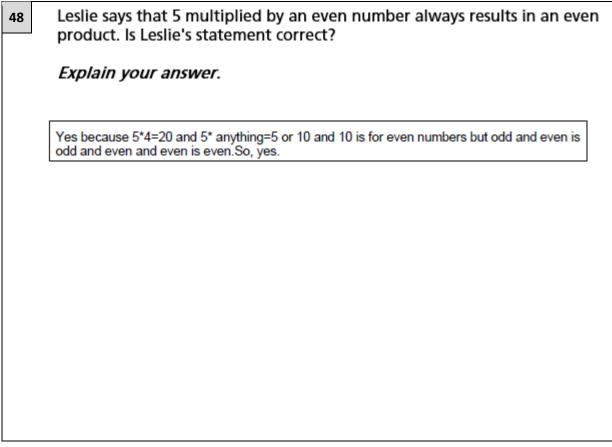
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The work contains multiple correct examples to support the answer. The response contains sufficient work to demonstrate a thorough understanding.



Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the statement is correct, only one example of multiplication by an even number is provided. The response does not contain sufficient work to establish a thorough understanding.



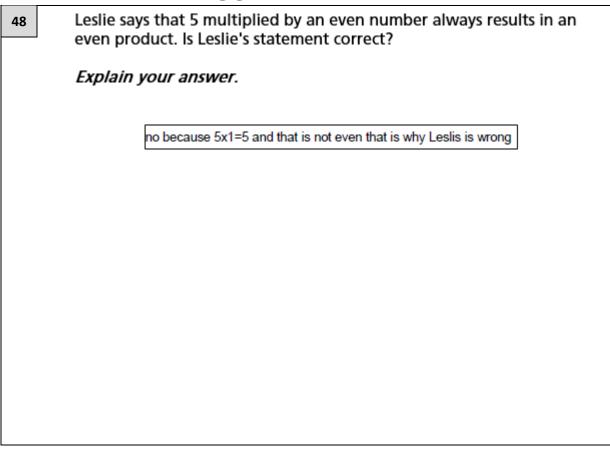
Score Point 1 (out of 2 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The work suggests understanding of multiplication patterns; however, the statement about the product of odd and even numbers is incorrect. The response addresses only some elements of the task correctly.

| 48 | | slie says that 5 multiplied by an even number always results in an even oduct. Is Leslie's statement correct? | |
|----|----|---|--|
| | Ex | xplain your answer. | |
| | | 5*8=40 5*4=20 | |
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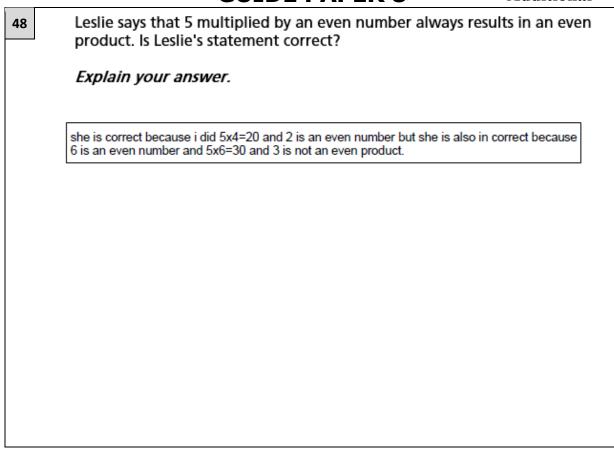
Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Two correct examples of multiplication by an even number are provided; however, the response does not draw a conclusion. The response correctly addresses only some elements of the task.



Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The response misinterprets the question and multiplies 5 by an odd rather than an even number, and an incorrect conclusion is drawn.



Score Point 0 (out of 2 points)

Although the work contains correct examples of multiplication by an even number, the procedure of looking at the first digit of the number to determine if it is an even or odd number shows no understanding. Holistically, this response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

| 49 | Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect. |
|----|--|
| | What error did Andy make when calculating the total number of balloons? |
| | |
| | |
| | What is the total number of balloons Mrs. Ruiz bought? |
| | Show your work. |
| | |
| | |
| | |
| | |
| | Answer balloons |

EXEMPLARY RESPONSE

| | ught 5 bags of balloons for a party. Each bag contained Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is |
|----------------|---|
| What error d | did Andy make when calculating the total number of balloons? |
| Andy may ha | we added 70 and 5 and got 75 when he should have multiplied 70 and 5. |
| Or other valid | 1 response |
| | |
| What is the t | total number of balloons Mrs. Ruiz bought? |
| Show your | work. |
| | $5 \times 70 = 350$ |
| | Or other valid response |
| Answer | 350 balloons |
| | |
| | |

| 49 | Mrs. Ruiz bought 5 bags of bailoons for a party. Each bag contained 70 bailoons. Andy said Mrs. Ruiz bought a total of 75 bailoons. Andy is incorrect. |
|----|--|
| | What error did Andy make when calculating the total number of balloons? |
| | Andy added instead of using multiplication. |
| | What is the total number of balloons Mrs. Ruiz bought? |
| | Show your work. |
| | × 5 350 balloons |
| | Answer 350 balloons |

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and a correct procedure is applied to determine the total number of balloons.

