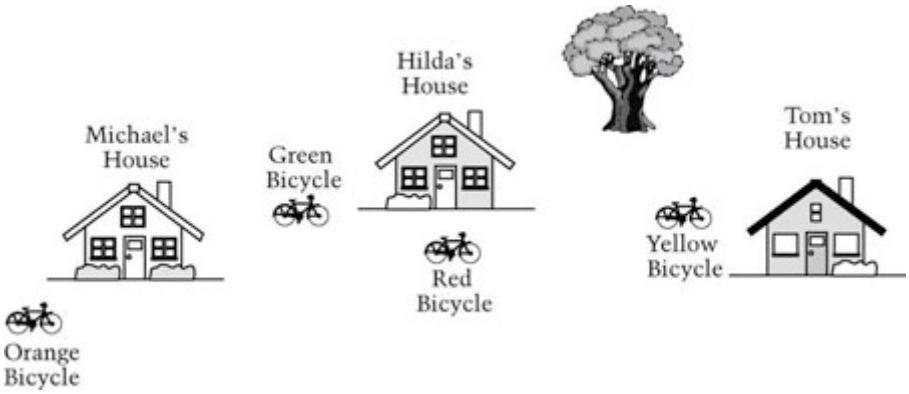


1. Jan left her bicycle between Hilda's house and Michael's house. What color is Jan's bicycle?

   A) Orange
   B) Green
   C) Red
   D) Yellow

Did you use the calculator on this question?

○ Yes ○ No

2. On Saturday 789 people went to the zoo. On Sunday 983 people went to the zoo. How many more people went to the zoo on Sunday than on Saturday?

   A) 194
   B) 204
   C) 206
   D) 1,772

Did you use the calculator on this question?

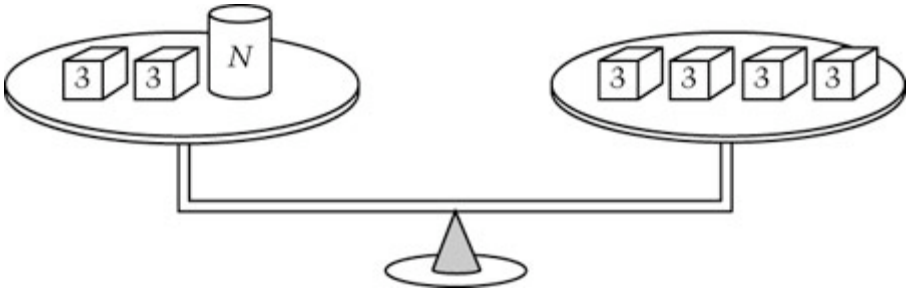
○ Yes ○ No

3. If Fred's rope is 12 inches long, about how long is Susan's rope?

   A) 16 inches
   B) 20 inches
   C) 24 inches
   D) 30 inches

Did you use the calculator on this question?

○ Yes ○ No

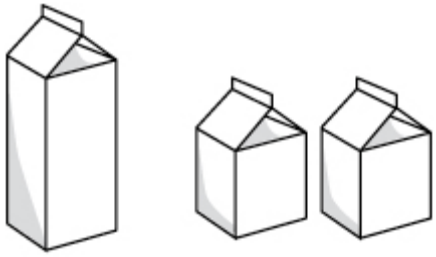


4. The weights on the scale above are balanced. Each cube weighs 3 pounds. The cylinder weighs *N* pounds. Which number sentence best describes this situation?

A) 6 + *N* = 12
B) 6 + *N* = 4
C) 2 + *N* = 12
D) 2 + *N* = 4

Did you use the calculator on this question?

○ Yes ○ No



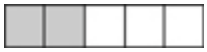
1 quart = 2 pints

5. Mr. Harper bought 6 pints of milk. How many quarts of milk is this equal to?

A) 3
B) 4
C) 6
D) 12

Did you use the calculator on this question?

○ Yes ○ No



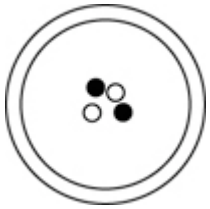
6. What fraction of the figure is shaded?

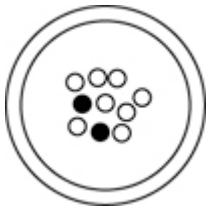
Answer: _____

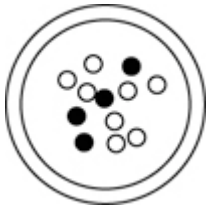
Did you use the calculator on this question?

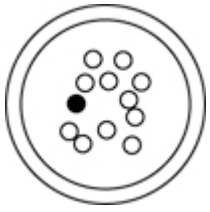
○ Yes ○ No

7. A person is going to pick one marble without looking. For which dish is there the greatest probability of picking a black marble?

A) 

B) 

C) 

D) 

Did you use the calculator on this question?

○ Yes ○ No

8. The clock shows the time that Bill leaves his house in the morning. He returns 6 hours and 25 minutes later. At what time does he return?

A) 5:15 A.M.
B) 5:40 A.M.
C) 5:15 P.M.
D) 5:40 P.M.

Did you use the calculator on this question?

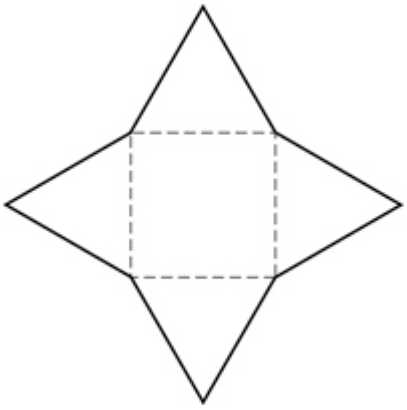
○ Yes ○ No

9. On the chart, circle all the numbers that have 4 as a factor.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

Did you use the calculator on this question?

○ Yes ○ No

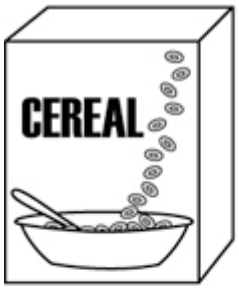


10. What three-dimensional shape could be made by folding the figure above on the dotted lines until the points on the triangles meet?

A) Triangle
B) Pyramid
C) Cube
D) Cone

Did you use the calculator on this question?

○ Yes ○ No



$4.95

$2.45

SALES TAX TABLE

Amount of Sales	Amount of Tax
$6.00	$0.36
6.20	0.37
6.40	0.38
6.60	0.40
6.80	0.41
7.00	0.42
7.20	0.43
7.40	0.44
7.60	0.46
7.80	0.47
8.00	0.48

11. Carlos bought the cereal and milk shown. Use the table to find out the total amount Carlos spent, including tax.

Total amount spent: _____

Show how you found your answer.

Did you use the calculator on this question?

○ Yes ○ No

In	Out
2	5
3	7
4	9
5	11
15	31
38	

12. The table shows how the “In” numbers are related to the “Out” numbers. When 38 goes in, what number comes out?

A) 41
B) 51
C) 54
D) 77

Did you use the calculator on this question?

○ Yes ○ No

13. Mark's room is 12 feet wide and 15 feet long. Mark wants to cover the floor with carpet. How many square feet of carpet does he need?

Answer: _____ square feet

The carpet costs $2.60 per square foot. How much will the carpet cost?

Answer: $ _____

Did you use the calculator on this question?

○ Yes ○ No

14. There will be 58 people at a breakfast and each person will eat 2 eggs. There are 12 eggs in each carton. How many cartons of eggs will be needed for the breakfast?

A) 9
B) 10
C) 72
D) 116

Did you use the calculator on this question?

○ Yes ○ No

15. Ben bought 4 items at a bake sale and added their cost on his calculator. The total cost read 1.1 on the calculator. What amount does Ben need to pay?

A) 11 cents
B) 1 dollar and 1 cent
C) 1 dollar and 10 cents
D) 11 dollars

Did you use the calculator on this question?

○ Yes ○ No

16. Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

_____ Packages of postcards

_____ Packages of greeting cards

Explain how you know your answer is correct.

Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.

Did you use the calculator on this question?

○ Yes ○ No

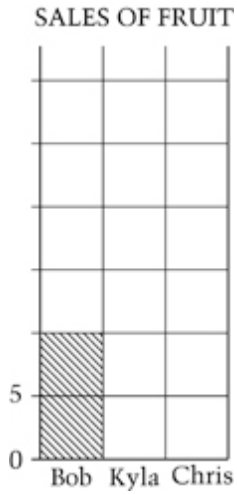
17. Which of the following could be the length of the pencil you use in school?

A) 6 feet
B) 6 pounds
C) 6 ounces
D) 6 inches

18. What number is 10 more than 5,237?

A) 5,238
B) 5,247
C) 5,337
D) 6,237

19. In the school sale Bob sold 10 boxes of fruit, Kyla sold 20 boxes, and Chris sold 15 boxes. Complete the bar graph below to show how many boxes each student sold.



20. What fraction of the group of umbrellas is closed?

A) $\frac{1}{3}$

B) $\frac{3}{7}$

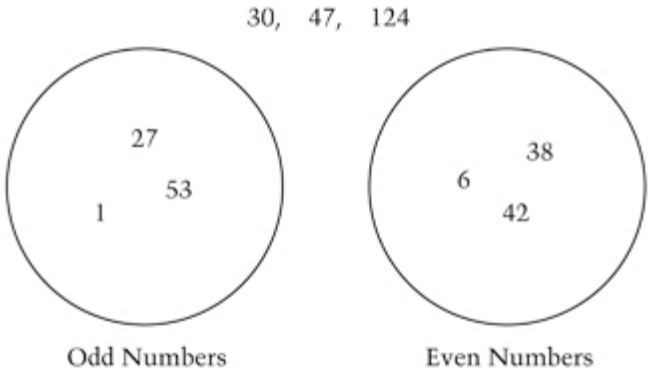
C) $\frac{4}{7}$

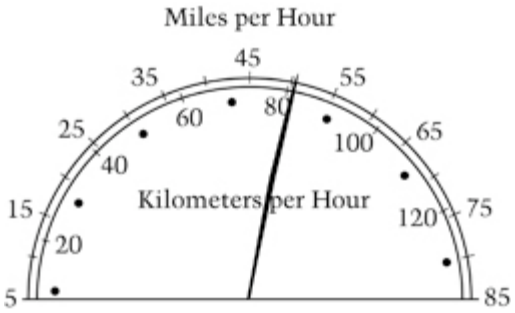
D) $\frac{3}{4}$

21. Paco had 32 trading cards. He gave *N* trading cards to his friend. Which expression tells how many trading cards Paco has now?

A) 32 + *N*
B) 32 - *N*
C) *N* - 32
D) 32 ÷ *N*

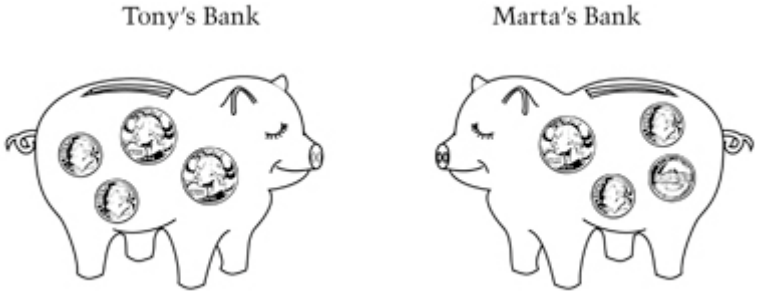
22. Write each of the following numbers in the circle where it belongs.





23. The speedometer shows how fast Dale is driving. If the speed limit is 55 miles per hour (mph), which of the following is true?

A) Dale is going about 5 mph over the speed limit.
B) Dale is going about 25 mph over the speed limit.
C) Dale is going about 5 mph under the speed limit.
D) Dale is going about 25 mph under the speed limit.



24. Tony has 2 quarters and 2 dimes. Marta has 1 quarter, 2 dimes, and 1 nickel. Which of the coins from Tony's bank would he need to give Marta so that they each have the same amount of money?

