New York State Testing Program

2018

Mathematics Test

Grade 3

Scoring Leader Materials

Training Set

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).

3-Point Holistic Rubric

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 • 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.

* 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).

2018 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 space, the student should still receive full credit.

3. If students are directed to show work, a correct answer with **no** work shown receives **no** credit.

4. 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.

7. If the student provides more than one response, but does not indicate which response is to be considered the correct response and none has been crossed out, the student shall not receive full credit.

8. If the student makes a conceptual error (that is an error in understanding rather than an arithmetic or computational error), that student shall not receive more than 50% credit.

9. Trial-and-error responses are **not** subject to Scoring Policy #6 above, since crossing out is part of the trial-and-error process.

10. 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.

11. In questions requiring number sentences, the number sentences must be written horizontally.

12. When measuring angles with a protractor, there is a +/- 5 degrees deviation allowed of the true measure.

13. 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.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?
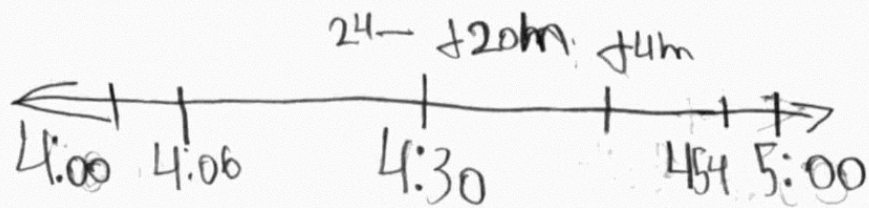
Show your work.

Answer _____ p.m.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m. ?

Show your work.

$30 - 24 = 6$ minutes

Beth left her house at 4:06 p.m.

Or any other valid process.

Answer _____ p.m.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m. ?

Show your work.

$$30 - 24 = 6$$

Answer | 4:06 | p.m.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the time Beth left her house.

34

R

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?
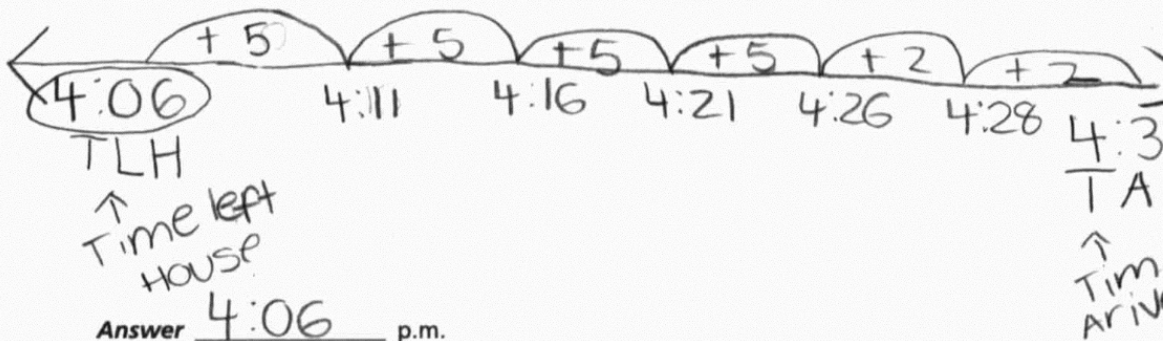
Show your work.

1)

24 — +20m +4m

4:00 4:06   4:30   464 5:00

$$\begin{array}{r} 2 10 \\ \cancel{3}\cancel{0} \\ -\ 24 \\ \hline 06 \end{array}$$

W *Answer* __4:06__ p.m.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the time Beth left her house.

GUIDE PAPER 3

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

↓ time she met freinds

↓ time it took her to walk from
24m house to library

Plan: 4:30 −24
= [?]

4:30 − 10m = 4:20
4:20 − 10m = 4:10
4:10 − 2 m = 4:08
4:08 − 2 m = (4:06) ↖ time Beth left
her house

5+5+5+5+2+2=24 ↙time it took
her to walk to
library

+5   +5   +5   +5   +2   +2

(4:06)   4:11   4:16   4:21   4:26   4:28   4:3
TLH   T A
↑   ↑
Time left   Tim
House   Ariv

Answer __4:06__ p.m.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the time Beth left her house.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

4:30-24=4:16
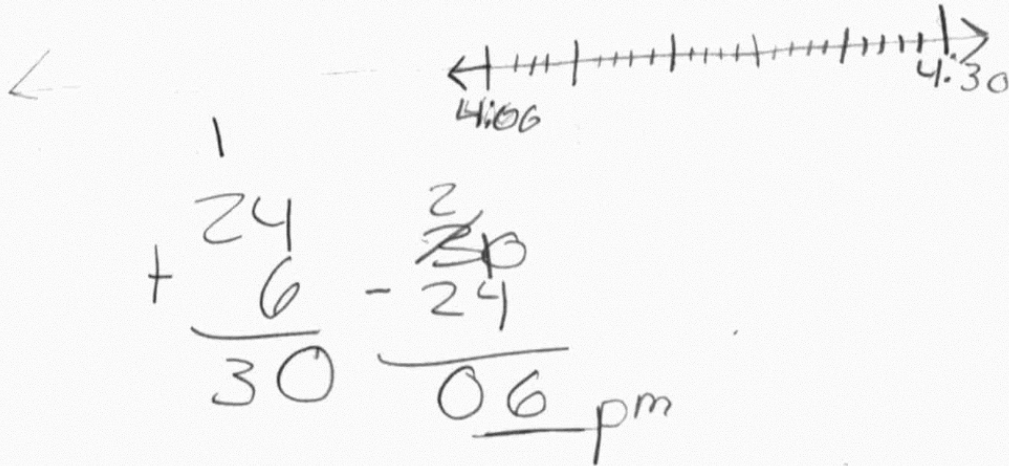
Answer 4:16 p.m.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct process is followed to find the start time, an error in subtraction results in an incorrect answer. The response correctly addresses only some elements of the task.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

4:06

1
24   2
+ 6   - 24
——   ——
30   06 pm

Beth   Started walking
at   6 pm

Answer ___6___ p.m.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct process is followed to find the start time, the answer is interpreted incorrectly. The response correctly addresses only some elements of the task.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

$$30 - 24 = 14$$

Answer | 4 14 | p.m.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct process is followed to find the start time, an error in subtraction results in an incorrect answer. The response correctly addresses only some elements of the task.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

4+30=34

Answer ___34___ p.m.

