New York State Testing Program

2026

Mathematics Test

Grade 3

Scoring Leader Materials

Training Set

QAI30795

Note to Scorers

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

Example: Stem of the question. [2]

1-Credit Constructed-Response Rubric

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

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

2-Credit Constructed-Response Holistic Rubric

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

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

3-Credit Constructed-Response Holistic Rubric

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

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

1-Credit Constructed-Response Mathematics Scoring Policies

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

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

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

32

An incomplete equation is shown below.

$7 \times 50 = (\underline{\quad ? \quad} \times 10)$

What number makes the equation true?

Answer _____

EXEMPLARY RESPONSE

32

An incomplete equation is shown below.

$7 \times 50 = (\underline{\ ?\ } \times 10)$

What number makes the equation true?

Answer 35

GUIDE PAPER 1

32

An incomplete equation is shown below.

$7 \times 50 = (\underline{\quad ? \quad} \times 10)$

What number makes the equation true?

Answer 35

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

32

An incomplete equation is shown below.

$7 \times 50 = (\underline{\ ?\ } \times 10)$

What number makes the equation true?

Answer (35x10)

Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

32

An incomplete equation is shown below.

$7 \times 50 = (\underline{\ ?\ } \times 10)$

What number makes the equation true?

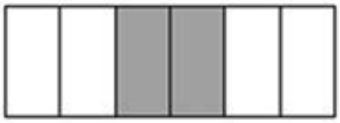
Answer 350

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

33

The model shown below represents a whole divided into equal parts.



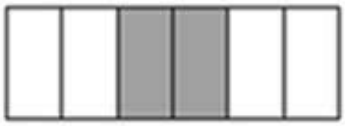
What fraction of the model is shaded?

Answer _____

EXEMPLARY RESPONSE

33

The model shown below represents a whole divided into equal parts.



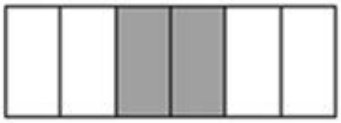
What fraction of the model is shaded?

Answer $\frac{2}{6}$
OR equivalent

GUIDE PAPER 1

33

The model shown below represents a whole divided into equal parts.



What fraction of the model is shaded?

Answer $\frac{2}{6}$

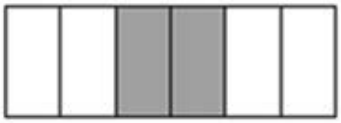
Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 2

33

The model shown below represents a whole divided into equal parts.



What fraction of the model is shaded?

Answer The model that is shaded is $\frac{2}{6}$.

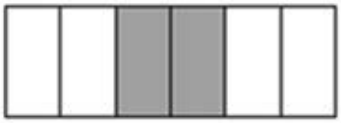
Score Credit 1 (out of 1 credit)

A correct answer is provided.

GUIDE PAPER 3

33

The model shown below represents a whole divided into equal parts.



What fraction of the model is shaded?

Answer $\frac{6}{2}$

Score Credit 0 (out of 1 credit)

An incorrect answer is provided.

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

EXEMPLARY RESPONSE

35

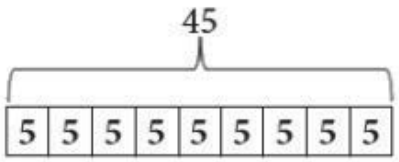
An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

The multiplication equation is asking how many groups of 5 is 45.
This means the same thing as taking 45
and dividing it into equal groups of 5
and determining the number of groups
(how many times does 5 go into 45),
45 ÷ 5 = ?
The number of groups or the unknown is 9.



OR

The multiplication equation is asking what number taken five times is 45.
In that case, there are 5 groups
and the unknown represents the size of the groups
or how many there are in each group.
If we divide 45 into 5 equal groups (45 ÷ 5 = ?),
there will be 9 in each group.
The answer for the unknown is 9.

OR other valid response

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

45 ÷ 5 = 9. Since multiplicaton and division are related, i divided the 2 numbers I know and that gave me the answer for the incomplete multiplication equation.

Score Credit 2 (out of 2 credits)

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

- A related division equation is given that shows the value of 9 for the unknown and is supported by sound reasoning.

This response is complete and correct.