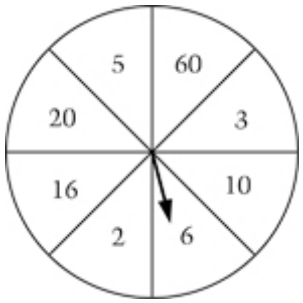
A) One dime
B) Two dimes
C) One quarter
D) One quarter and one dime

	Ms. King's Class	Mr. West's Class	Ms. Chang's Class
Number of Students	20	25	28

25. In each class listed above, the students are lining up with a partner to walk to lunch. Which class will have one child with no other child for a partner?

Answer: _____

Explain your choice.



26. If the arrow is spun and stops in one of the 8 spaces, what is the probability that the arrow will stop in the space labeled 6?

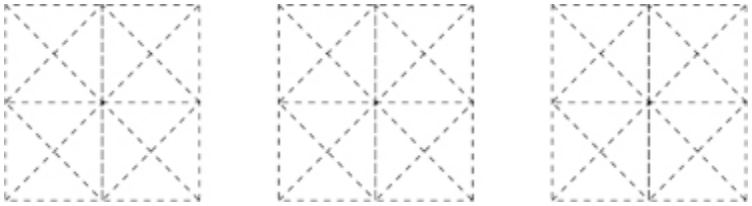
A) 1 out of 6
B) 1 out of 8
C) 1 out of 10
D) 1 out of 60

27. These three fractions are equivalent. Give <u>two</u> more fractions that are equivalent to these.

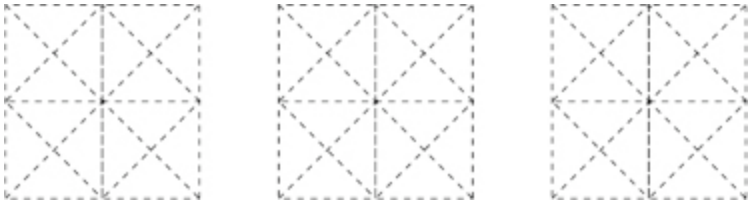
28. Which of these units would be the best to use to measure the length of a school building?

A) Millimeters
B) Centimeters
C) Meters
D) Kilometers

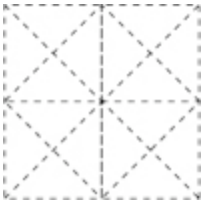
29. In each figure below, outline a square. The squares must <u>not</u> be the same size.



30. In each figure below, outline a triangle. The triangles must not be the same size.



31. In the figure below, outline a four-sided shape that is not a rectangle (or a square).



32. Five classes are going on a bus trip and each class has 21 students. If each bus holds only 40 students, how many buses are needed for the trip?

Answer: _____

33. In the pattern shown above, which of the following would go into the blank space?

A) 

B) 

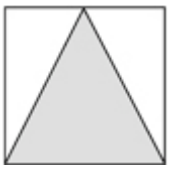
C) 

D) △

34. Mark says $\frac{1}{4}$ of his candy bar is smaller than $\frac{1}{5}$ of the same candy bar.

Is Mark right? ⬭ Yes ⬭ No

Draw a picture or use words to explain why you think Mark is right or wrong.



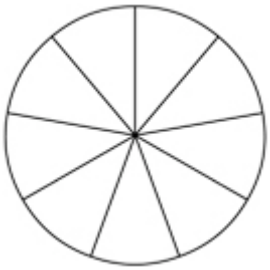
35. If the area of the shaded triangle is 4 square inches, what is the area of the entire square?

A) 2 square inches
B) 4 square inches
C) 8 square inches
D) 16 square inches

36.

Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

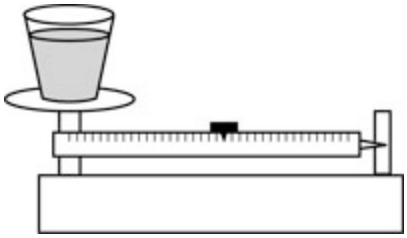
Show how he could label his spinner.



Number of blues: _____

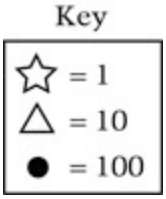
Number of reds: _____

Explain how you found your answer.



37. What is being measured?

A) The amount of water in the cup
B) The height of the water in the cup
C) The weight of the cup of water
D) The temperature of the water



38. Based on the key above, which of these equals 352?

A) ● ● ● △ △ △ △ △ ☆ ☆

B) ● ● ● ☆ ☆ ☆ ☆ ☆ △ △

C) ☆ ☆ ☆ △ △ △ △ △ ● ●

D) △ △ △ ● ● ● ● ● ☆ ☆

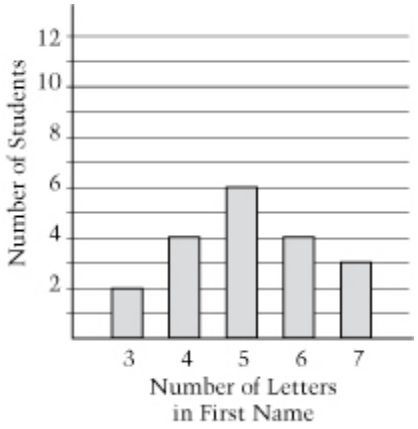
14, 26, 38, _____ , _____

39. The numbers in the pattern above are increasing by 12. Which of these numbers is part of the pattern?

A) 52
B) 58
C) 60
D) 62

40.

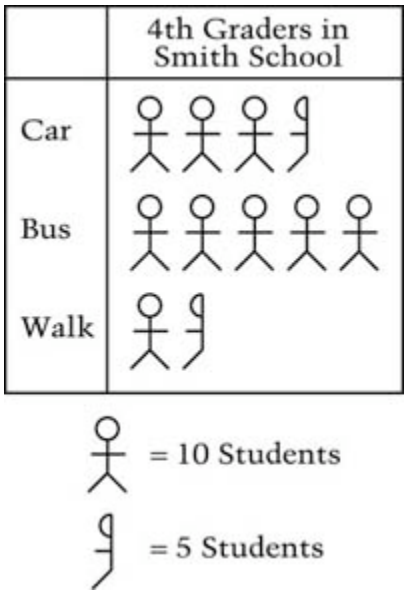
The students in a class each counted the number of letters in their first names. The class made the graph below of the results.



A new student, Victor, joined the class. Draw on the graph to include the data for Victor.

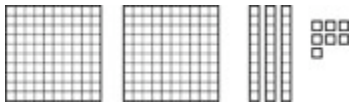
41. By how much will the value of the number 4,372 increase if the 3 is replaced with a 9 ?

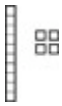
A) 6
B) 60
C) 600
D) 6,000



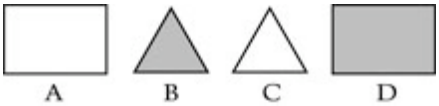
42. The pictograph shows how all the 4th graders at Smith School get to school. According to the pictograph, how many 4th graders attend Smith School?

A) 95
B) 100
C) 105
D) 110



43. The figure above represents 237. Which number is  more than 237?

A) 244
B) 249
C) 251
D) 377



44. Melissa chose one of the figures above.

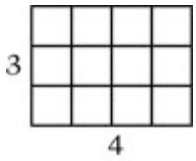
- The figure she chose was shaded.
- the figure she chose was not a triangle.

Which figure did she choose?

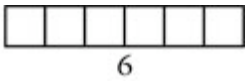
A) A
B) B
C) C
D) D

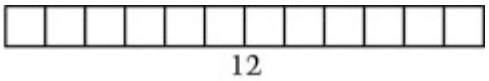
45. Which of these would be easiest to solve by using mental math?

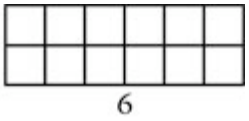
A) $65.12 - $28.19
B) 358 x 2
C) 1,625 ÷ 3
D) $100.00 + $10.00

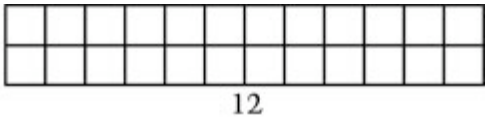


46. Which rectangle below has the same perimeter (distance around) as the rectangle above?

A) 

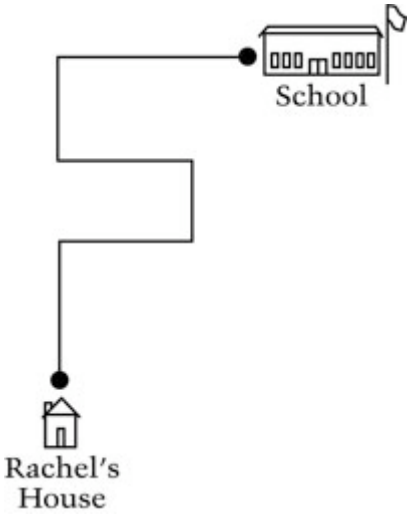
B) 

C) 

D) 

47. The Ben Franklin Bridge was 75 years old in 2001. In what year was the bridge 50 years old?

A) 1951
B) 1976
C) 1984
D) 1986



48. The picture shows Rachel's path to school. How many right angle turns does Rachel make to get to school?

A) Two
B) Three
C) Five
D) Seven

49. Which number is forty-five and six hundredths?

A) 45.6
B) 45.06
C) 456.0
D) 645.0

50. A stop sign has 8 sides of equal length. Ryan knows that the length of each side is 10 inches.

Explain how Ryan can find the perimeter (distance around) of the sign.

What is the perimeter of the sign?

Answer: _____ inches

51. Stickers come in small booklets of 100 and in rolls of 1,000. On the store shelf, there are 6 booklets and 4 rolls of stickers. How many stickers are on the shelf?

A) 1,100

B) 4,600
C) 6,400
D) 10,000

52.

There are 6 cubes of the same size in a jar.

2 cubes are yellow.

3 cubes are red.

1 cube is blue.

Chuck is going to pick one cube without looking. Which color is he most likely to pick?

What is the probability of this color being picked?

---

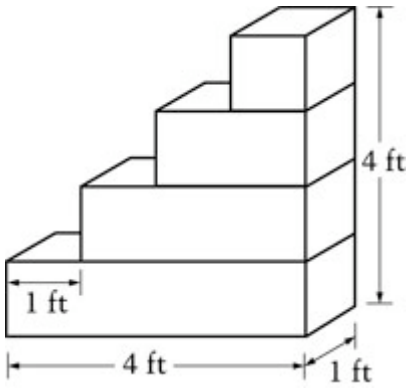
53. Which set of numbers is listed from the smallest to largest?

A) 1,001 1,100 1,011

B) 2,200 2,022 2,020

C) 3,030 3,003 3,300

D) 4,004 4,040 4,044



54. Sierra built the block tower with 1-foot cubes. How many cubes did she use?

A) 4
B) 6
C) 8
D) 10

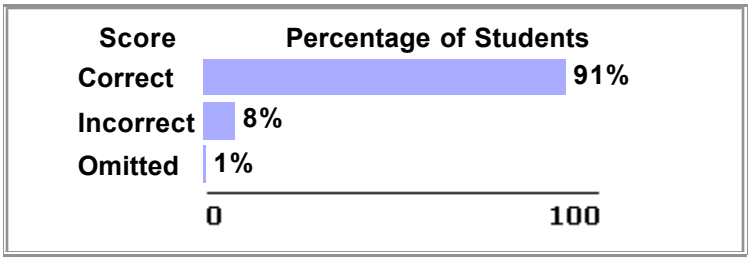
Question 1

Key

1. Jan left her bicycle between Hilda's house and Michael's house. What color is Jan's bicycle?

A) Orange
B) Green
C) Red
D) Yellow

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

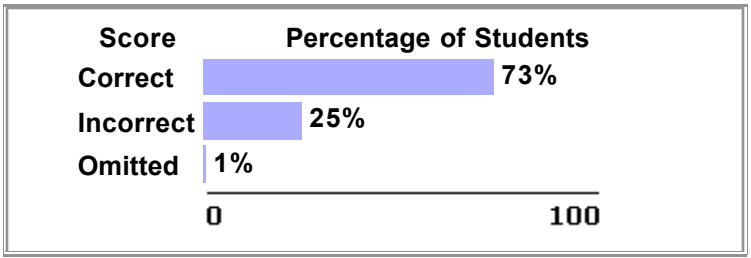
Question 2

Key

2. On Saturday 789 people went to the zoo. On Sunday 983 people went to the zoo. How many more people went to the zoo on Sunday than on Saturday?