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 addition of 4 and 30 shows no understanding of the process.

34

Beth met her friends at the library at 4:30 p.m. It took her 24 minutes to walk from her house to the library. What time did Beth leave her house to arrive at the library at exactly 4:30 p.m.?

Show your work.

> 24 minutes to get there.

Answer | 4:06 | p.m.

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 correct answer is not supported by any work. The phrase "*24 minutes to get there*" is only a restatement of the prompt.
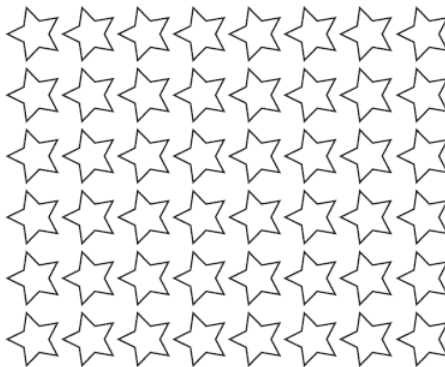
35

Ethan made the array below to show the product of 6×7.

Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

_____

_____

_____

35

Ethan made the array below to show the product of 6×7.
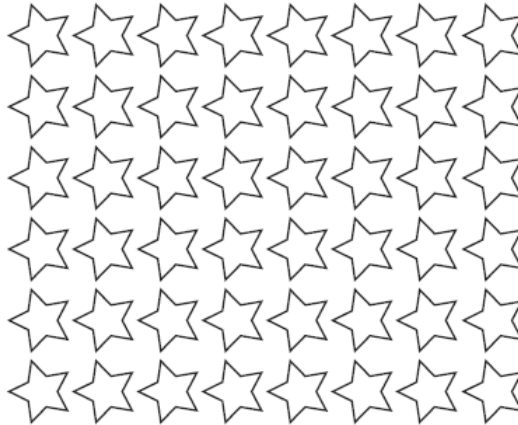
Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

No, Ethan's model is incorrect. It shows the product of 6×8.

There are 6 rows of stars and 8 columns of stars in his model.

There are a total of $6 \times 8 = 48$ stars shown.

Or any other valid explanation.

35

Ethan made the array below to show the product of 6×7.
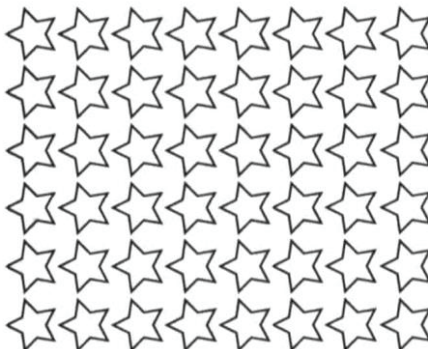
Does Ethan's model show the product of 6×7? Explain why or why not.
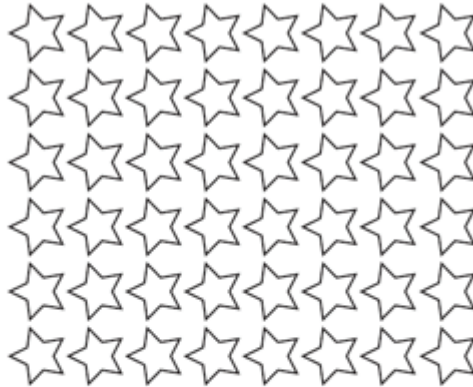
Answer

No Becouse it is 8X6.

Score Point 2 (out of 2 points)

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

35

Ethan made the array below to show the product of 6×7.
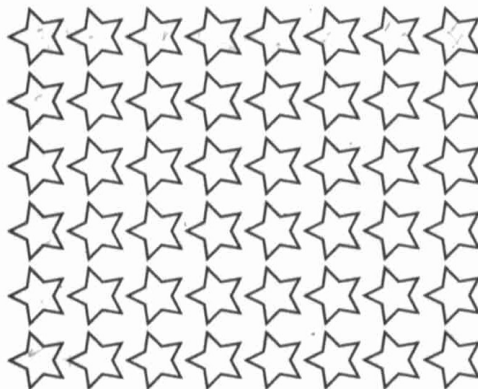
Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

No because his aray shows 6X8 and he can not get the anse frome that.
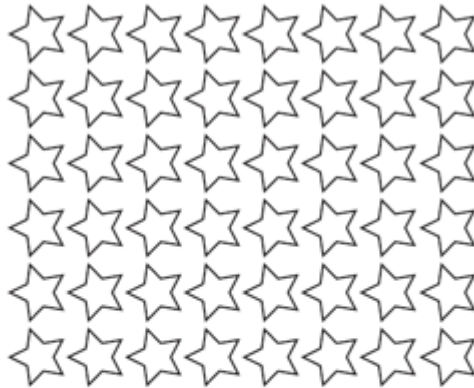

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The explanation correctly states Ethan's mistake and identifies the actual dimensions of the array.

35

Ethan made the array below to show the product of 6 × 7.

Does Ethan's model show the product of 6 × 7? Explain why or why not.

Answer

No ,beacause 6 is correct but 7 is not there is 8 insted of 7.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The response correctly identifies which dimension of the array differs from representing the product of 6 × 7.

GUIDE PAPER 4

35 Ethan made the array below to show the product of 6×7.

Does Ethan's model show the product of 6×7? Explain why or why not.
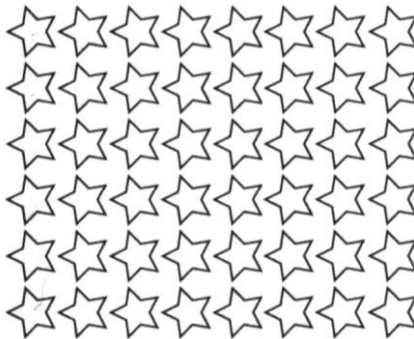
Answer

no becace The Top is all 8

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The correct answer is supported by an incomplete explanation. The response addresses only some elements of the task correctly.