GUIDE PAPER 2

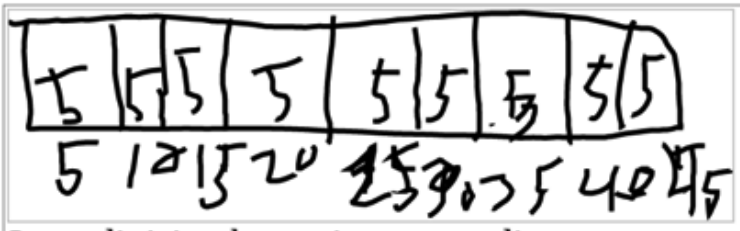
35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.



I can division by useing a tape dirgram to count the squares so 45 ÷ 5=9.

Score Credit 2 (out of 2 credits)

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

- A related division equation is given that shows the value of 9 for the unknown and is supported by a visual that shows 45 being broken up into 9 groups of 5.

This response is complete and correct.

GUIDE PAPER 3

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

$45 \div 5 = 9, \begin{array}{r} \times\ 9 \\ 5 \\ \hline 45 \end{array}$

Score Credit 2 (out of 2 credits)

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

- The value of 9 for the unknown is given and supported by a related division equation.

This response is complete and correct.

GUIDE PAPER 4

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

Divison can be used to find the value of the unknown, by putting 45 in 5 equal groups. The amount in each groups equals the unknown.

Score Credit 1 (out of 2 credits)

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

- Sound reasoning on how division can be used to find the value of the unknown is given; however, the value of 9 for the unknown is not provided.

This response correctly addresses only some elements of the task.

GUIDE PAPER 5

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

9
becase if u count by 5s u get 9

Score Credit 1 (out of 2 credits)

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

- The correct value of 9 for the unknown is given; however, the provided reasoning of skip counting by fives does not fully describe the related division of 45 involved in the task.

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

GUIDE PAPER 6

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

you can flip it and turn the times sighn to a divishin sighn and the anser is 9

Score Credit 1 (out of 2 credits)

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

- The correct value of 9 for the unknown is given; however, the provided reasoning does not adequately describe the related division of 45 involved in the task.

This response correctly addresses only some elements of the task.

GUIDE PAPER 7

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

9 × 5=45

Score Credit 0 (out of 2 credits)

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

- Although the correct value of 9 for the unknown is given, no reasoning is provided on how division was used or how division relates to the multiplication equation.

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

35

An incomplete equation is shown below.

$\_\_?\_\_ \times 5 = 45$

How can division be used to find the value of the unknown number? Be sure to include the value of the unknown number in your answer.

Explain your answer.

because if you ÷ you will get 9

Score Credit 0 (out of 2 credits)

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

- Although the correct value of 9 for the unknown is given, it is unclear how division was used to obtain that value due to no further reasoning being provided.

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

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

Answer _____ p.m.

EXEMPLARY RESPONSE

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

5:39 + 30 minutes = 6:09
6:09 + 8 minutes = 6:17
6:17 pm

OR

Total amount of minutes spent painting and cleaning up is
30 + 8 = 38.
39 + 38 = 77
77 - 60 = 17,
so 77 minutes is 1 hour and 17 minutes.
5 + 1 = 6
6:17 p.m.

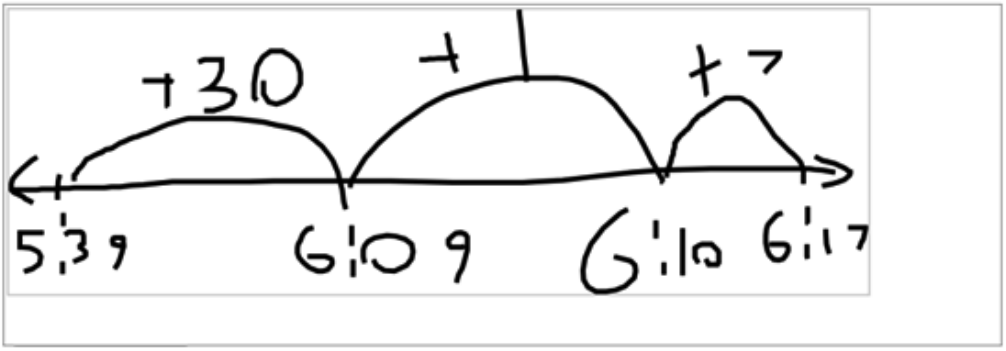
OR other valid process

Answer **6:17** p.m.

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.



Answer 6:17 p.m.