A) 194
B) 204
C) 206
D) 1,772

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

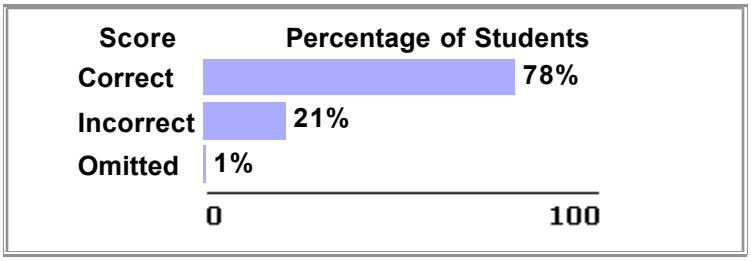
Question 3

Key

3. If Fred's rope is 12 inches long, about how long is Susan's rope?

A) 16 inches
B) 20 inches
C) 24 inches
D) 30 inches

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

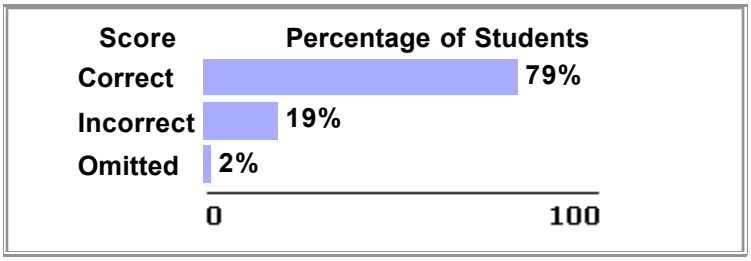
Question 4

Key

4. The weights on the scale above are balanced. Each cube weighs 3 pounds. The cylinder weighs *N* pounds. Which number sentence best describes this situation?

A) $6 + N = 12$
B) $6 + N = 4$
C) $2 + N = 12$
D) $2 + N = 4$

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

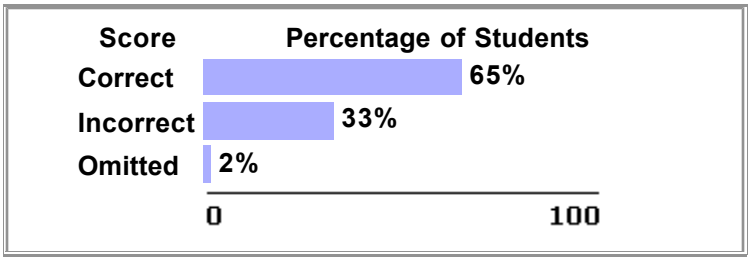
Question 5

Key

5. Mr. Harper bought 6 pints of milk. How many quarts of milk is this equal to?

A) 3
B) 4
C) 6
D) 12

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 6

Scoring Guide

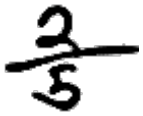
Solution:

$\frac{2}{5}$

Score & Description
Correct Correct response
Incorrect Incorrect response

Correct - Student Response

6 What fraction of the figure is shaded?



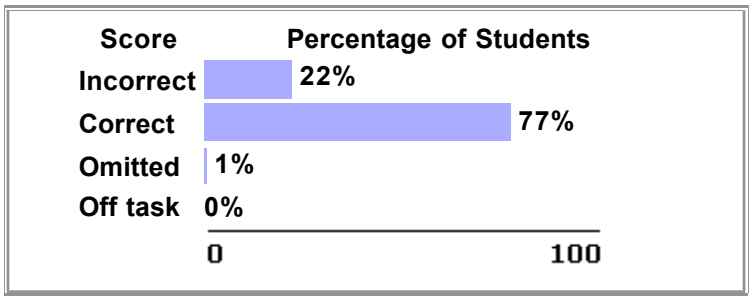
Scorer Comments:
This paper gave the correct response that two-fifths of the figure is shaded.

Incorrect - Student Response

6 What fraction of the figure is shaded?

Scorer Comments:
A common incorrect response to this question was “2,” the number of squares shaded in the figure.

2007 National Performance Results

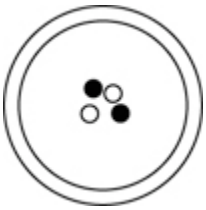


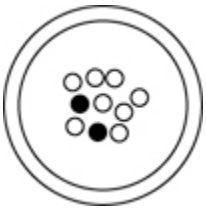
Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

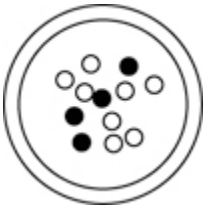
Question 7

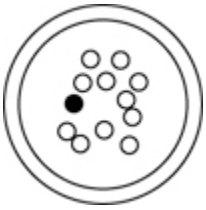
Key

7. A person is going to pick one marble without looking. For which dish is there the greatest probability of picking a black marble?

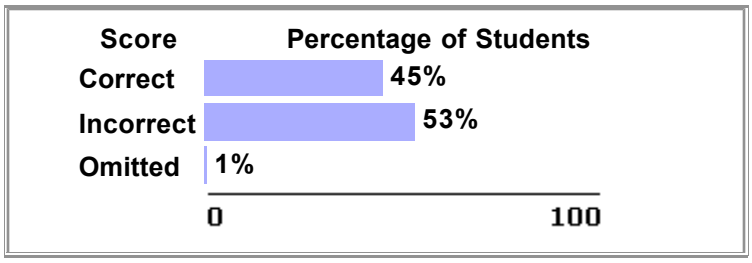
A) 

B) 

C) 

D) 

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

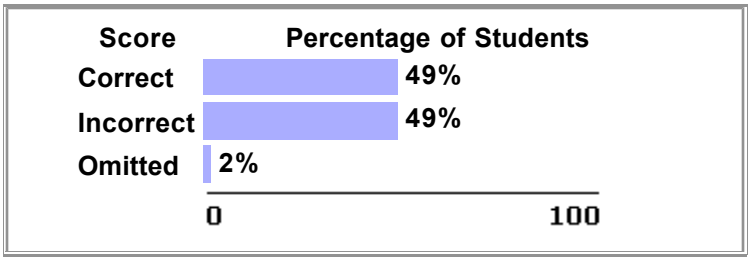
Question 8

Key

8. The clock shows the time that Bill leaves his house in the morning. He returns 6 hours and 25 minutes later. At what time does he return?

A) 5:15 A.M.
B) 5:40 A.M.
C) 5:15 P.M.
D) 5:40 P.M.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 9

Scoring Guide

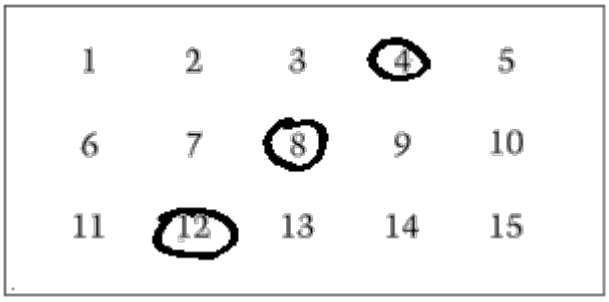
Solution:

4, 8, and 12 should be circled

Score & Description
Correct Circles all 3 numbers and no incorrect numbers.
Partial Circles 2 of the 3 numbers and no incorrect numbers. OR Circles 1, 2, and 4
Incorrect Incorrect response

Correct - Student Response

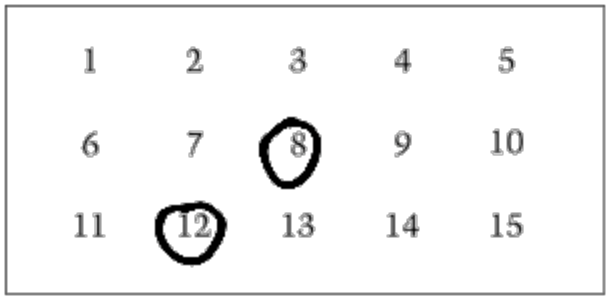
9 On the chart, circle all the numbers that have 4 as a factor.



Scorer Comments:
This paper correctly circled the three numbers that have 4 as a factor (4, 8, and 12).

Partial - Student Response

9 On the chart, circle all the numbers that have 4 as a factor.



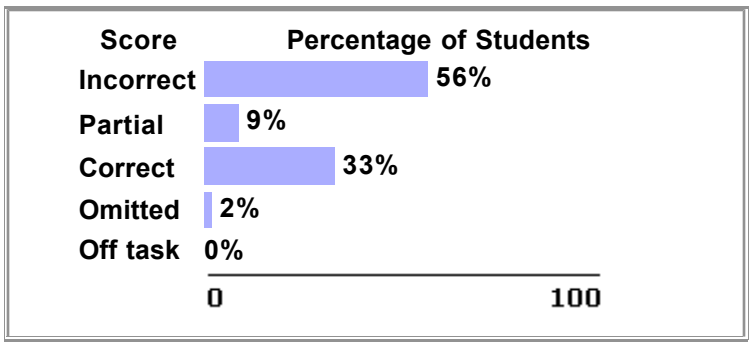
Scorer Comments:
A common partially correct response to this question was to circle only 8 and 12.

Incorrect - Student Response

9 On the chart, circle all the numbers that have 4 as a factor.

Scorer Comments:
A common incorrect response to this question was to circle the numbers 4 and 14. Responses with only one correct factor circled were scored “Incorrect.”

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

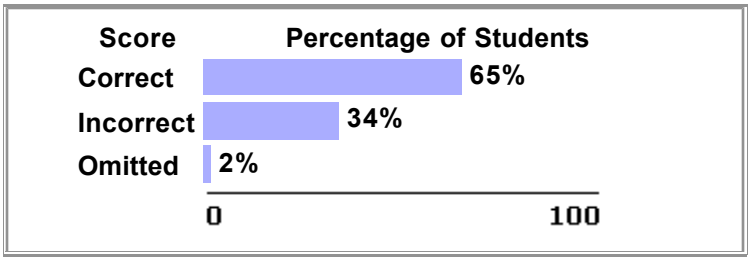
Question 10

Key

10. What three-dimensional shape could be made by folding the figure above on the dotted lines until the points on the triangles meet?

A) Triangle
B) Pyramid
C) Cube
D) Cone

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 11

Scoring Guide

Solution:

$4.95 + $2.45 = $7.40

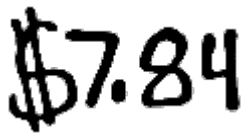
Tax amount $0.44

Total amount $7.40 + $.44 = $7.84

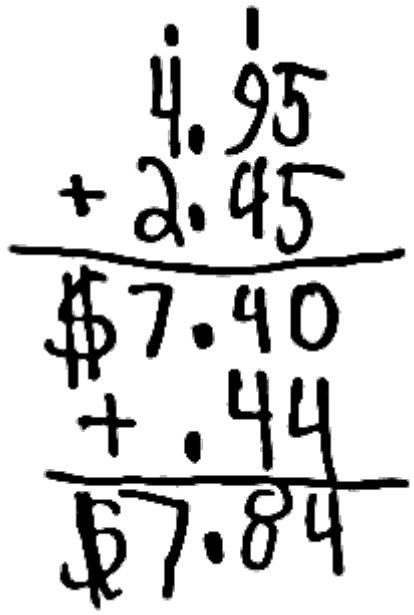
Score & Description
Correct $7.84 with correct work.
Partial 1 $7.84 with no correct work, partial correct work, or incomplete correct work.
Partial 2 An answer other than $7.84, but student has demonstrated a correct process (e.g., add the cost of the two items and then add the tax)
Incorrect Incorrect response

Correct - Student Response

11 Carlos bought the cereal and milk shown. Use the table to find out the total amount Carlos spent, including tax.
Total amount spent: _____



Show how you found your answer.