GUIDE PAPER 2 49 Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect. What error did Andy make when calculating the total number of balloons? multiplical 5x15 which equals 75 which was his answer. What is the total number of balloons Mrs. Ruiz bought? Show your work. (70) (70 70 (70) 5× 20=350 Answer 350 balloons

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and a correct procedure is followed to determine the solution.

| 49 | Mrs. Rulz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Rulz bought a total of 75 balloons. Andy is incorrect. |
|----|--|
| | What error did Andy make when calculating the total number of balloons? |
| | The error Andy mode was each loag had sevently balloons, He |
| | did plus five inseal of times five so he got the incorrect |
| | answer of balloons. |
| | What is the total number of balloons Mrs. Ruiz bought? |
| | Show your work. 70 350 350 |
| | |
| | |
| | Answer 350 balloons |

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and the total number of balloons is correctly calculated.

GUIDE PAPER 4 49 Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect. What error did Andy make when calculating the total number of balloons? Andy is wrong because he said it was is a nen sine brought in 70. What is the total number of balloons Mrs. Ruiz bought? Show your work. 7 ×5=35 70×5=350

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct procedure is followed to determine the solution, the explanation is incorrect. The response addresses only some elements of the task correctly.

GUIDE PAPER 5 Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 49 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is Incorrect. What error did Andy make when calculating the total number of balloons? Andy messed up by adding. He added in-stead of multiplying. I know this becc 70+5=75, which is his answer. What is the total number of balloons Mrs. Ruiz bought? Show your work. 5 45 Jalloons Answe balloons

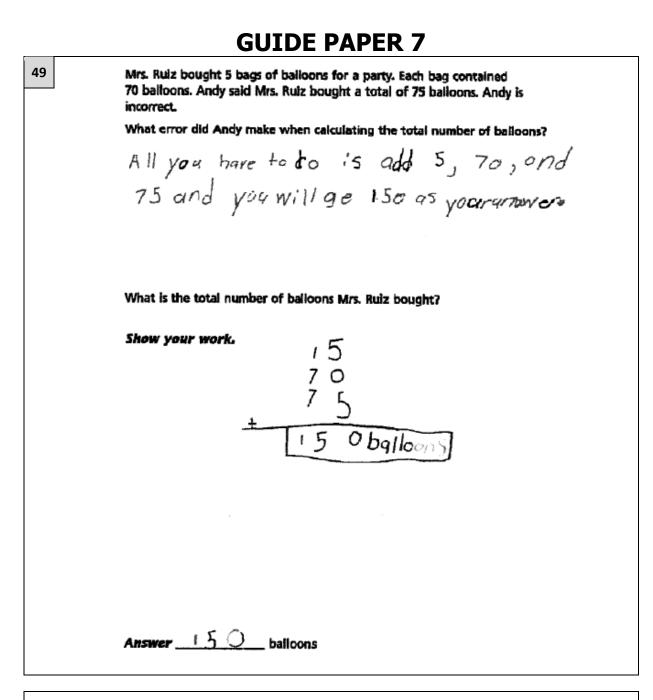
Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The explanation is correct; however, an incorrect number of balloons per bag is used to determine the solution and the solution has a calculation error. The response contains an incorrect solution but applies a mathematically appropriate process.

49 Mrs. Rulz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect. What error did Andy make when calculating the total number of bailoons? the error that andy did was she did 7073 not (5!)ſ What is the total number of balloons Mrs. Ruiz bought? Show your work. balloons

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The error is explained correctly; however, the work is incorrect: 75 balloons is multiplied by the number of bags, and then an extra addition operation is performed. The response addresses only some elements of the task correctly.



Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation and work are incorrect.

Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation and work are incorrect.

| A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
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| Show your work. |
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| Can the same 36 band members be placed into exactly 7 equal rows? Why why not? |
| Explain your answer. |
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EXEMPLARY RESPONSE

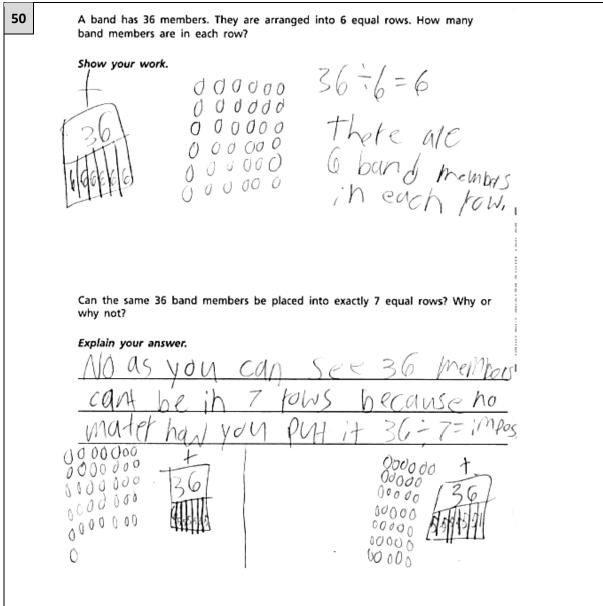
| A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
|--|
| Show your work. |
| $36 \div 6 = 6$ band members in each row |
| Or other valid response |
| |
| |
| |
| |
| |
| Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| |
| Explain your answer. |
| Explain your answer. No, because 7 is not a factor of 36. |

GUIDE PAPER 1 Additional 50 A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? Show your work. There are six in each row. Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? Explain your answer. ar

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The number of band members in each row is correctly calculated. The explanation is complete and correct.





Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the number of band members per row. Two tables are created to correctly show that it is not possible to place band members in 7 equal rows.

| 50 | A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
|----|--|
| | Show your work. |
| | |
| | |
| | |
| | |
| | 1234567=36 |
| | Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| | Explain your answer. |
| | No, because if you try to divide Tequal / you don't |
| | get36. 7, 14, 21, 28, 35, 42. |
| | |
| | |

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct chart is drawn to identify the number of band members in each row. The explanation assumes the same number of people per row ($6 \times 7 = 42$) and is correct.

| 50 | A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
|----|--|
| | Show your work. |
| | 36-16=6 |
| | |
| | |
| | Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| | Explain your answer. |
| | Noy because you can only do it by |
| | by graped 4's. |
| | |

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The number of band members in each row is correctly calculated. The explanation only covers 4, 6, and 9 as factors of 36 and is not complete to establish a thorough understanding. The response appropriately addresses most, but not all aspects of the task.

| 50 | A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
|----|--|
| | Show your work. |
| | $6 \times 6 = 36$ |
| | Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| | Explain your answer. |
| | No they con not because |
| | the par will not be |
| | equil |

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The number of band members in each row is correctly determined; however, the explanation is incomplete. The response addresses most but not all aspects of the task.

| | GUIDE PAPER 6 |
|----|--|
| 50 | A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
| | |
| | Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| | Explain your answer. |
| | It could not be 7 leave then the |
| | BOWS will have New Redric and there |
| | Will not be 36 polle. |

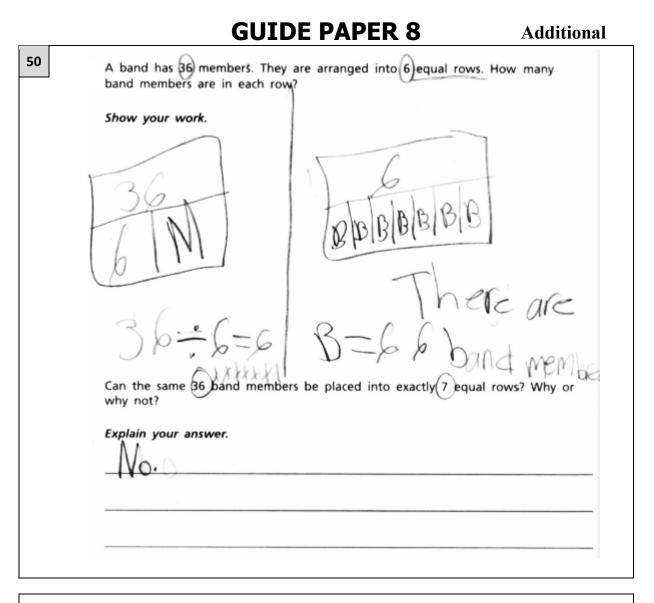
Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The chart correctly represents the number of band members in each row; however, the explanation is weak and reflects some misunderstanding. The response addresses most but not all aspects of the task.

GUIDE PAPER 7 A band has 36 members. They are arranged into 6 equal rows. How many 50 band members are in each row? Show your work. Answer. 36-6=6 Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? Explain your answer. 30=7=NOT becaul

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation is faulty. The response addresses some elements of the task correctly but reflects a lack of essential understanding of how to divide with a remainder.



Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation to the second question is not provided. The response addresses some elements of the task correctly but required work is limited.

| GUIDE PAPER 9 |
|--|
| A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row? |
| Show your work. |
| 5676=6 |
| |
| |
| Can the same 36 band members be placed into exactly 7 equal rows? Why or why not? |
| |
| Explain your answer. |
| Explain your answer. No it can not becar EXE=BE and 26 46=0. |

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation is limited to repeating the previous work. The response addresses only some elements of the task correctly but the required work is limited.

| Show your w | |
|--------------|--|
| | ork. |
| | |
| | 36 |
| | |
| | |
| | 30 |
| | |
| | |
| | |
| | |
| Can the came | 26 band members he alread into swedly 7 and and 2 Why |
| why not? | 36 band members be placed into exactly 7 equal rows? Why |
| | 355407 |
| Evolain your | answer. |
| | · · · · · · · · · · · · · · · · · · · |
| | they can becuase 36+7=43 |
| Explain your | · · · · · · · · · · · · · · · · · · · |

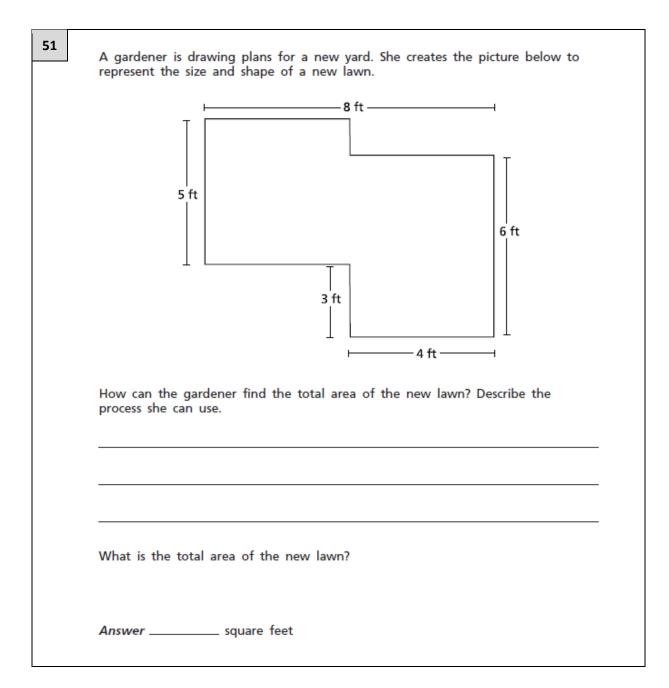
Score Point 0 (out of 3 points)