Score Credit 2 (out of 2 credits)

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

- The solution is given and supported by a sound procedure.

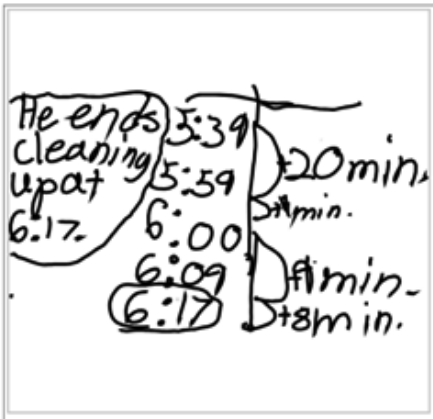
This response is complete and correct.

GUIDE PAPER 2

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.



Answer 6:17 p.m.

Score Credit 2 (out of 2 credits)

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

- The solution is given and supported by a sound procedure.

This response is complete and correct.

GUIDE PAPER 3

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

5:39+8min=5:47
5:47+30min=6:17

Answer 6:17 p.m.

Score Credit 2 (out of 2 credits)

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

- The solution is given and supported by a sound procedure.

This response is complete and correct.

GUIDE PAPER 4

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

I got 6:19 because I drawn a clok and the time was 5:39 and then I added 1 then 30 minetes and it was 6:11 then I added 8 more minetes and the answer is 6:19!

Answer 6:19 p.m.

Score Credit 1 (out of 2 credits)

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

- The elapsed 38 minutes is broken apart into two addition steps; however, a calculation error in the first step results in an incorrect solution.

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

GUIDE PAPER 5

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

5:30+30=6:00 6:00+9+=6:17 6:17p.m.

Answer 6:17 p.m.

Score Credit 1 (out of 2 credits)

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

- The solution is determined; however, an incorrect addition equation is provided for the second step shown in the work due to the needed 8 minutes not being written.

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

GUIDE PAPER 6

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

I just did 38+39

Answer 6:17 p.m.

Score Credit 1 (out of 2 credits)

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

- Although the correct solution is given, the work shown does not adequately support how the addition expression (total elapsed number of minutes between 5 o'clock and when the student finishes cleaning up) can be used to determine the final solution.

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

GUIDE PAPER 7

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

5:39 + 8=5:47

Answer 5:49 p.m.

Score Credit 0 (out of 2 credits)

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

- Although the 8-minute part of the elapsed number of minutes between the painting and the cleaning up is utilized, the 30 minutes is not reflected in the work, and an incorrect solution is provided.

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

36

A student starts painting at 5:39 p.m. The student spends 30 minutes painting, and then spends 8 minutes cleaning up. What time does the student finish cleaning up?

Show your work.

Answer 6:17 p.m.

Score Credit 0 (out of 2 credits)

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

- The correct solution is given; however, no work is shown.

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

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

EXEMPLARY RESPONSE

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

Pizza A is cut into larger slices.
Since the size of each slice for Pizza B is 1/8,
I know that the pizza (the whole) was cut into 8 equal parts (slices).
Each slice is 1 part out of 8 equal parts.
Since the size of each slice for Pizza A is 1/6,
Pizza A (the whole) is cut into 6 equal parts (slices),
and each slice is 1 part out of 6 equal parts.
Since Pizza B (the whole) was cut into more equal parts (slices),
the size of each slice would need to be smaller
than the size of each slice of Pizza A.

OR

When comparing two fractions, if the numerators are the same,
the fraction with the smaller denominator, which in this case is 1/6,
will be the larger fraction, so $^1/_6 > {}^1/_8$.
Pizza A has the larger slices.

OR other valid explanation

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

pizza A is cut into larger slices because if the numartors are the same the bigger the denomator smaller the fraction in this case bigger the denomator smaller the slices.

Score Credit 2 (out of 2 credits)

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

- Pizza A is chosen and supported by sound reasoning.

This response is complete and correct.

GUIDE PAPER 2

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

$\frac{1}{6}$ because if the numerator is the same, I compare the denomanator and $6 < 8$, so $\frac{1}{6} > \frac{1}{8}$.

Score Credit 2 (out of 2 credits)

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

- The ⅙ slice is chosen and supported by sound reasoning.

This response is complete and correct.