Scorer Comments:
This paper gave a correct response with complete work, first adding the prices of the cereal and milk, and then adding the appropriate amount of tax to find the total amount Carlos spent.

Partial 1 - Student Response

11 Carlos bought the cereal and milk shown. Use the table to find out the total amount Carlos spent, including tax.
Total amount spent: _____

$7.84

Show how you found your answer.

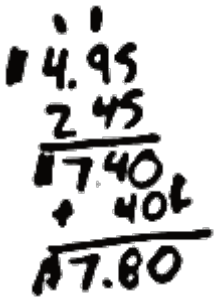
Scorer Comments:
This response gave the correct answer but did not show how the answer was found, earning partial credit.

Partial 2 - Student Response

11 Carlos bought the cereal and milk shown. Use the table to find out the total amount Carlos spent, including tax.
Total amount spent: _____

$7.80

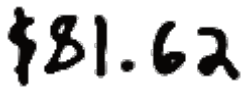
Show how you found your answer.



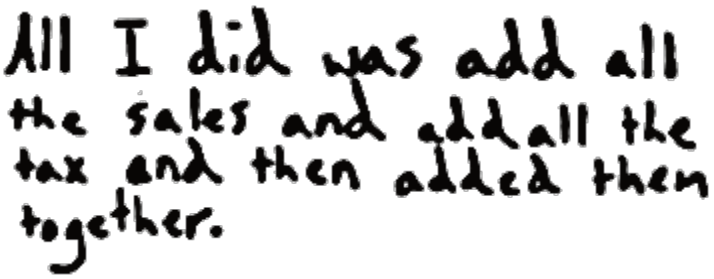
Scorer Comments:
This partially correct response showed a correct process (adding the cost of the milk and cereal and then adding the tax), but did not use the correct value of the tax from the table.

Incorrect - Student Response

11 Carlos bought the cereal and milk shown. Use the table to find out the total amount Carlos spent, including tax.
Total amount spent: _____



Show how you found your answer.



Scorer Comments:
This incorrect response added all of the amounts given in the table.

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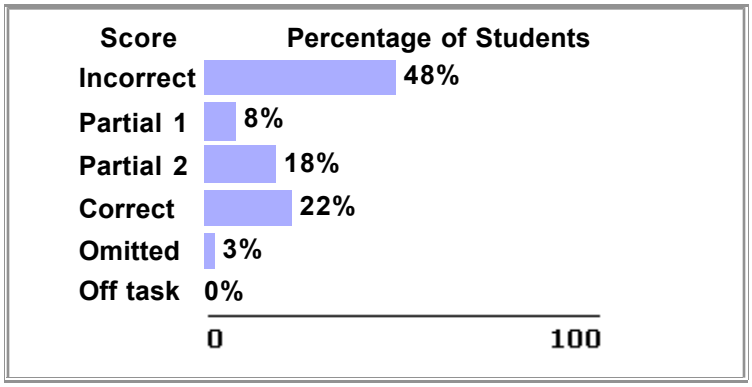


Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

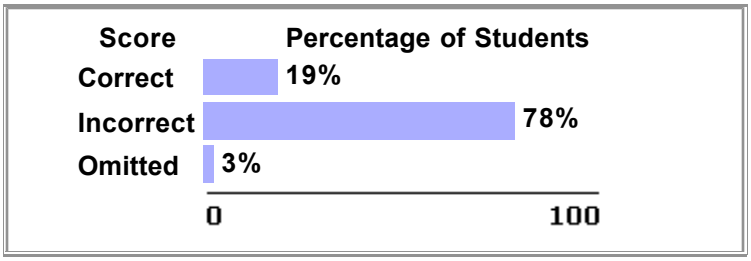
Question 12

Key

12. The table shows how the “In” numbers are related to the “Out” numbers. When 38 goes in, what number comes out?

A) 41
B) 51
C) 54
D) 77

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 13

Scoring Guide

Solution:
Area is 180 square feet; cost is $468.

Score & Description
Correct Both parts correct
Partial Has correct area but incorrect cost OR Has incorrect area or no area, but correct cost $468 OR Has incorrect area but cost correct for that area
Incorrect Incorrect response

Correct - Student Response

13 Mark's room is 12 feet wide and 15 feet long. Mark wants to cover the floor with carpet. How many square feet of carpet does he need?

Answer: _____ square feet

The carpet costs $2.60 per square foot. How much will the carpet cost?

Answer: $ _____

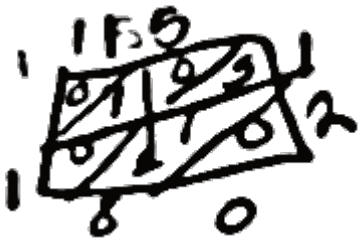
Scorer Comments:
This paper gave the correct responses of 180 square feet and $468.

Partial - Student Response

13 Mark's room is 12 feet wide and 15 feet long. Mark wants to cover the floor with carpet. How many square feet of carpet does he need?

Answer: _____ square feet

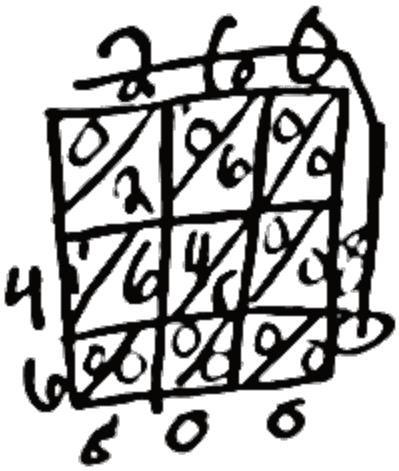
180



The carpet costs $2.60 per square foot. How much will the carpet cost?

Answer: $ _____

46800



Scorer Comments:
This partially correct response correctly found that the area of the carpet is 180 square feet, but omitted the decimal point in the cost of the carpet.

Incorrect - Student Response

13 Mark's room is 12 feet wide and 15 feet long. Mark wants to cover the floor with carpet. How many square feet of carpet does he need?

Answer: _____ square feet

27

The carpet costs $2.60 per square foot. How much will the carpet cost?

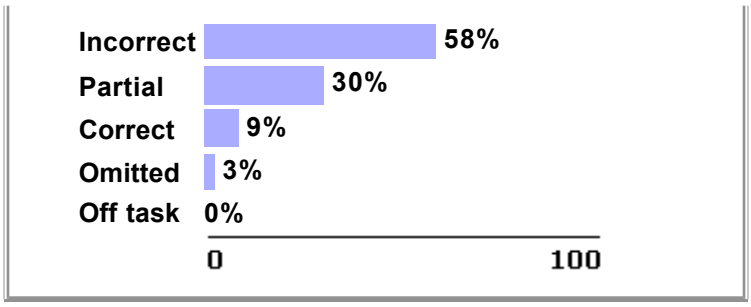
Answer: $ _____

$29.60

Scorer Comments:
This response added the dimensions of the room (instead of multiplying) to find the area. To find the cost of the carpet, the cost per square foot of carpet was added to the answer of 27 that was given for the first part of the question.

2007 National Performance Results

Score	Percentage of Students



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

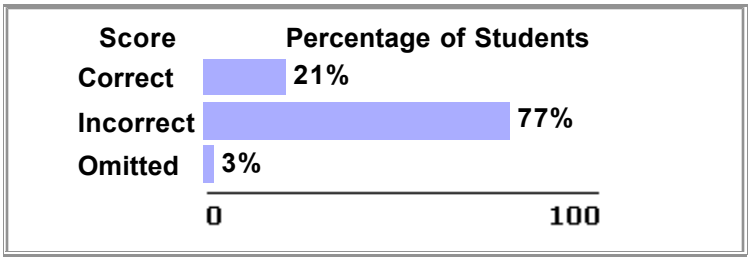
Question 14

Key

14. There will be 58 people at a breakfast and each person will eat 2 eggs. There are 12 eggs in each carton. How many cartons of eggs will be needed for the breakfast?

A) 9
B) 10
C) 72
D) 116

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

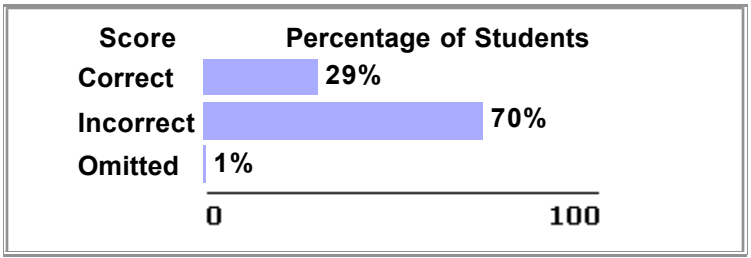
Question 15

Key

15. Ben bought 4 items at a bake sale and added their cost on his calculator. The total cost read 1.1 on the calculator. What amount does Ben need to pay?

A) 11 cents
B) 1 dollar and 1 cent
C) 1 dollar and 10 cents
D) 11 dollars

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 16

Scoring Guide

Solution:

Rico bought two $3.60 packages (6 postcards) and one $5.00 package (4 greeting cards)

$7.20 + $5.00 = $12.20

A package of postcards cost $1.20 per card and a package of greeting cards cost $1.25 per card, so the postcards are cheaper.

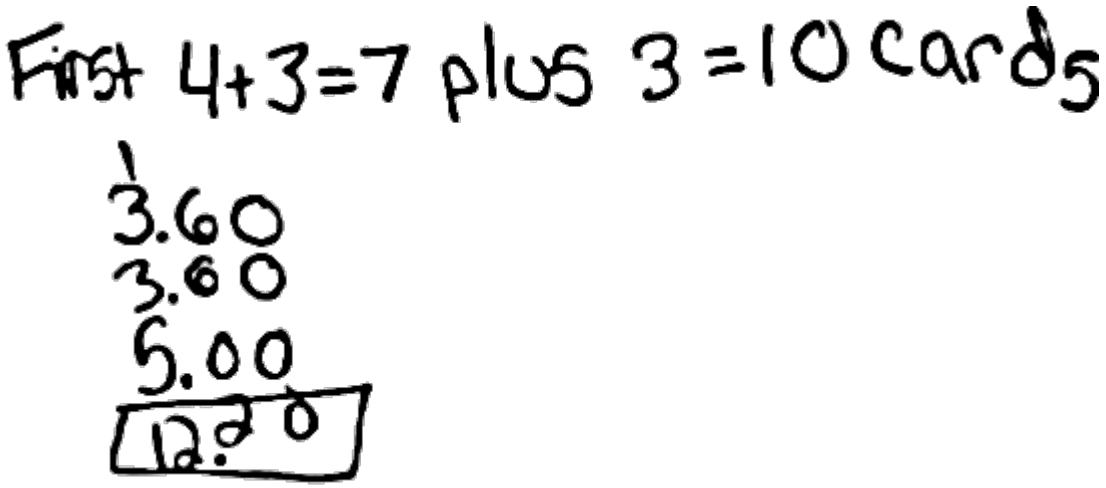
Score & Description
Extended Correct response
Satisfactory Has either first part or second part completely correct and some correct work for the other part.
Partial Either part is completely correct, but there is no correct work for the other part.
Minimal Neither part completely correct but some correct work
Incorrect Incorrect response

Extended - Student Response

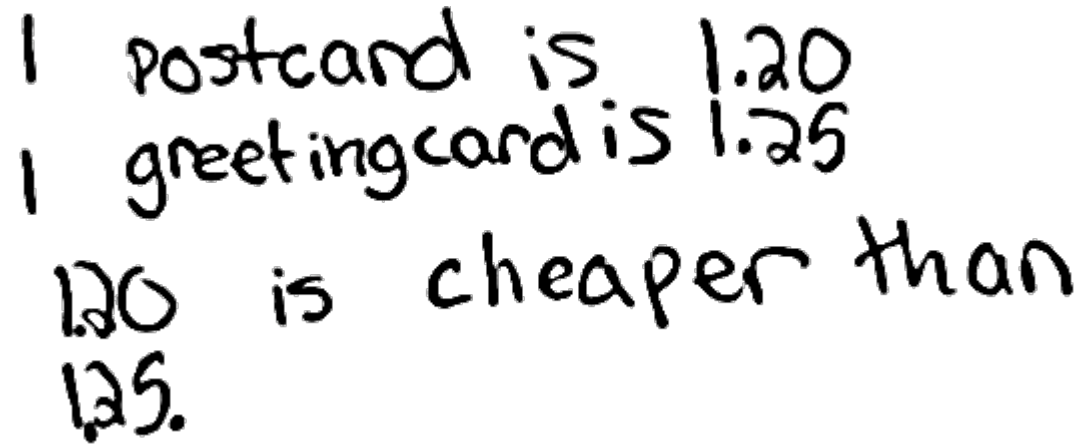
16 Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

_____ Packages of postcards
_____ Packages of greeting cards

Explain how you know your answer is correct.



Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.



Scorer Comments:

Full credit was awarded for both parts of this response. In the first part, this paper correctly identified the number of packages of postcards and greeting cards and showed that this answer supports the two given conditions:

- Rico bought 10 cards
- The cards cost $12.20

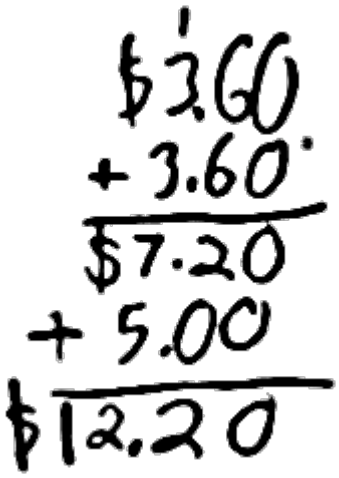
In the second part, this paper correctly computed the cost of one postcard and one greeting card, showing that Rico was correct.

Satisfactory - Student Response

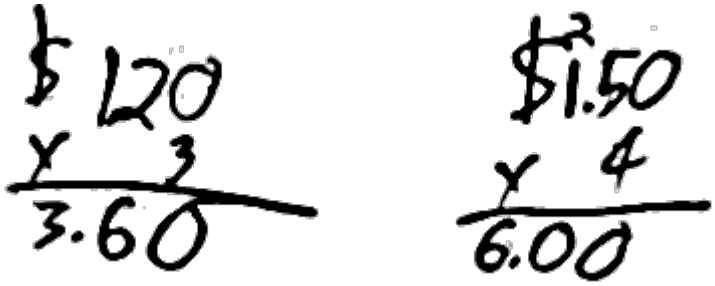
16 Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

_____ Packages of postcards
_____ Packages of greeting cards

Explain how you know your answer is correct.



Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.



Scorer Comments:

Full credit was awarded for the first part of this response; partial credit was awarded for the second part. In the first part, this paper correctly identified the number of packages of postcards and greeting cards and showed that this answer supports the two given conditions:

- Rico bought 10 cards
- The cards cost $12.20

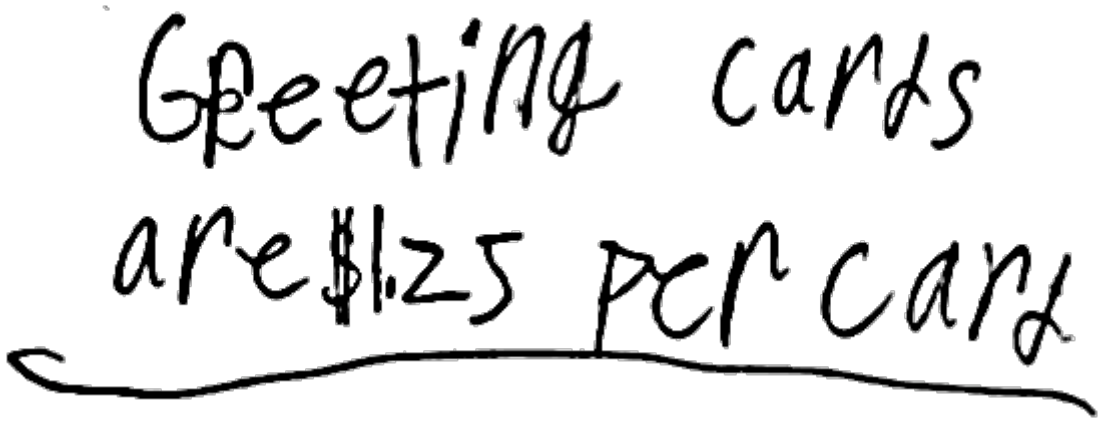
In the second part, this paper correctly computed the cost of one postcard, but incorrectly computed the cost of one greeting card.

Partial - Student Response

16 Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

_____ Packages of postcards
_____ Packages of greeting cards

Explain how you know your answer is correct.



Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.

Scorer Comments:
Full credit was awarded for the second part of this response. In the first part, the response of 3 packages of postcards and 4 packages of greeting cards received no credit. In the second part, this paper correctly computed the cost of one postcard and one greeting card, showing that Rico was correct.

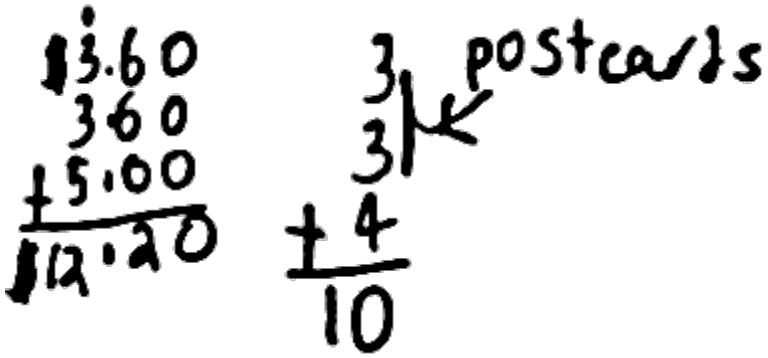
Minimal - Student Response

16 Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

_____ Packages of postcards
_____ Packages of greeting cards

2
4

Explain how you know your answer is correct.



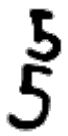
Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.

Scorer Comments:
Partial credit was awarded for the first part of this response. Although the number of packages of postcards and greeting cards was not recorded correctly, the explanation showed correct work No credit was awarded for the second part, which showed the difference between the cost of a package of greeting cards and a package of postcards.

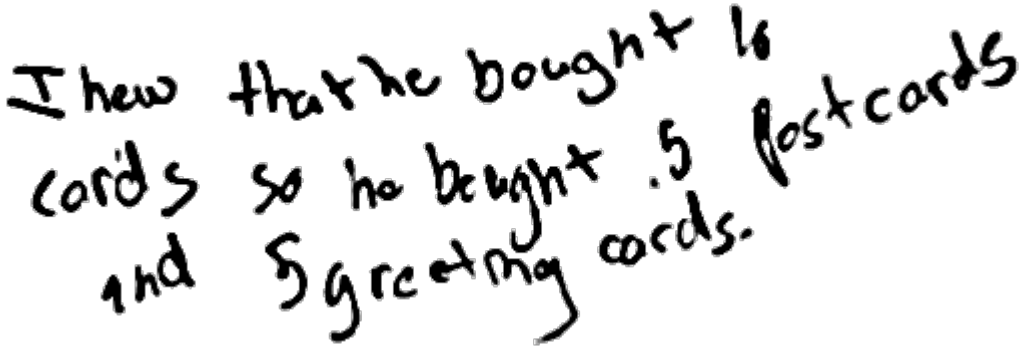
Incorrect - Student Response

16 Rico bought 10 cards, which cost $12.20 before tax. How many packages of each type did he buy?

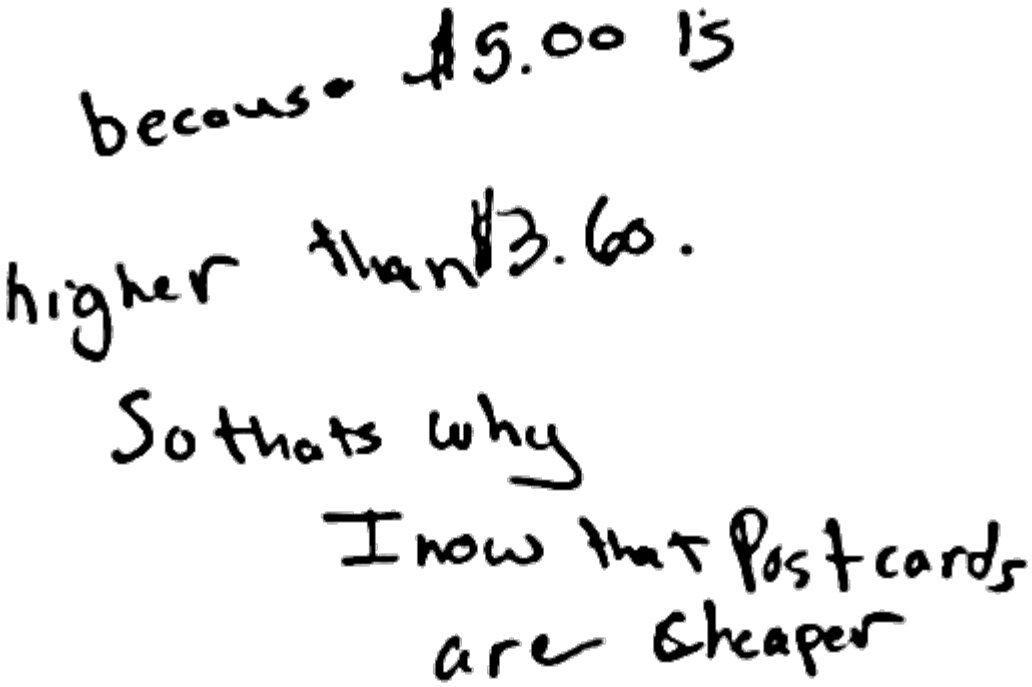
_____ Packages of postcards
_____ Packages of greeting cards



Explain how you know your answer is correct.

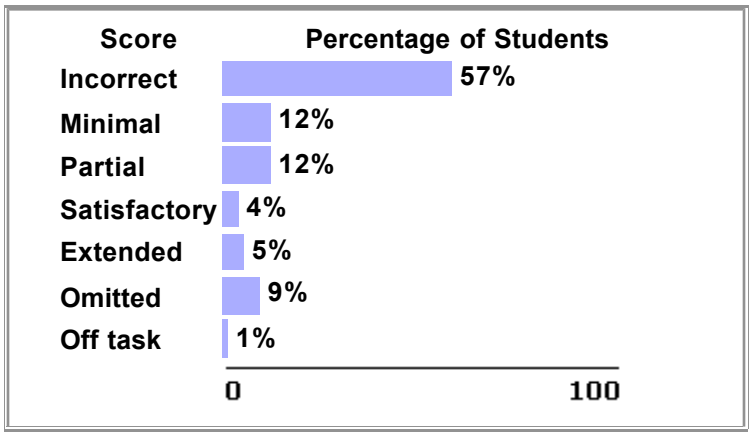


Rico said that one postcard is cheaper than one greeting card. Show that Rico is correct.