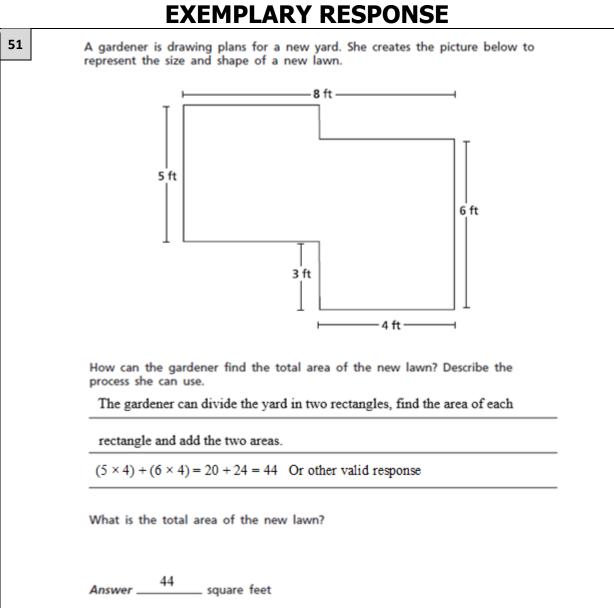
This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The work is incorrect and reflects no understanding.

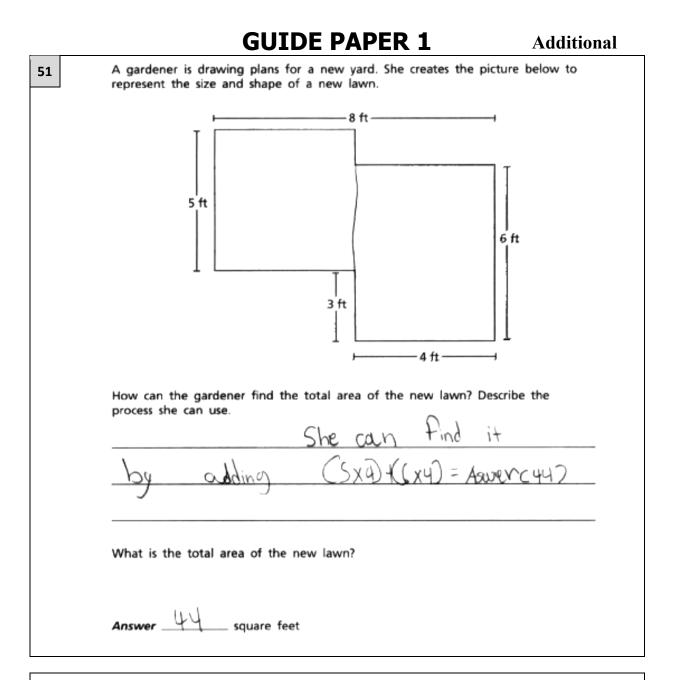
| | GUIDE PAPER 11 | Additional |
|----|--|--------------|
| 50 | A band has 36 members. They are arranged into 6 equal rows. band members are in each row? | How many |
| | show your work. $6 \div 36 = 9$ | |
| | q nombers in each | POW, |
| | Can the same 36 band members be placed into exactly 7 equal why not? | rows? Why or |
| | Explain your answer. No becaus there be noone to fill the | Would |
| | de no one ro till me | 1 low |

Score Point 0 (out of 3 points)

Although a division operation is applied to determine the solution, the division is written in reverse order, and is incorrect. Holistically, the work is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