35

Ethan made the array below to show the product of 6×7.

Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

Ethan did not show the product of 6×7
because when I counted it. It
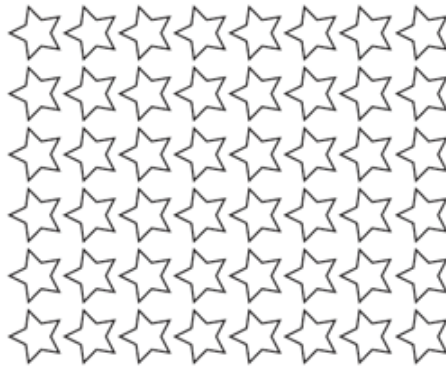Showed 8 × 7.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The answer is correct, but the explanation contains an error: the array does not represent 8 × 7. The response addresses only some elements of the task correctly.

35

Ethan made the array below to show the product of 6×7.

Does Ethan's model show the product of 6×7? Explain why or why not.
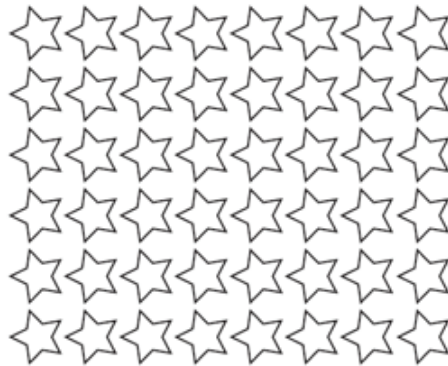
Answer

ON THE TOP IT HAS 8 INSTEAD OF 7.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The response suggests an error exists, but the explanation is incomplete and it does not indicate whether or not Ethan is correct. The response addresses only some elements of the task correctly.

35

Ethan made the array below to show the product of 6×7.

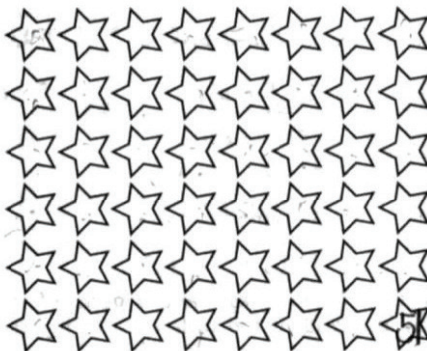Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

> 6x7=48 THERE IS 48 STARS IN ALL

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 is irrelevant.

35

Ethan made the array below to show the product of 6×7.

Does Ethan's model show the product of 6×7? Explain why or why not.

Answer

NO Becaus the Stans eual
51 or 60 Because he only
Conted 36,

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 is incorrect.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.

- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

_____

_____
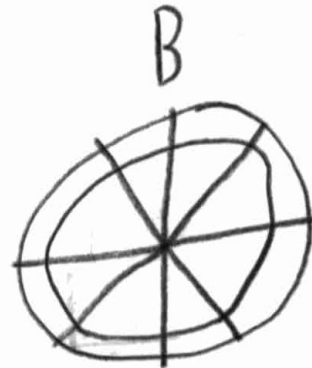
_____

EXEMPLARY RESPONSE

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.

- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Teacher A's pizza slice is $\frac{1}{6}$ of the pizza.

Teacher B's pizza slice is $\frac{1}{8}$ of the pizza.

$\frac{1}{6}$ is greater than $\frac{1}{8}$, because fraction $\frac{1}{6}$ has the same numerator as $\frac{1}{8}$ but a smaller denominator than $\frac{1}{8}$.

Teacher A cut the pizza into larger slices.

Or any other valid explanation.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Teachers A's pizza has bigger slices because the slices are in sixes and the sma the denominater the bigger th fraction.

A

B

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The response provides a correct answer supported by a correct explanation.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Teacher A's pizza were cut into larger slices because since six is less than eight the sixths must be bigger pieces than the eighths so, Teacher A's pizza was cut into larger slices than Teacher B's pizza.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The response provides a correct answer supported by a correct explanation.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.

- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

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

A's pizza is cut into larger slices

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The response provides a correct answer supported by a correct explanation.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

teacher A's Pizza Was larger Cause it didn't have many Pices of Pizza and the otherone had a lot

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The choice is correct but the explanation is not specific enough to show a thorough understanding of fractions. The response addresses only some elements of the task correctly.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.
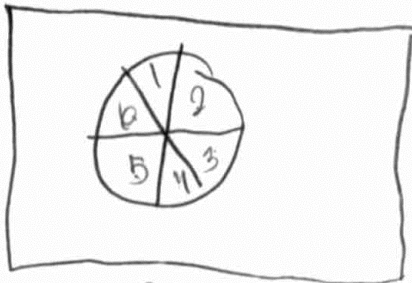
- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Teacher As pizza was bigger because less slices means bigger peaces.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The choice is correct; however, while the explanation "*less slices means bigger peaces*" shows some understanding of slice size, it does not refer to fractions. The response addresses only some elements of the task correctly.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.
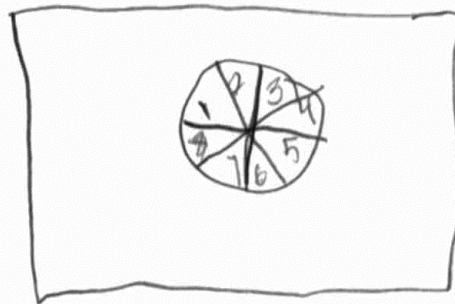
Answer

Teacher a's pizza is larger because the larger the larger the number the smaller the peice.