Scorer Comments:
No credit was awarded for either part of this response. A common incorrect response to the first part of the question was 5 of each type of card. A common incorrect response to the second part of the question was to compare the cost of one package of postcards to the cost of one package of greeting cards.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

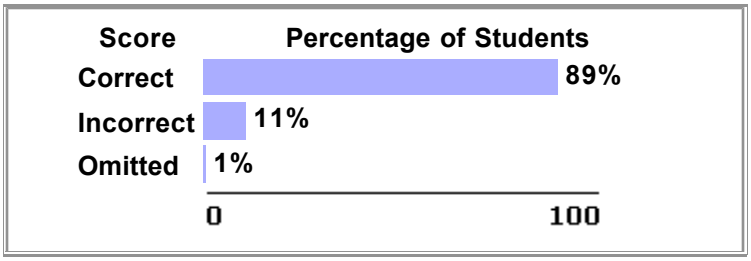
Question 17

Key

17. Which of the following could be the length of the pencil you use in school?

A) 6 feet
B) 6 pounds
C) 6 ounces
D) 6 inches

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

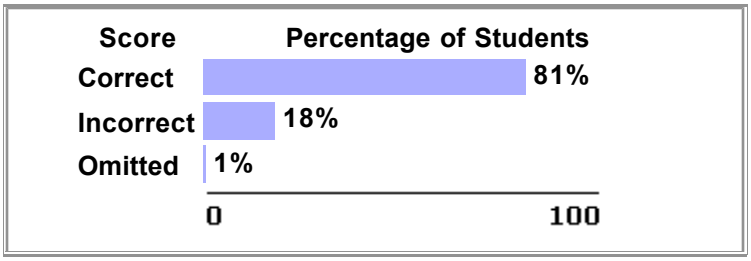
Question 18

Key

18. What number is 10 more than 5,237?

A) 5,238
B) 5,247
C) 5,337
D) 6,237

2007 National Performance Results

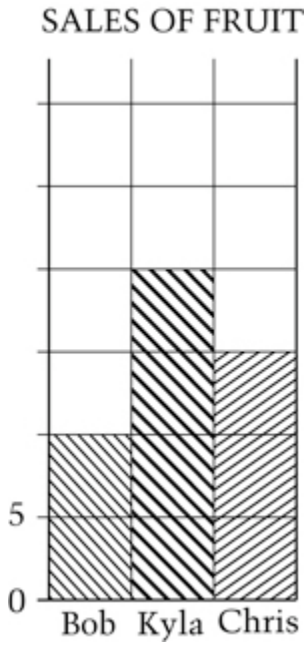


Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 19

Scoring Guide

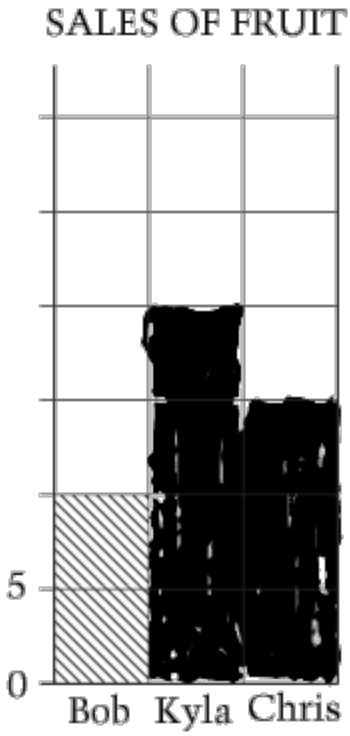
Solution:



Score & Description
Correct Correct response
Incorrect Incorrect response

Correct - Student Response

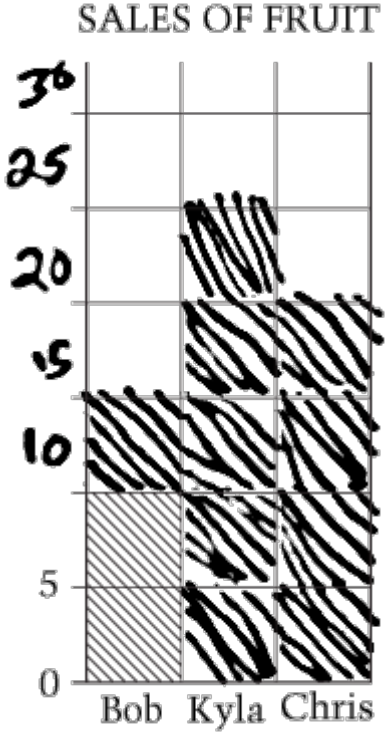
19 In the school sale Bob sold 10 boxes of fruit, Kyla sold 20 boxes, and Chris sold 15 boxes. Complete the bar graph below to show how many boxes each student sold.



Scorer Comments:
The bar graph in this response was completed correctly.

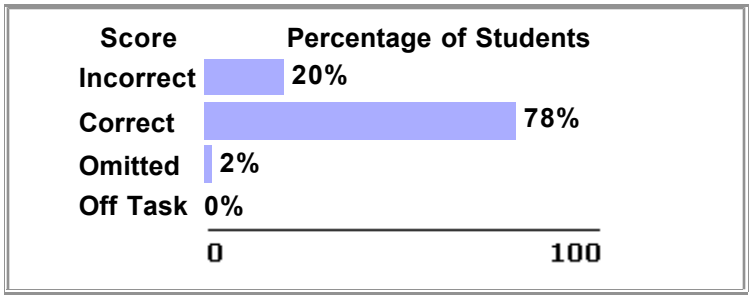
Incorrect - Student Response

19 In the school sale Bob sold 10 boxes of fruit, Kyla sold 20 boxes, and Chris sold 15 boxes. Complete the bar graph below to show how many boxes each student sold.



Scorer Comments:
This common incorrect response resulted from incorrectly interpreting the extended scale on the graph. Although it was not required to extend the scale, this was done on many responses.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 20

Key

20. What fraction of the group of umbrellas is closed?

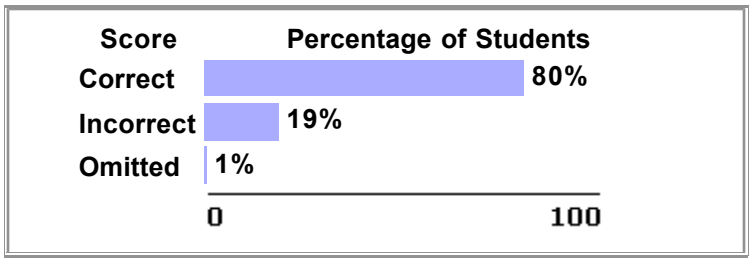
A) $\frac{1}{3}$

B) $\frac{3}{7}$

C) $\frac{4}{7}$

D) $\frac{3}{4}$

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

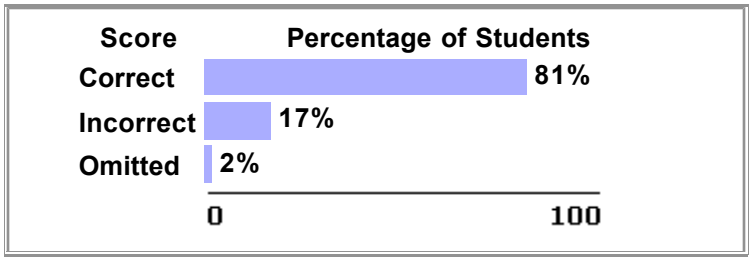
Question 21

Key

21. Paco had 32 trading cards. He gave *N* trading cards to his friend. Which expression tells how many trading cards Paco has now?

A) 32 + *N*
B) 32 - *N*
C) *N* - 32
D) 32 ÷ *N*

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 22

Scoring Guide

Solution:

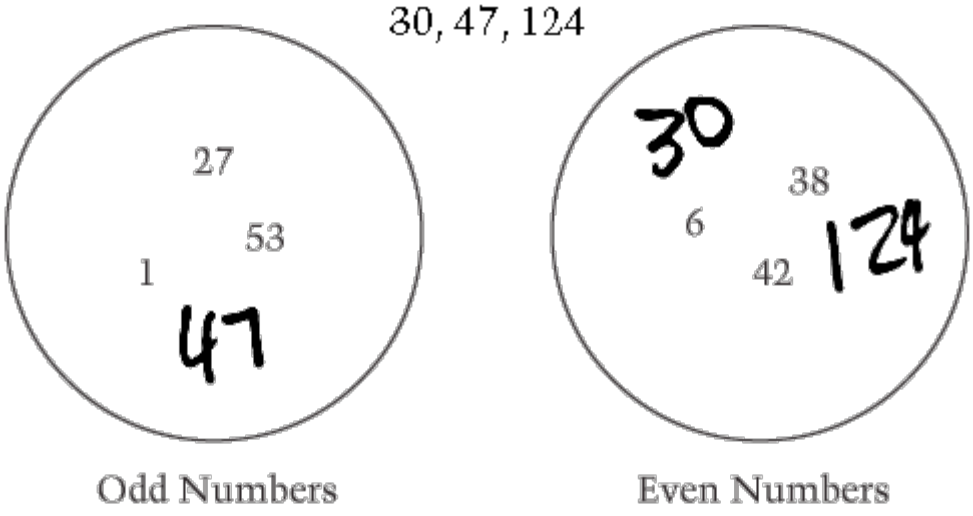
47 is an odd number.

30 and 124 are even numbers.

Score & Description
Correct Correct response
Partial Has 30 and 47 only correct OR Has 30 and 124 only correct OR Has 47 and 124 only correct
Incorrect Incorrect response

Correct - Student Response

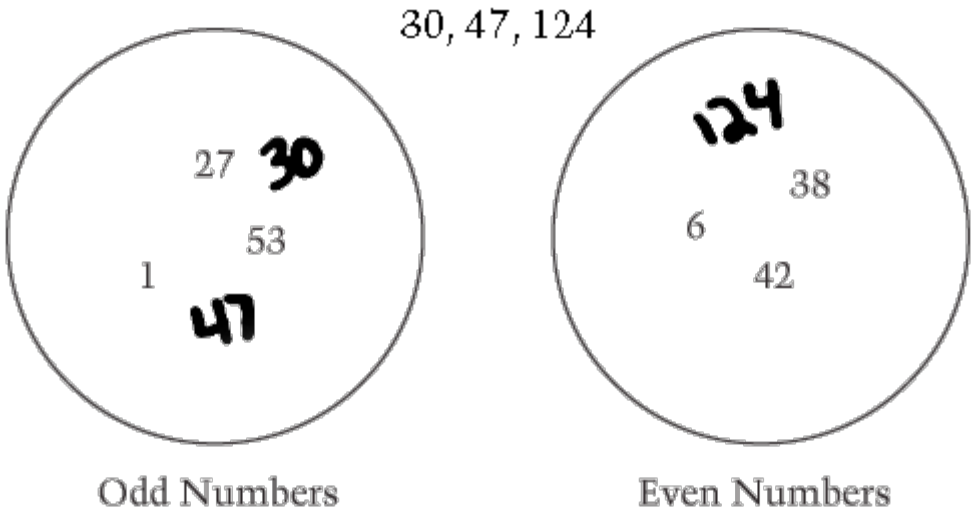
22 Write each of the following numbers in the circle where it belongs.



Scorer Comments:
This correct response placed the three numbers in the correct circles.

Partial - Student Response

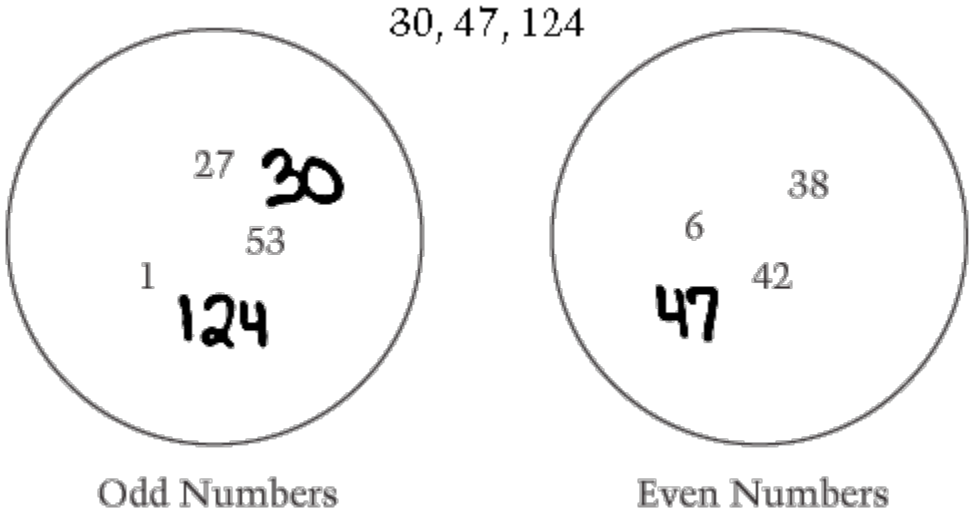
22 Write each of the following numbers in the circle where it belongs.