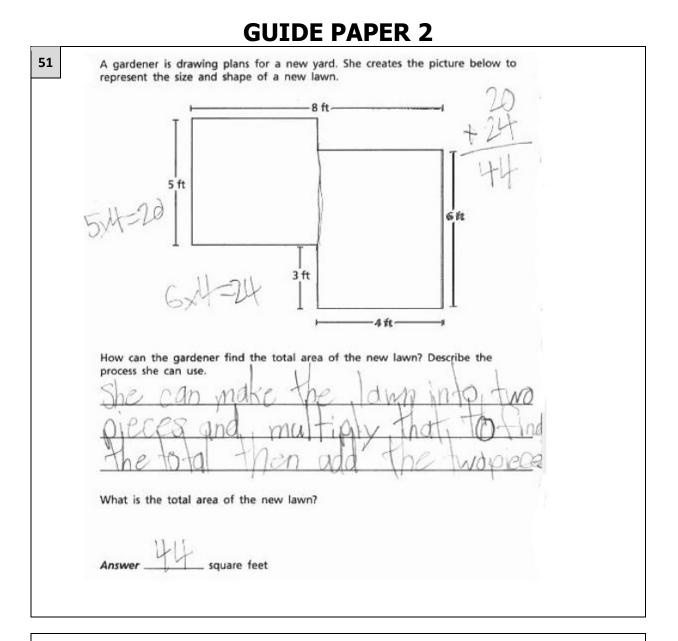






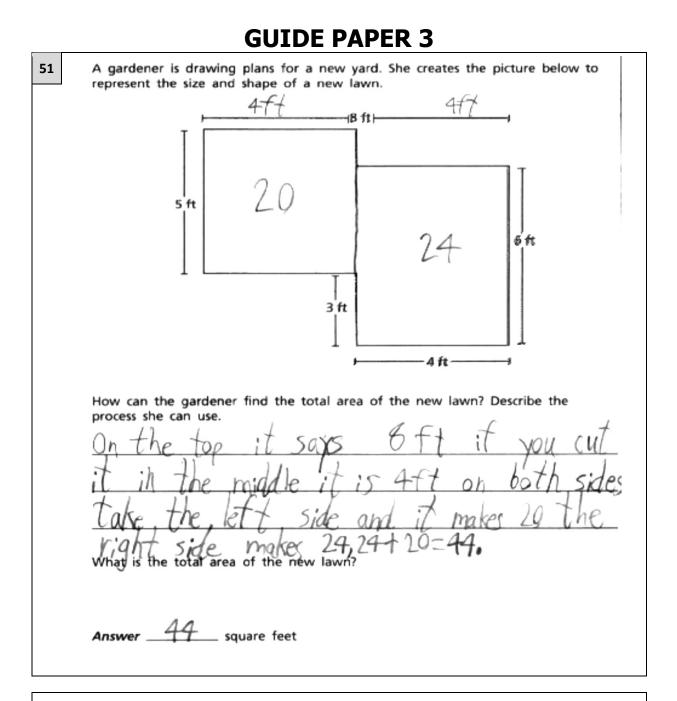
Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The area of each part of the yard is correctly calculated and then two areas are added to determine the total area of the new lawn. The explanation of the process is complete and correct.



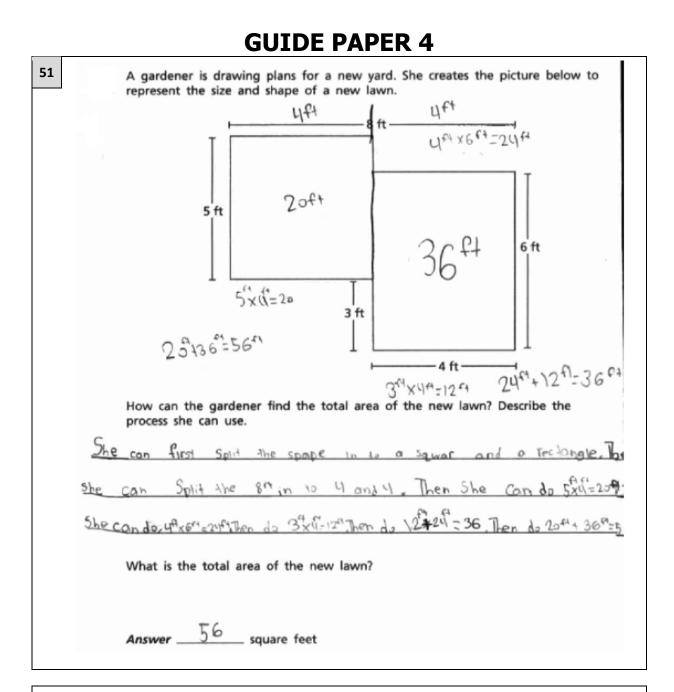
Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct process of dividing the yard in two parts and calculating the area of each and then adding the two areas is described and all calculations are correct.



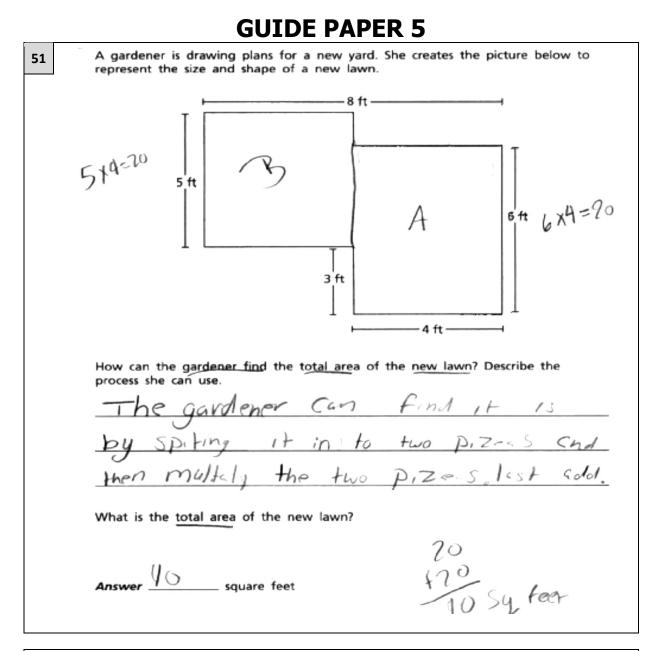
Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The explanation of the process and all calculations are correct.



Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is split in two parts and the area of one part is correctly calculated. The 3×4 area is inappropriately added twice when determining the area of the second part of the yard. The calculated areas are correctly added to determine the solution. The response appropriately addresses most but not all aspects of the task.