Teacher a

Teacher B

8 ⊘ 6

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The explanation "*the larger the number the smaller the peice*" is not specific enough to show a thorough understanding of fractions. The response addresses only some elements of the task correctly.
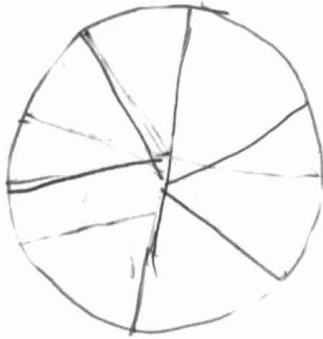
36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.
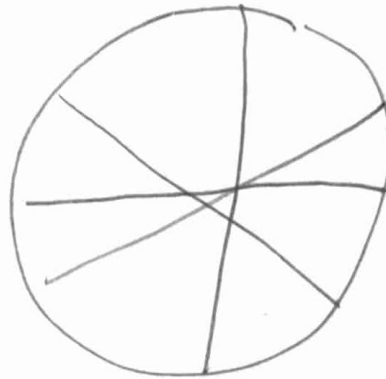- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.

Answer

Teacher B's pizzas were cut into 8 equal slices.

$$\frac{3}{6}$$

$$\frac{8}{4}$$

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. An incorrect choice is made and the work shows incorrect fractions.

36

Two teachers each buy pizzas for a party. All of the pizzas are the same size.

- Teacher A's pizzas were cut into 6 equal slices.

- Teacher B's pizzas were cut into 8 equal slices.

Which teacher's pizzas were cut into larger slices? Use what you know about fractions to explain your answer.
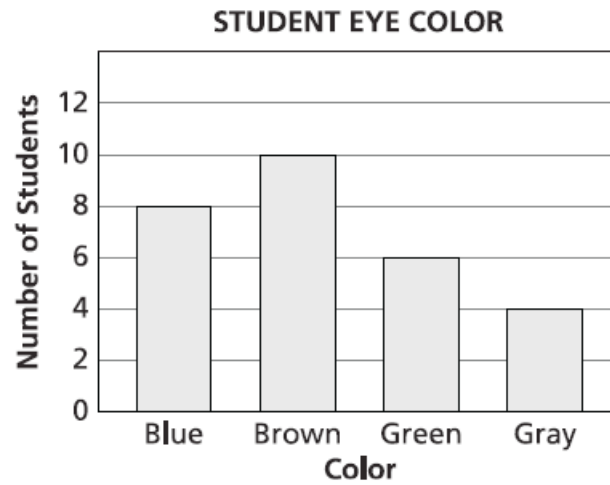
Answer

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

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 fractions written represent wholes and the comparison is incorrect.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?
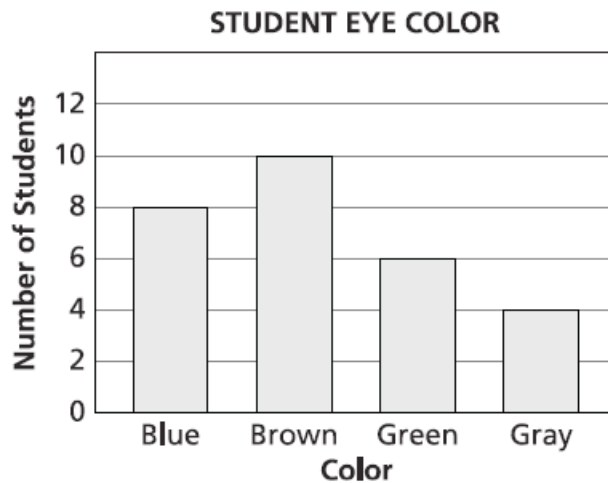
Show your work.

Answer _____ fewer students

EXEMPLARY RESPONSE

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

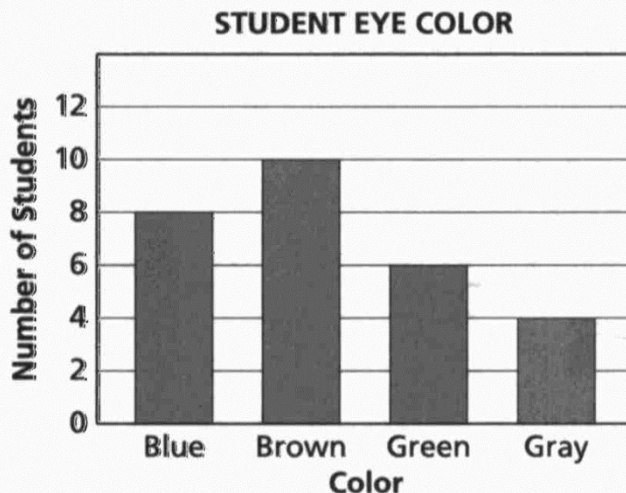*Show your work.*

Students with blue and brown eyes
$8 + 10 = 18$

Students with green eyes $= 6$

$18 - 6 = 12$ fewer students have green eyes.

Or any other valid process.

Answer _____ fewer students

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$$10 + 8 = 18$$

$$\begin{array}{r} 18 \\ -\ 6 \\ \hline 12 \end{array}$$
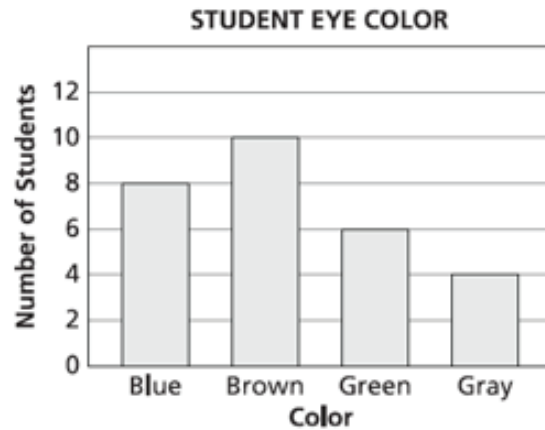
Answer _____12_____ fewer students