GUIDE PAPER 3

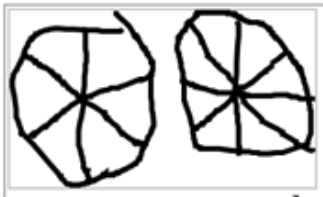
37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.



pizza a is cut into bigger peices because if you cut it 8 times the peices are smaller

Score Credit 2 (out of 2 credits)

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

- Pizza A is chosen and the provided reasoning is supported by a diagram that shows the size relationship between sixths and eighths.

This response contains sufficient work to demonstrate a thorough understanding.

GUIDE PAPER 4

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

$\frac{1}{6}$ is greater than $\frac{1}{8}$ because if you have the same numerator and different denominator the smaller the denominator the bigger the number

Score Credit 1 (out of 2 credits)

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

- The ⅙ slice is chosen.
- The provided reasoning addresses both the numerators and the denominators; however, the word "number" is unclear.

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

GUIDE PAPER 5

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

pizza a because the dnomnator is smaller on $\frac{1}{6}$ then $\frac{1}{8}$

Score Credit 1 (out of 2 credits)

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

- Pizza A is chosen; however, the response fails to address the relevance of the numerators of the two fractions being the same in order for the provided reasoning to be true.

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

GUIDE PAPER 6

37

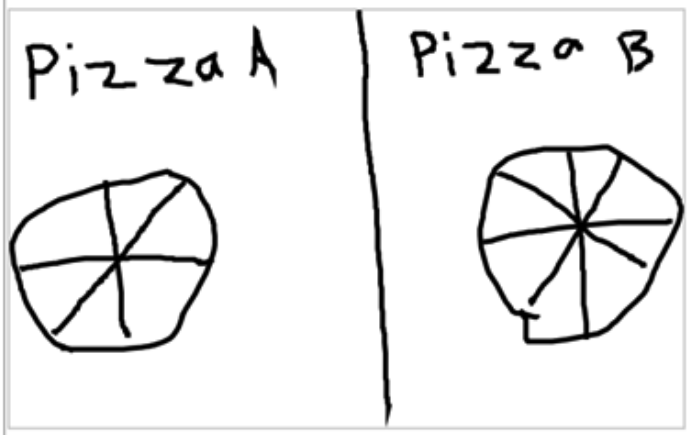
Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

If same numertors compare the denominators. $\frac{1}{8}$ is larger than $\frac{1}{6}$.



Score Credit 1 (out of 2 credits)

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

- The provided reasoning addresses the need for the numerators of the fractions to be the same in order to use the denominators for the size comparison and provides a diagram correctly showing the slices of sixths and eighths; however, an incorrect conclusion about how their sizes compare is made.

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

GUIDE PAPER 7

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

1 – 8 beaucse 8 is a bigger number

Score Credit 0 (out of 2 credits)

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

- An incorrect answer and reason is given.

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

37

Information about Pizza A and Pizza B is listed below.

- The pizzas are the same size.
- Pizza A is cut into slices that are each $\frac{1}{6}$ of the whole.
- Pizza B is cut into slices that are each $\frac{1}{8}$ of the whole.

Which pizza is cut into larger slices?

Explain how you found your answer.

$\frac{1}{8} > \frac{1}{6}$

Score Credit 0 (out of 2 credits)

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

- An incorrect answer is given.

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

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

EXEMPLARY RESPONSE

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

They have enough money because when you round the price of each ticket up from $9 to $10 and each bucket of popcorn up from $4 to $5, and then use those values to determine the estimated total cost of 3 tickets and 2 buckets of popcorn, it would be $40.
I know this is true because 10 + 10 + 10 + 5 + 5 = 40.
Since the actual price of each ticket and each popcorn is less than $10 and $5, the actual total cost would be less than $40, so I know they will have enough money.

OR

The cost for the 3 friends to go to the movies:
$3 \times 9 = 27$
$2 \times 4 = 8$
$27 + 8 = 35$
Since $40 > 35$, $40 is enough to cover the cost.

OR Other valid explanation

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

yes because,
$9 \times 3 = 27$
$4 \times 2 = 8$
$27 + 8 = 35$
$40 > 35$

Score Credit 3 (out of 3 credits)

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

- A correct solution is given and supported by work that shows the comparison of the calculated actual total amount the friends would need to spend to the $40.

This response is complete and correct.

GUIDE PAPER 2

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

She is correct because $9 + 9 = 18$ and $18 + 9 = 27$, $27 + 4 = 31$ and $31 + 4 = 35$ so it only coats $35 they have $5 left to spend.