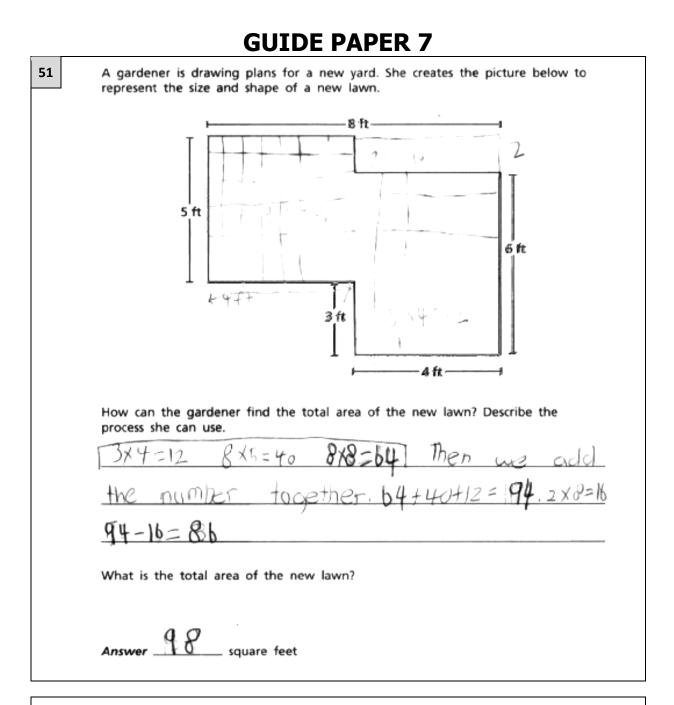
Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is split in two parts and area B is calculated correctly; however, a calculation error when determining area A results in an incorrect answer for area A and final solution. The response reflects some minor misunderstanding of the underlying mathematical concepts and procedures.

| | GUIDE PAPER 6 |
|----|--|
| 51 | A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn. |
| | B ft 4 5 ft 4 4 4 4 4 4 4 4 |
| | What is the total area of the new lawn? |
| | Answer square feet |

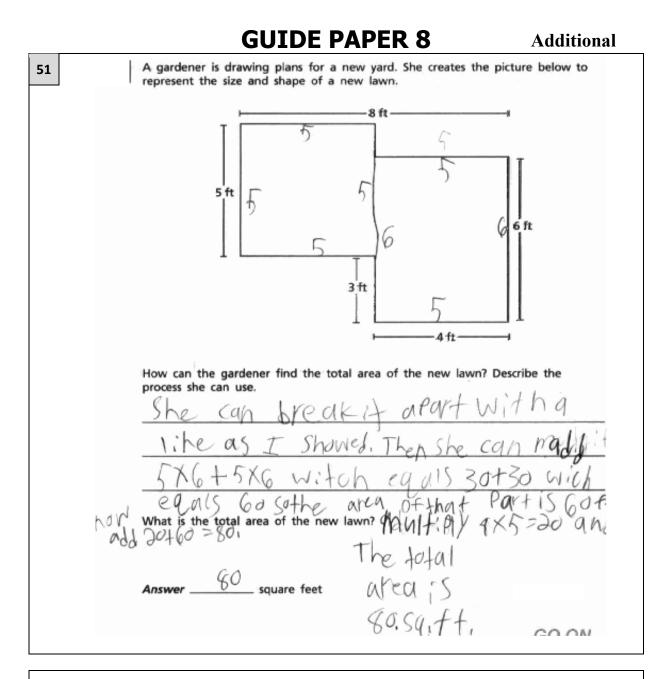
Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is divided in three parts, and areas of two parts are calculated correctly. The height of the middle rectangle is incorrectly determined as 4 rather than 3, resulting in an incorrect area and final solution. The response contains an incorrect solution but provides sound procedure and reflects some minor misunderstanding.



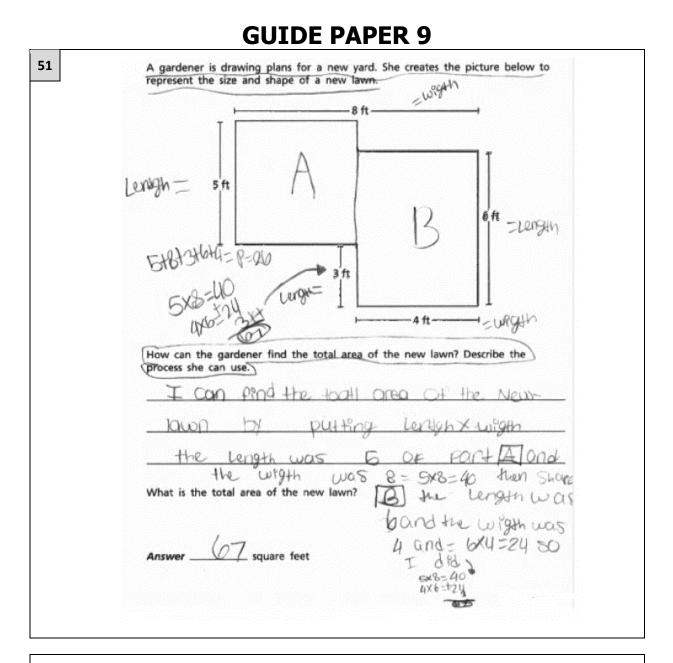
Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. The area of four different rectangles is correctly calculated; however, additional work of adding and subtracting the areas exhibits multiple flaws and reflects a lack of essential understanding. The response addresses only some elements of the task correctly.



Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a process of dividing the yard in smaller parts, calculating the area of each and adding areas is described, the work exhibits multiple flaws when determining dimensions and area of rectangles and reflects a lack of essential understanding. The response addresses only some elements of the task correctly.



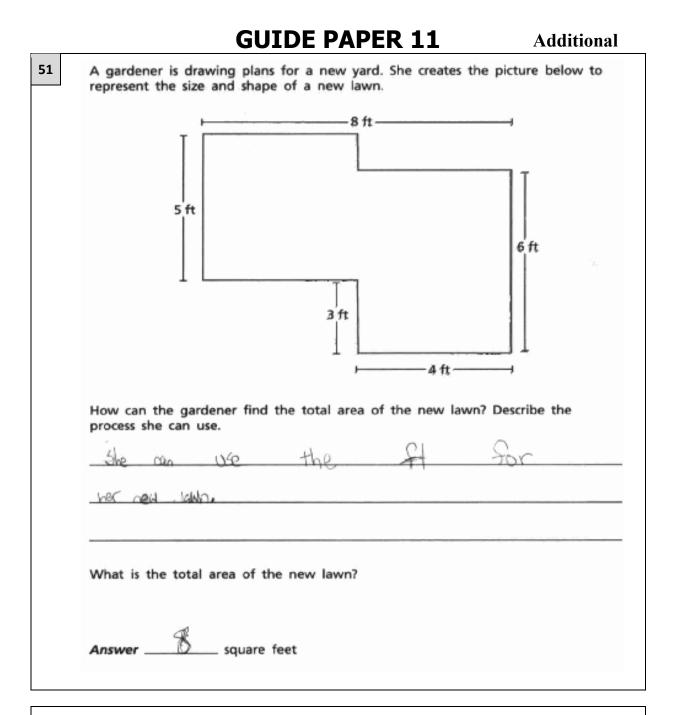
Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Area B is calculated correctly; however, the width of rectangle A is determined incorrectly resulting in an incorrect solution for area A. Additionally, the value 3 is incorrectly added to areas A and B when calculating the total area. The response addresses only some elements of the task correctly and reflects a lack of essential understanding.

51 A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn. 8 ft 5 ft 后微 3 ft 4 ft How can the gardener find the total area of the new lawn? Describe the process she can use. What is the total area of the new lawn? square feet Answer

Score Point 0 (out of 3 points)

Although the work contains correct calculations of 6×4 area, the response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation is faulty and suggests no understanding.



Score Point 0 (out of 3 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation is faulty and suggests no understanding.

| | CLASSROOM | SUPPLIES | |
|--|-----------------|----------|--|
| | Supply | Cost | |
| | Pencil Case | \$3 | |
| | Box of Crayons | \$4 | |
| | Pack of Folders | \$2 | |
| | | | |

| 52 | Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the suppli shown below. | es is |
|----|---|-------|
| | CLASSROOM SUPPLIES | |
| | Supply Cost | |
| | Pencil Case \$3 | |
| | Box of Crayons \$4 | |
| | Pack of Folders \$2 | |
| | Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of cray What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the su Mr. Blake ordered? | |
| | Show your work. | |
| | Ms. Amani's cost of supplies = cost of pencils + cost of fold cost of supplies = $(7 \times 3) + (9 \times 2) = 21 + 18 =$ | |
| | Mr. Blake's cost of supplies = cost of crayons cost of supplies = $9 \times 4 = 36$ | |
| | Difference in $cost = 39 - 36 = 3$ | |
| | Or other valid process | |
| | Difference in cost \$3 | |
| | | |

EXEMPLARY RESPONSE

GUIDE PAPER 1 Additional Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of 52 the supplies is shown below. CLASSROOM SUPPLIES Supply Cost Pencil Case \$3 **Box of Crayons** \$4 **Pack of Folders** \$2 Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered? ME blake's cost Show your work. $\xi 4 \times 9 = 36$ Mis Amani's cost $3 \times 7 = 21$ $3 \times 7 = 18$ 21+18=39 Difference in cost \$

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated using mathematically sound procedures.

| | CLASSROOM | SUPPLIES | |
|--|--|---|---------------|
| | Supply | Cost |] |
| | Pencil Case | \$3 | |
| | Box of Crayons | \$4 | |
| | Box of crayons | ** | |
| 9 boxes of cra | Pack of Folders dered 7 pencil cases and 9 ayons. What is the difference and the cost of the supp | \$2 packs of folders. I ce in the cost of t | he supplies M |
| 9 boxes of cra Amani ordere <i>Show your w</i> | Pack of Folders dered 7 pencil cases and 9 ayons. What is the difference ed and the cost of the supp | \$2 packs of folders. I ce in the cost of t | he supplies M |
| 9 boxes of cra Amani ordere <i>Show your w</i> | Pack of Folders dered 7 pencil cases and 9 ayons. What is the difference ed and the cost of the supp pork . | \$2 packs of folders. I ce in the cost of t lies Mr. Blake ord | he supplies M |

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated using mathematically sound procedures. The incorrect work shown $(9 \times 4 = 3)$ in the initial work for Mr. Blake's classroom cost is considered an inconsequential error that does not detract from the correct solution and the demonstration of a thorough understanding.

| | GUIDE PAPER 3 | | | | | | |
|----|---|--|-----------------------|----------------|--|--|--|
| 52 | Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below. | | | | | | |
| | CLASSROOM SUPPLIES | | | | | | |
| | | Supply | Cost |] | | | |
| | | Pencil Case | \$3 |] | | | |
| | | Box of Crayons | \$4 |] | | | |
| | | Pack of Folders | \$2 |] | | | |
| | 9 boxes of crayor | ed 7 pencil cases and ns. What is the differe nd the cost of the sup | nce in the cost of th | e supplies Ms. | | | |
| | Show your work. | | | | | | |
| | | ms .Amani3*7=21 9*2 mr.blake 9*4=36\$ | =18 21+18=39\$ |] | | | |
| | Difference in cost | \$ 3\$ | | | | | |

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated. The subtraction to calculate the difference in cost is performed mentally and is acceptable.