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The correct answer is determined using mathematically sound procedures.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$10 + 8 = 18$
$18 - 6 = 12$
i got 12 because i did $10 + 8$ and got 18 then $18 - 6$ because there is 18 together as blue AND brown is 18 and there is 6 green
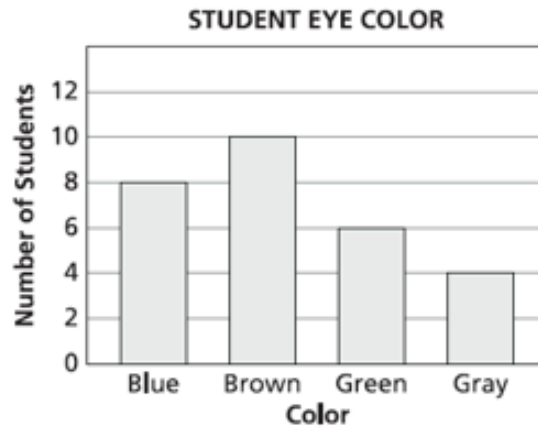
Answer [12] fewer students

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The correct answer is determined using mathematically sound procedures.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$(8 + 10) - 6 = n$
$18 - 6 = n$
$= 12$
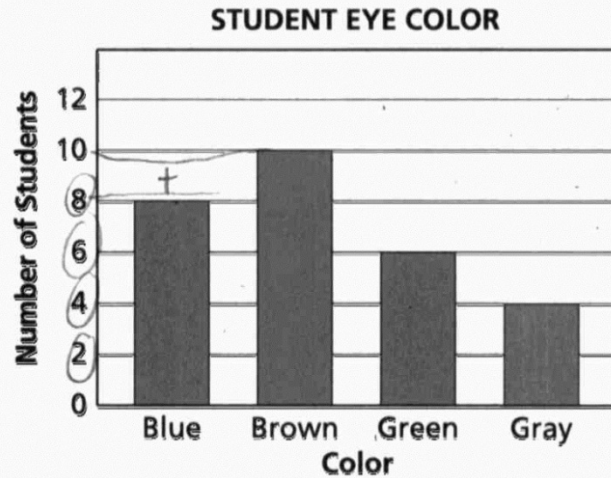
Answer [12] fewer students

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The correct answer is determined using a valid equation.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

Number of Students

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$8 + 10 = 18$

$6 - 18 = -6$

COUNT by 2

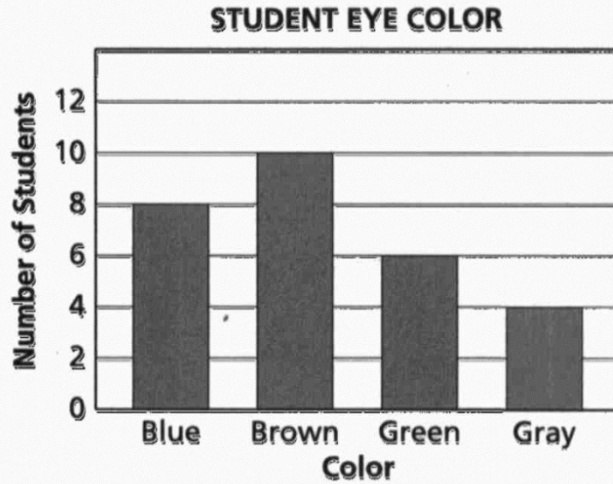SO $8 + 10 = 18$

Answer _____ fewer students

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of blue-eyed and brown-eyed students is calculated correctly, but the difference between the blue-eyed/brown-eyed students and the green-eyed students is not adequately addressed. The response addresses only some elements of the task correctly.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$$+ \begin{array}{r} 10 \\ 8 \\ \hline 18 \end{array}$$

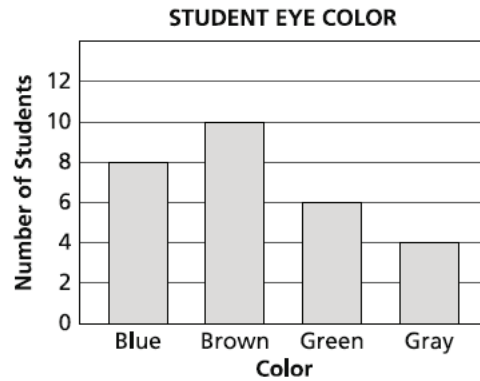**Answer** ___24___ fewer students

---

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of blue-eyed and brown-eyed students is calculated correctly, but the green-eyed students are mistakenly added instead of subtracted to produce an incorrect answer. The response addresses only some elements of the task correctly.

GUIDE PAPER 6

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

10+8=18. 6-18=12

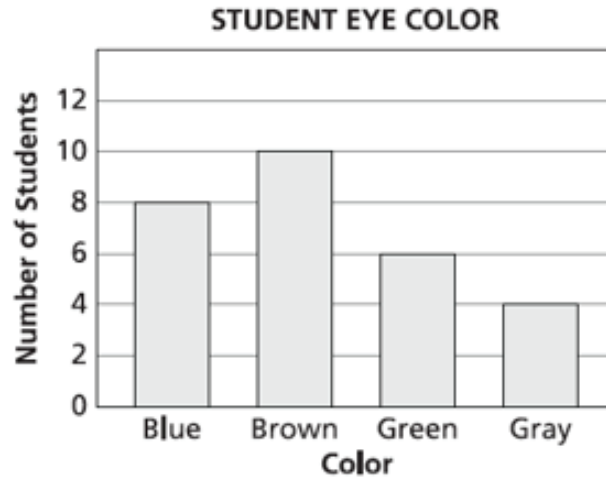*Answer* [12] fewer students

---

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of blue-eyed and brown-eyed students is calculated correctly, but the subtraction of green-eyed students is written in the incorrect order. The response addresses only some elements of the task correctly.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many **fewer** students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

$$18 - 6 = 3$$

Answer ___3___ fewer students

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. Holistically, the work provided in the response is not sufficient to show any understanding of the task.

37

The bar graph below shows the information third grade students collected about the eye color of students in their classroom.

STUDENT EYE COLOR

How many (fewer) students have green eyes than students that have blue eyes and brown eyes combined?

Show your work.