Scorer Comments:
This partially correct response correctly placed only 47 and 124 in the correct circles.

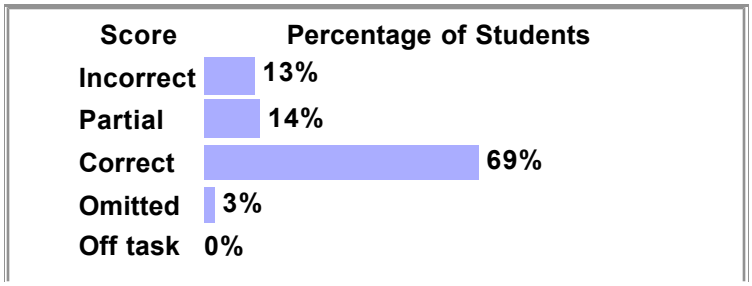
Incorrect - Student Response

22 Write each of the following numbers in the circle where it belongs.



Scorer Comments:
This incorrect response placed the even numbers 30 and 124 in the circle labeled “Odd Numbers” and placed the odd number 47 in the circle labeled “Even Numbers.”

2007 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

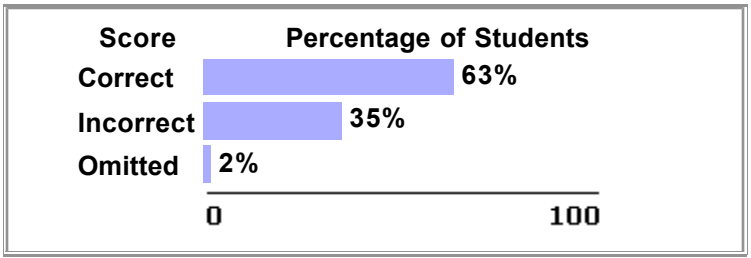
Question 23

Key

23. The speedometer shows how fast Dale is driving. If the speed limit is 55 miles per hour (mph), which of the following is true?

A) Dale is going about 5 mph over the speed limit.
B) Dale is going about 25 mph over the speed limit.
C) Dale is going about 5 mph under the speed limit.
D) Dale is going about 25 mph under the speed limit.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

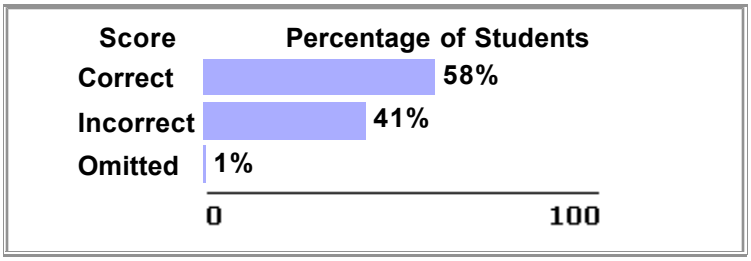
Question 24

Key

24. Tony has 2 quarters and 2 dimes. Marta has 1 quarter, 2 dimes, and 1 nickel. Which of the coins from Tony's bank would he need to give Marta so that they each have the same amount of money?

A) One dime
B) Two dimes
C) One quarter
D) One quarter and one dime

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 25

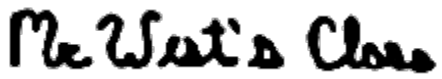
Scoring Guide

Solution:
Mr. West's class (or 25) – because there is an odd (uneven) number of students. Student could also draw appropriate picture to illustrate pairing.

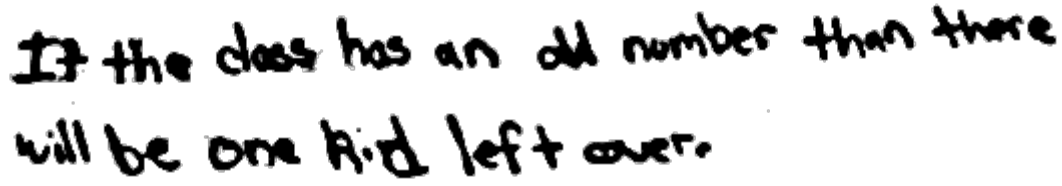
Score & Description
Correct Correct response
Partial Answers Mr. West's class (or 25) but does not give an explanation OR Gives correct explanation but does not answer Mr. West's class
Incorrect Incorrect response

Correct - Student Response

25 In each class listed above, the students are lining up with a partner to walk to lunch. Which class will have one child with no other child for a partner?
Answer: _____



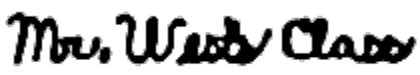
Explain your choice.



Scorer Comments:
This response correctly identified Mr. West's class and explained this was because there were an odd number of students.

Partial - Student Response

25 In each class listed above, the students are lining up with a partner to walk to lunch. Which class will have one child with no other child for a partner?
Answer: _____



Explain your choice.

Because Mr. West's class only has 25 Classmates.

Scorer Comments:
This partially correct response correctly identified Mr. West's class. However, the explanation was insufficient because it only restated the information given in the question and did not state or show that an odd number of students would have one student remaining when the students are paired with partners.

Incorrect - Student Response

25 In each class listed above, the students are lining up with a partner to walk to lunch. Which class will have one child with no other child for a partner?
Answer: _____

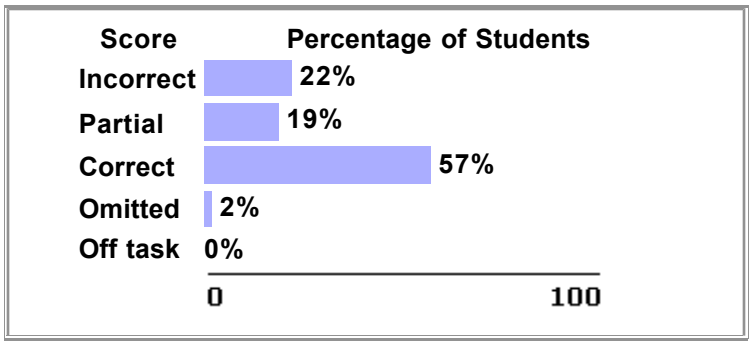
Ms. Changs class

Explain your choice.

Becuase 20 and 26 are even numbers and 28 is odd

Scorer Comments:
This response incorrectly identified Ms. Chang's class. Although the explanation shows an understanding that an odd number of students would have one student remaining when the students are paired with partners, this response incorrectly identified 28 as an odd number.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

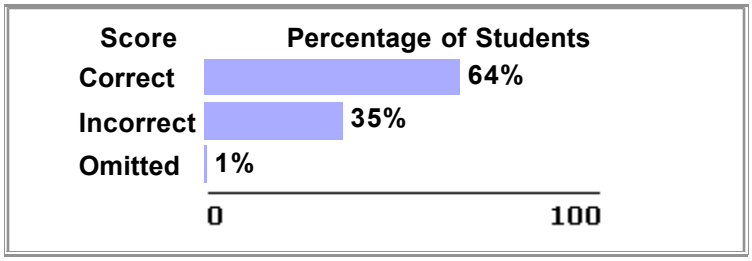
Question 26

Key

26. If the arrow is spun and stops in one of the 8 spaces, what is the probability that the arrow will stop in the space labeled 6?

A) 1 out of 6
B) 1 out of 8
C) 1 out of 10
D) 1 out of 60

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 27

Scoring Guide

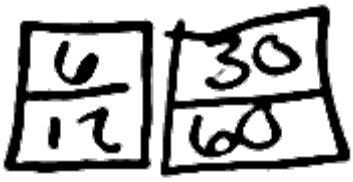
Solution:

Any 2 fractions equivalent to $\frac{1}{2}$ other than those given (e.g., $\frac{1}{2}$, $\frac{2}{4}$, $\frac{6}{12}$, etc.)

Score & Description
Correct Correct response
Partial Gives only one equivalent fraction, that is not the same as those given and has no incorrect fractions OR Gives 2 fractions equivalent to each other (but not equivalent to $\frac{1}{2}$) OR Gives two other fractions equivalent to $\frac{1}{2}$ given pictorially. (e.g., partial shading of a square).
Incorrect Incorrect response

Correct - Student Response

27 These three fractions are equivalent. Give <u>two</u> more fractions that are equivalent to these.



Scorer Comments:
This correct response gives two fraction that are equivalent to 1/2.

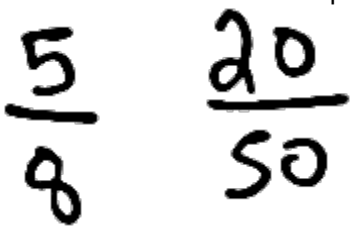
Partial - Student Response

27 These three fractions are equivalent. Give <u>two</u> more fractions that are equivalent to these.

Scorer Comments:
This response received partial credit for giving two equivalent fractions that are not equivalent to 1/2.

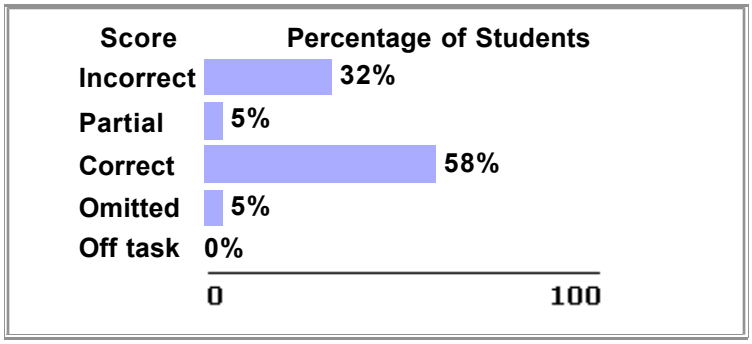
Incorrect - Student Response

27 These three fractions are equivalent. Give two more fractions that are equivalent to these.



Scorer Comments:
This response was incorrect, giving two fractions that are not equivalent to 1/2 or to each other.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

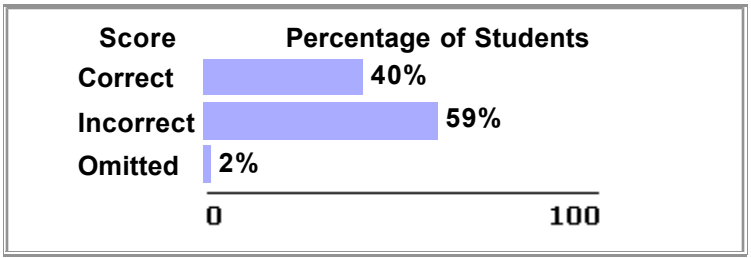
Question 28

Key

28. Which of these units would be the best to use to measure the length of a school building?

A) Millimeters
B) Centimeters
C) Meters
D) Kilometers

2007 National Performance Results



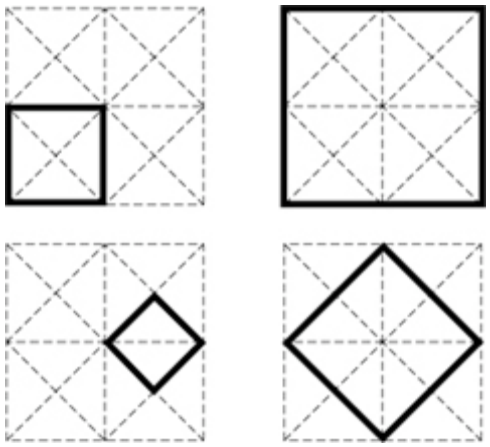
Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 29

Scoring Guide

Solution:

A different-sized square in each figure. It does not matter which figure has which size square. For example, any three of the following four sizes:

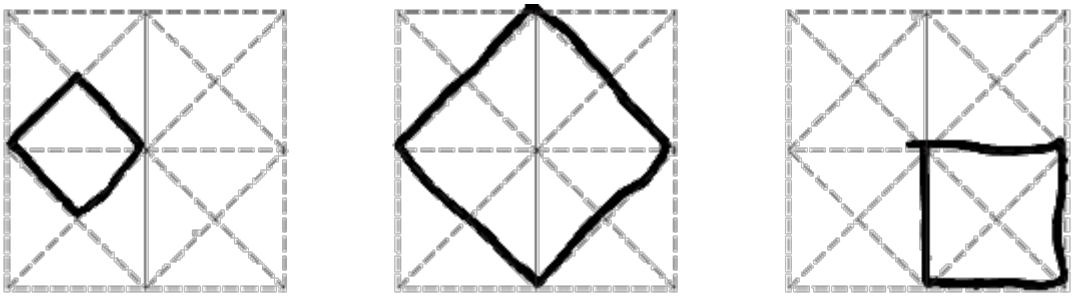


Note: A figure in which the interior is shaded should be counted as correct.