GUIDE PAPER 4 52 Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below. CLASSROOM SUPPLIES Supply Cost Pencil Case \$3 Box of Crayons \$4 Pack of Folders \$2 Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered? Show your work. Mr Blake 4+4+4+4+4+4= 36 Difference in cost \$ M. Ameni Puy 39 and Mr Blake Pay 36

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. A correct process of repeated addition is applied to calculate the cost of supplies for each classroom; however, the difference in cost is not addressed. The response addresses most, but not all aspects of the task using mathematically sound procedures.

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

| | CLASSROOM | | |
|--------------------------|---|-------|--|
| | Supply | Cost | |
| | Pencil Case | \$3 | |
| | Box of Crayons | \$4 | |
| | Pack of Folders | \$2 | |
| 7/8=21 2 9/2=18 $1/3$ | $\frac{1}{9} = \frac{1}{9} = \frac{1}{9}$ | B6 Ke | |
| MS Aman i | | | |
| The Dim C | then MS. blake 9N | Amo | |

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. Although the cost of each room's supplies is correctly determined, the difference in cost is not calculated. The response addresses most, but not all aspects of the task.

GUIDE PAPER 6 Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The 52 cost of the supplies is shown below. CLASSROOM SUPPLIES Supply Cost Pencil Case \$3 Box of Crayons \$4 Pack of Folders \$2 Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered? Show your work. 6x3=18 9x4=\$36 9x2=18 \$36 Difference in cost \$ 0

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. Mr. Blake's classroom cost is correctly determined; however, an incorrect number of pencil cases is used to determine the cost of pencils, resulting in incorrect total cost for Ms. Amani's classroom. The difference in costs is then calculated correctly. The response contains an incorrect solution but provides sound procedures.

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

52

| | Supply | Cost | |
|-----------------|-----------------|-----------|------|
| | Pencil Case | \$3 | |
| | Box of Crayons | \$4 | |
| | Pack of Folders | \$2 | |
| Show your work. | QX (H | DX2 IB | - 39 |
| | X | ` | |

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although the cost of supplies Ms. Amani ordered is correctly calculated and supported with work, the cost of Mr. Blake's supplies and the difference in cost is not determined. The response addresses some elements of the task correctly but required work is limited.

| | | GUIDE PA | PER 8 | Additional |
|----|--------------------|--|----------------------|-----------------|
| 52 | | r. Blake each ordered es is shown below. | supplies for their | classrooms. The |
| | | CLASSROOM | I SUPPLIES | |
| | | Supply | Cost | |
| | | Pencil Case | \$3 | |
| | | Box of Crayons | \$4 | |
| | | Pack of Folders | \$2 | |
| | 9 boxes of crayon | ed 7 pencil cases and 9 s. What is the differen nd the cost of the sup | nce in the cost of t | he supplies Ms. |
| | Show your work. | | | |
| | | 7X3=21 9X2= | 18 21-18=3 | |
| | Difference in cost | \$ 3 | | |

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Only the costs of supplies Ms. Amani ordered is calculated and the difference in cost of these supplies is determined. The response addresses some elements of the task correctly but reflects a lack of essential understanding.

52 Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below. CLASSROOM SUPPLIES Supply Cost Pencil Case \$3 Box of Crayons \$4 Pack of Folders \$2 Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered? Show your work. \$39-136-18 Difference in cost

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although the difference in cost is calculated correctly, no initial work is shown for how 36 and 39 are obtained. The response contains a correct solution but required work is limited.

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

| Supply | Cost |
|-----------------|------|
| Pencil Case | \$3 |
| Box of Crayons | \$4 |
| Pack of Folders | \$2 |

CLASSROOM SUPPLIES

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work Difference in cost \$55

Score Point 0 (out of 3 points)

Although the cost of folders is correctly calculated, additional work to calculate cost of supplies suggests no understanding; cases are multiplied by packs and dollars are multiplied by dollars. Holistically, this response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

| | | GUIDE PA | PER 11 | Additional | | | |
|----|---|-----------------|--------|------------|--|--|--|
| 52 | Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below. | | | | | | |
| | CLASSROOM SUPPLIES | | | | | | |
| | | Supply | Cost |] | | | |
| | | Pencil Case | \$3 |] | | | |
| | | Box of Crayons | \$4 | | | | |
| | | Pack of Folders | \$2 | | | | |
| | Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered? | | | | | | |
| | Show your work. | | | | | | |
| | 3+3+3+3+3=18 | | | | | | |
| | Difference in cost | \$ 18 | | | | | |

Score Point 0 (out of 3 points)

Although an attempt is made to determine the cost of pencil cases, the repeated addition is performed incorrectly, and no other work is provided. The response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.