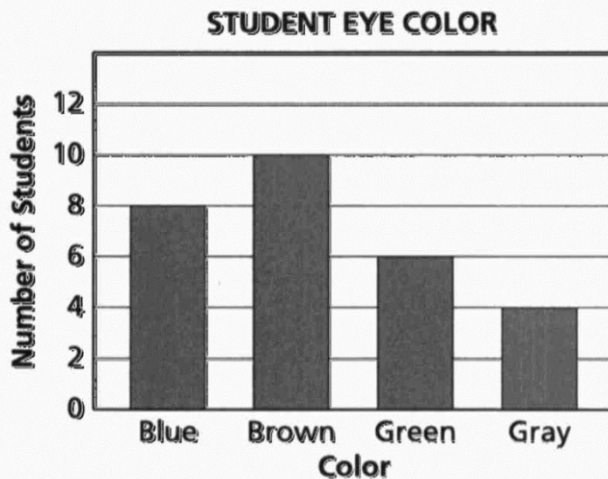adding and subtraction

$5+4=9-3=6$

Answer _____6_____ fewer students

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 work is unrelated to the data in the prompt and is not sufficient to show any understanding of the task.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

Answer _____ tennis balls

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

$8 \times 3 = 24$ total number of tennis balls

$24 \div 6 = 4$ tennis balls per player

Each player will get 4 tennis balls.

Or any other valid process.

Answer _____ tennis balls

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

$$8 \times 3 = 24$$
$$24 \div 6 = 4$$

Answer ___4___ tennis balls
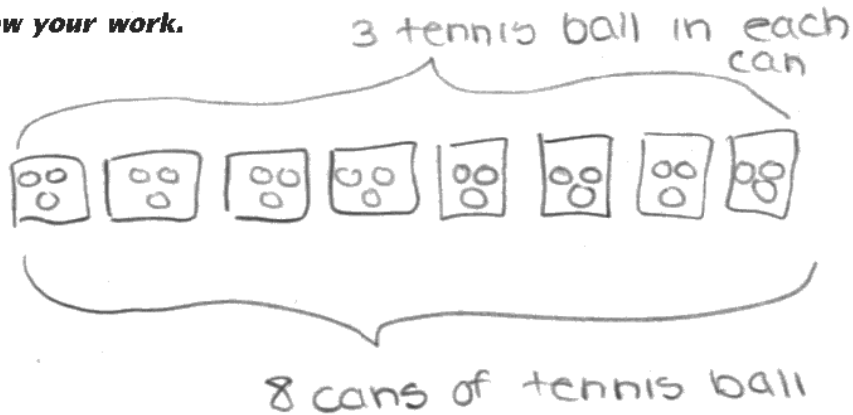
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The total number of tennis balls and the amount to distribute to each player are correctly calculated.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

3 tennis ball in each can

8 cans of tennis ball

$8 \times 3 = 24 \div 6 = 4$ The answer of how many tennis ball each person get.

cans in each can · Total of the balls · among 6 players

Answer _____4_____ tennis balls

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The total number of tennis balls and the amount to distribute to each player are correctly calculated and explained.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

$8 \times 3 = 24$ tenis balls

Each player will get 4 tennis balls.

Answer ___4___ tennis balls

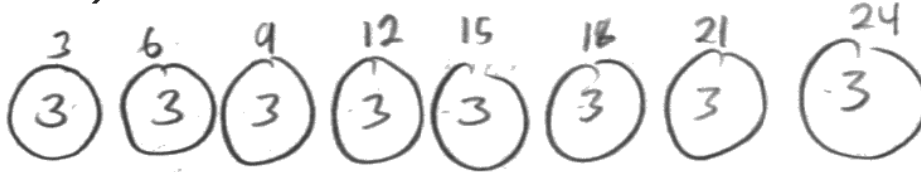## Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The total number of tennis balls and the amount to distribute to each player are correctly calculated and explained.
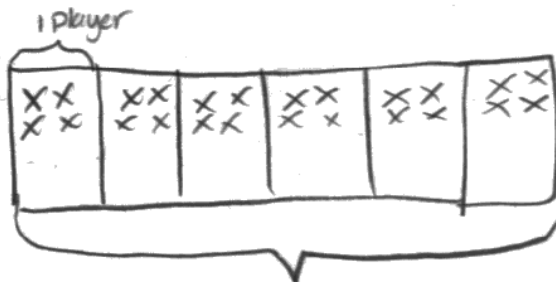
38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

③ ③ ③ ③ ③ ③

③ ③ = 24

8 x 3 = 24 tennis balls

Answer _____ tennis balls

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of tennis balls is correctly calculated but it is not divided by the number of players. The response addresses only some elements of the task correctly.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

$8 \times 3 = 24$

$24 + 6 = 30$

Answer _____ tennis balls

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of tennis balls is correctly calculated; however, addition is used instead of division to determine an incorrect solution. The response addresses only some elements of the task correctly.

GUIDE PAPER 6

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

Answer _____2_____ tennis balls

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The total number of tennis balls is correctly calculated by repeated addition, but a calculation error during division results in an incorrect solution. The response addresses only some elements of the task correctly.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?

Show your work.

$$\begin{array}{r} 8 \\ +3 \\ \hline 11 \end{array} \qquad \begin{array}{r} 8 \\ +6 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 14 \\ +11 \\ \hline 25 \end{array}$$

each Player will get 25 tennies balls.

Answer _____25_____ tennis balls

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. Adding the numbers given in the prompt does not show an understanding of the task.

38

A tennis coach buys 8 cans of tennis balls. There are 3 tennis balls in each can. All of the tennis balls will be shared equally among 6 players. How many tennis balls will each player get?
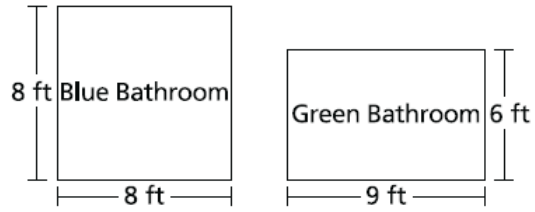
Show your work.

$$
\begin{array}{r}
8 \ \ 3 \\
6 \\
+ \ 3 \\
\hline
17
\end{array}
$$

Answer ___17___ tennis balls

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. Adding the numbers given in the prompt does not show an understanding of the task.

39

The sizes of two bathroom floors in Beth's house are shown below.