Score Credit 3 (out of 3 credits)

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

- A correct solution is given and supported by work that shows the comparison of the calculated actual total amount the friends would need to spend to the $40.

This response is complete and correct.

GUIDE PAPER 3

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

9x3=27 4x2=8 27+8=35 Answer:Yes Because,they had 40 dollars to spend and they could spend less then their budget!

Score Credit 3 (out of 3 credits)

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

- A correct solution is given and supported by work that shows the calculated actual total amount the friends would need to spend and sound reasoning of how that total compares to the $40.

This response is complete and correct.

GUIDE PAPER 4

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

Yes, one of the friends is correct. I know this because each movie ticket is 9$ and they buy 3. 9x3 is 27. Then they re buying 2 buckets of popcorn. Each bucket is 4$. 4x2 is 8. 27+8 is 35.

Score Credit 2 (out of 3 credits)

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

- Although a correct solution is provided and a sound mathematical process is used to determine the actual total amount that the friends would need to spend, no comparison statement between that total and the $40 is given to support the final solution.

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

GUIDE PAPER 5

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

No because they can save 5$ because

$(9 \times 3) + (4 \times 2) = 35$

$\times \begin{matrix} 9 \\ 3 \end{matrix} \quad \times \begin{matrix} 4 \\ 2 \end{matrix} \quad + \begin{matrix} 27 \\ 8 \end{matrix}$

$\begin{matrix} 27 & 8 & 35 \end{matrix}$

40 - 35 = 5.

Score Credit 2 (out of 3 credits)

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

- A sound mathematical process is provided that shows the remaining $5 difference between the $40 and the actual total amount the friends would need to spend; however, an incorrect solution is given based on a misinterpretation of that difference.

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

GUIDE PAPER 6

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

Yes they are correct because $4 \times 3 = 12$, and $9 \times 2 = 18$, $18 + 12 = 30$, so they would have $10 left.

Score Credit 2 (out of 3 credits)

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

- A correct solution is given based on the calculated difference between the $40 and the actual total amount that the friends would need to spend that was determined; however, the actual total amount is incorrectly calculated.

This response appropriately addresses most, but not all, aspects of the task using mathematically sound procedures.

GUIDE PAPER 7

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

the toatle is under 40 it is 35.

Score Credit 1 (out of 3 credits)

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

- Although a correct comparison is stated between the actual total amount that the friends would need to spend and the $40, no supportive mathematical process for the total is provided and no final solution is given.

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

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

The friend is not correct because $40 - 27 = 13$ $13 - 12 = 1$ and so they are not going to have enough money for tickets and popcorn

Score Credit 1 (out of 3 credits)

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

- A process for determining the difference between the $40 and the actual total amount that the friends would need to spend is provided; however, an incorrect value is used for the number of buckets of popcorn and the calculated difference is misinterpreted, leading to an incorrect solution.

This response exhibits multiple flaws related to misunderstanding of important aspects of the task, misuse of mathematical procedures, or faulty mathematical reasoning.

GUIDE PAPER 9

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

yes because if u add 9 + 9 that is 18 + 8 = 26 so they do have enough

Score Credit 1 (out of 3 credits)

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

- A correct solution is provided based on the determined actual total amount that the friends would need to spend; however, a calculation error is made and no comparison between the determined total and the $40 is given to support the final solution.

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

GUIDE PAPER 10

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

Yes the friend is correct. They will have 4 dollars leftover

Score Credit 0 (out of 3 credits)

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

- Although the correct solution is provided, an incorrect difference between the $40 and the actual total amount the friends would need to spend, with no supportive work, is given as a reason.

Holistically, this response shows no overall understanding.

38

Three friends go to a movie theater. They have a total of $40 to spend on tickets and popcorn. Information about the price of tickets and popcorn is shown below.

- Each movie ticket is $9.
- Each bucket of popcorn is $4.
- They will buy 3 movie tickets.
- They will buy 2 buckets of popcorn.

One of the friends says $40 is enough to buy all the movie tickets and buckets of popcorn. Is the friend correct?

Explain your answer.

yes bc 40$ is enough to get 3 movie tickets and 2 bucket of popcorn

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 given with no explanation.

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

Grade 3
Mathematics

Scoring Leader Materials
2026 Training Set