8 ft | Blue Bathroom

8 ft

Green Bathroom | 6 ft

9 ft

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

_____

_____

_____

39

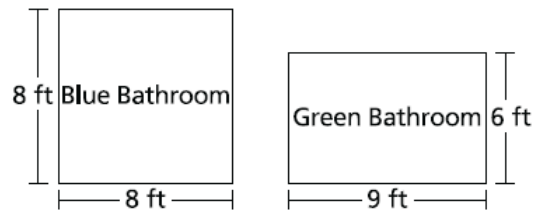The sizes of two bathroom floors in Beth's house are shown below.

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

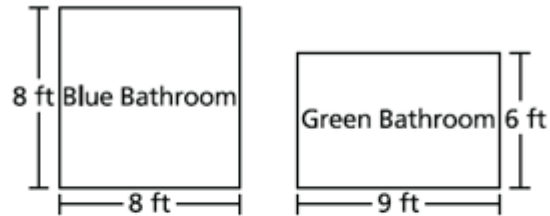*Explain your answer.*

No, Beth's statement is not correct.

The area of the blue bathroom is
$8 \times 8 = 64$ square feet.

The area of the green bathroom is
$9 \times 6 = 54$ square feet.

$64 > 54$, so the area of the green bathroom is smaller than the area of the blue bathroom.

Or any other valid explanation.

39

The sizes of two bathroom floors in Beth's house are shown below.

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

9 × 6 = 54
8 × 8 = 64
Beth's statement is not true, because 64 is a larger than 54.

Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The areas of each room are correctly calculated and the explanation is complete and correct.

39

The sizes of two bathroom floors in Beth's house are shown below.

8 ft Blue Bathroom

$8 \times 8 = 64$ sq ft

Green Bathroom 6 ft

$9 \times 6 = 54$ sq ft

├── 8 ft ──┤   ├── 9 ft ──┤

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

Beth's statement is not true because 64 - 54 = 10 sq ft that's why Beth's statement is not true.

$$\begin{array}{r} 64 \\ -54 \\ \hline 10 \end{array} \text{ more sq ft}$$
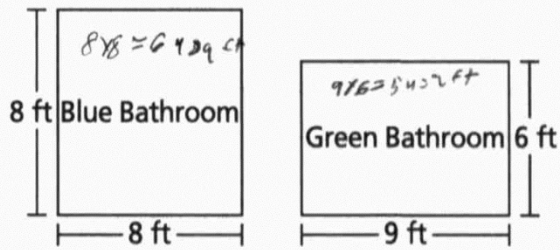
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The areas of each room are correctly calculated and the explanation is complete and correct.

39

The sizes of two bathroom floors in Beth's house are shown below.

$9ft \times 6ft = 54 sq. ft$

$ft \times 8ft = 64 sq. ft$

8 ft | Blue Bathroom

64 sq. ft

8 ft

Green Bathroom | 6 ft

54 sq. ft

9 ft

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

Beth's statement is not true because when you multiplie the numbers together for the green bathroom you get the number 54 sq. ft but the Blue bathroom is 64 sq. ft So the Blue bathroom is greater than the green bathroom.
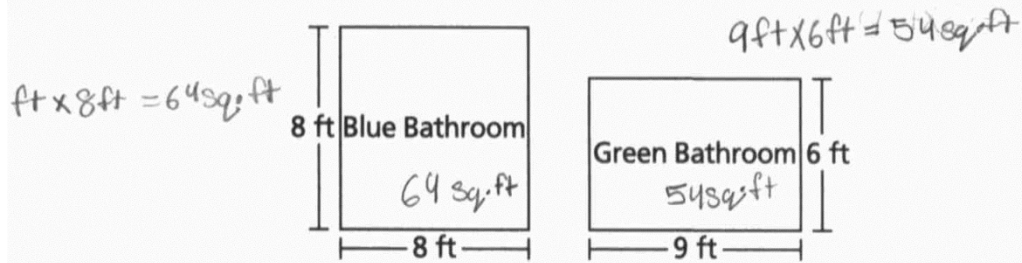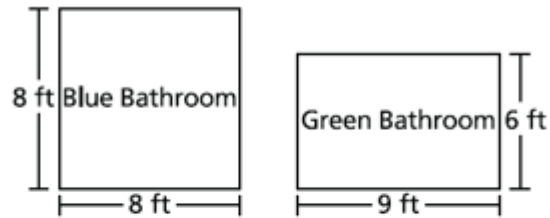
Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The areas of each room are correctly calculated and the explanation is complete and correct.

39

The sizes of two bathroom floors in Beth's house are shown below.

8 ft | Blue Bathroom

— 8 ft —

Green Bathroom | 6 ft

— 9 ft —

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

$8 \times 8 = 64$
$9 \times 6 = 55$
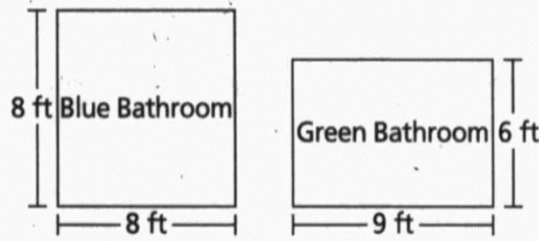beth statement is not true because green bathroom is 55

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Area is calculated mostly correctly and a correct answer is given. However, the question of "why or why not" is not addressed. The response addresses only some elements of the task correctly.

39

The sizes of two bathroom floors in Beth's house are shown below.

8 ft | Blue Bathroom — 8 ft

Green Bathroom | 6 ft — 9 ft

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

Beth was wrong because she bibn't multiplication and add propley.

8x8=64
Blue

↑
yes it is

4 X 9 = 36
4 X 6 = 24
60

the blue's greater then green.

Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The area for the blue bathroom is calculated correctly. The area for the green bathroom is calculated using an incorrect process. The response addresses only some elements of the task correctly.

39

The sizes of two bathroom floors in Beth's house are shown below.

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

> $8 \times 8 = 64$
> $9 \times 6 = 54$
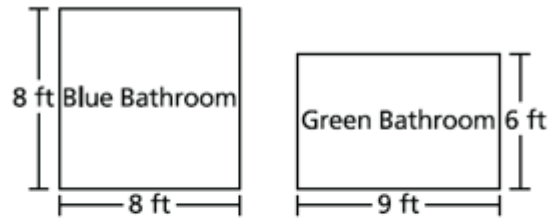> beths statement is true beacause 64 is 10 bigger than 54


Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The areas of each bathroom are calculated and compared correctly; however, an incorrect answer is given. The response addresses only some elements of the task correctly.

39

The sizes of two bathroom floors in Beth's house are shown below.

8 ft | Blue Bathroom
8 ft

Green Bathroom | 6 ft
9 ft
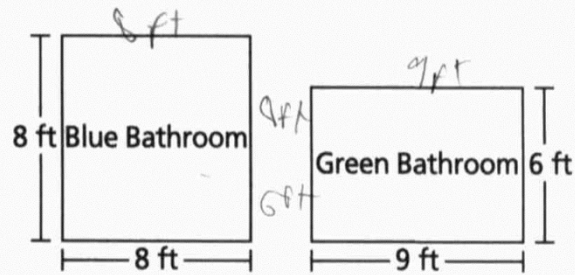
Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

I think that there both the same shape but Just diffrent sizes so I agree with Beth.

Square

Retangle

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 comparison of shapes does not address any elements of the task.
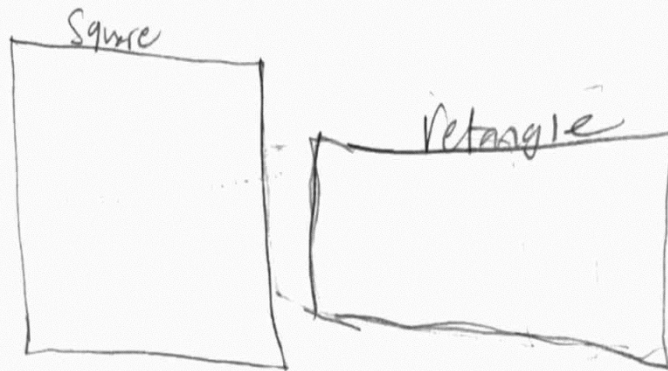
39

The sizes of two bathroom floors in Beth's house are shown below.

Beth says that the area of the floor of the green bathroom is larger than the area of the floor of the blue bathroom. Is Beth's statement true? Why or why not?

Explain your answer.

$$8 + 8 = 16 \quad 9 + 6 = 15$$
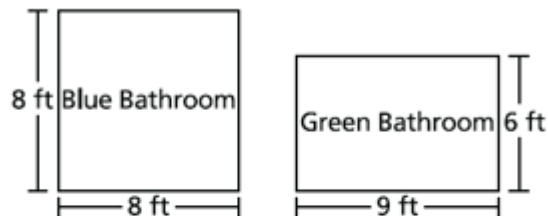

Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. Adding the numbers given in the prompt is not sufficient to show an understanding.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

Answer _____ feet

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

Total amount of green ribbon
$4 \times 90 = 360$ feet

Total amount of purple ribbon
$8 \times 60 = 480$ feet

The difference in ribbon length
$480 - 360 = 120$ feet

Or any other valid process.

Answer _____ feet

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

green ribbon-4x90=360ft
purple ribbon-8x60=480ft
    480ft
-   360ft
  ————
   120ft

Answer | 120ft | feet

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The correct difference in ribbon length is determined using mathematically sound procedures.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

90x4=360   60x8=480   480-360 =

Answer 120 feet

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The correct difference in ribbon length is determined using mathematically sound procedures.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

90+90+90+90=360   480-360=120
60+60+60+60+60+60+60+60=480

Answer | 120 | feet

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The response uses repeated addition to calculate the total length of each ribbon and correctly determines the ribbon length difference.

GUIDE PAPER 4

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

4 TIMES 90= 360   400-360=40

8 TIMES 60= 400

Answer 40 feet

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The response uses mathematically sound processes, but a multiplication error results in an incorrect solution. The response addresses most, but not all aspects of the task correctly.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

90+90+90+90=360   60+60+60+60+60+60+60+60=470   470-360=110
the difference is they are 110 feet apart.

Answer 110 feet

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. Repeated addition is used to calculate the total length of each ribbon, but a calculation error results in an incorrect solution. The response addresses most, but not all aspects of the task correctly.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

360ft-480ft=120ft.

Answer 120 feet

Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The total lengths of each ribbon are shown, but a reverse subtraction yielding the correct answer reflects some minor misunderstanding of the underlying mathematical concepts.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

th green ribben is 90 feet and the purple ribben is 60

Answer 30 feet

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. The difference between the lengths of single rolls of green and purple ribbon is calculated instead of the difference between the total lengths. The response addresses some elements of the task correctly.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

4 x 90=810
8 x 60=480
the diference about the amounts of ribbon, 810+480 equals 1900

Answer | 1900 | feet

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. The total length of purple ribbon is calculated correctly. A calculation error when calculating the total length of the green ribbon and the use of addition instead of subtraction result in an incorrect answer. The response addresses some elements of the task correctly.

GUIDE PAPER 9

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

4x90=360 feet
8x60=480 feet

Answer 840 feet

Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. The student calculates the total length of each ribbon correctly but a conceptual error is made when the two products are added. Per Scoring Policy #8, this response cannot receive more than 50% credit. The response addresses some elements of the task correctly.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

```
4 G ROLL   90F     4+8=12      150+12=162
8 P ROLL   60F   90+60=150
```

Answer | 162 | feet

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 unrelated to the task and the answer is incorrect.

40

Edwin uses 4 rolls of green ribbon and 8 rolls of purple ribbon for a project.

- Each roll of green ribbon has a length of 90 feet.

- Each roll of purple ribbon has a length of 60 feet.

What is the difference in length, in feet, between the total amount of green ribbon and the total amount of purple ribbon Edwin uses?

Show your work.

(NO STUDENT RESPONSE GIVEN)

Answer 120 feet

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. A correct answer is given without any work shown. Per Scoring Policy #3, this response cannot receive credit.