Score & Description
Correct Correct response
Incorrect 1 Only two correct squares drawn - other drawings may be repeats, missing, or incorrect.
Incorrect 2 Only one correct square drawn - other drawings may be repeats, missing or incorrect.
Incorrect 3 Any incorrect response other than those described above.

Correct - Student Response

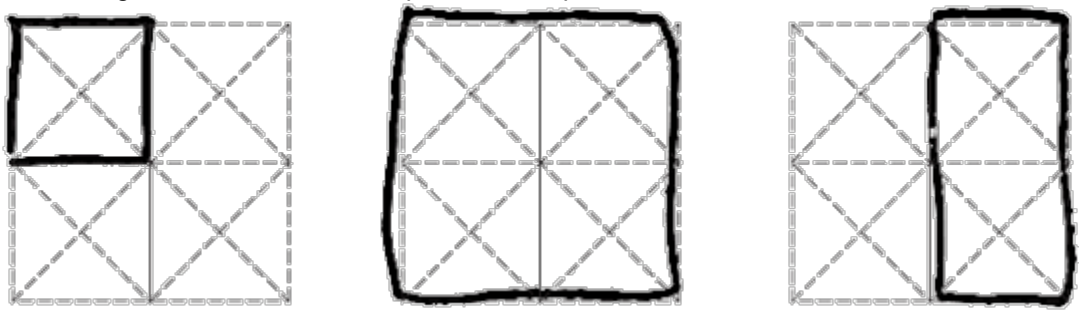
29 In each figure below, outline a square. The squares must not be the same size.



Scorer Comments:
This response correctly outlined three squares of different sizes.

Incorrect 1 - Student Response

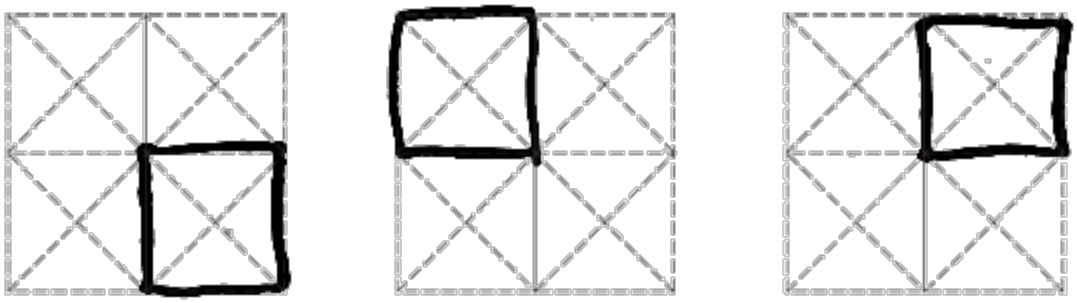
29 In each figure below, outline a square. The squares must not be the same size.



Scorer Comments:
This incorrect response correctly outlined two squares of different sizes, but the third outlined figure is a rectangle.

Incorrect 2 - Student Response

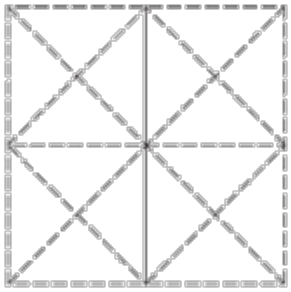
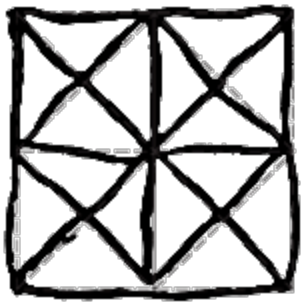
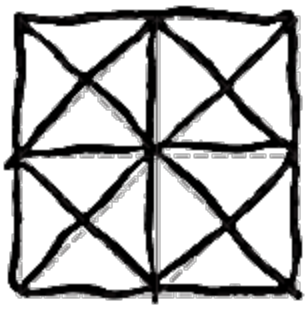
29 In each figure below, outline a square. The squares must not be the same size.



Scorer Comments:
This incorrect response correctly outlined only one square. The second and third squares are the same size as the first square.

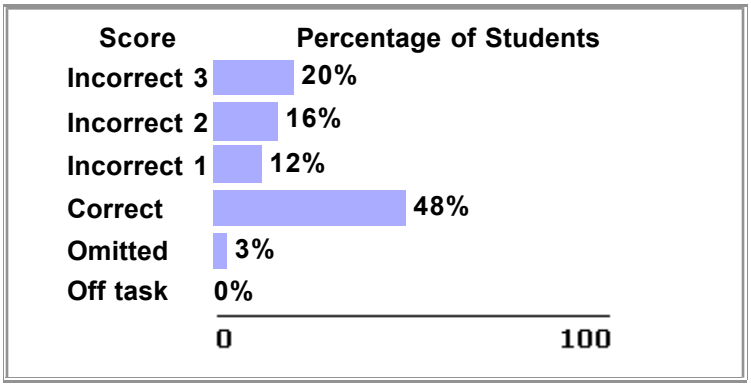
Incorrect 3 - Student Response

29 In each figure below, outline a square. The squares must not be the same size.

Scorer Comments:
A common incorrect response was to trace the entire outline on one or more of the figures.

2007 National Performance Results



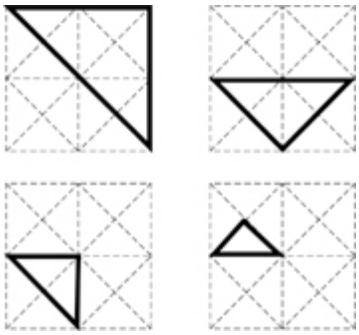
Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 30

Scoring Guide

Solution:

A different-sized triangle in each figure. It does not matter which figure has which size triangle. For example, any three of the following four sizes:

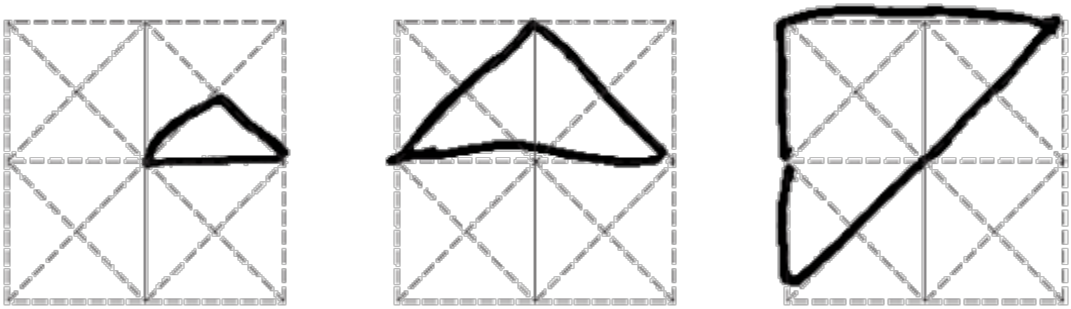


Note: A figure in which the interior is shaded should be counted as correct.

Score & Description
Correct Correct response
Incorrect 1 Only two correct triangles drawn - other drawings may be repeats, missing, or incorrect.
Incorrect 2 Only one correct triangle drawn - other drawings may be repeats, missing or incorrect.
Incorrect 3 Any incorrect response other than those described above.

Correct - Student Response

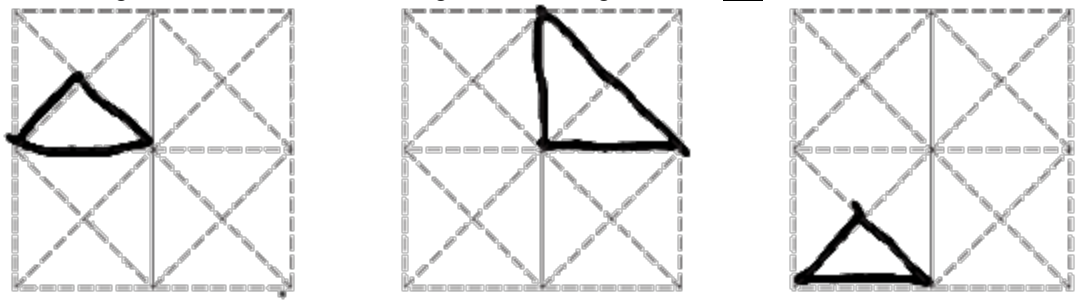
30 In each figure below, outline a triangle. The triangles must not be the same size.



Scorer Comments:
This response correctly outlined three triangles of different sizes.

Incorrect 1 - Student Response

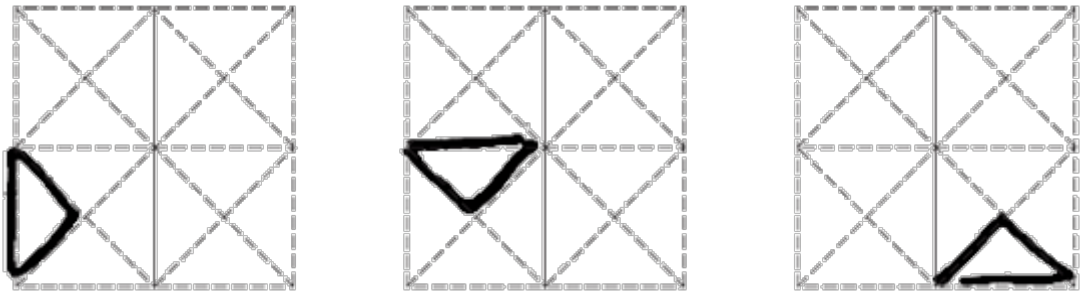
30 In each figure below, outline a triangle. The triangles must not be the same size.



Scorer Comments:
This incorrect response correctly outlined two triangles of different sizes, but the third triangle is the same size as the first triangle.

Incorrect 2 - Student Response

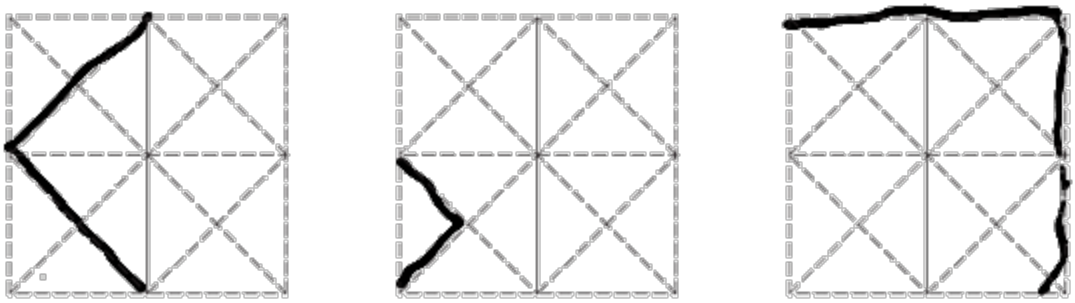
30 In each figure below, outline a triangle. The triangles must not be the same size.



Scorer Comments:
This incorrect response correctly outlined only one triangle. The second and third triangles are the same size as the first triangle.

Incorrect 3 - Student Response

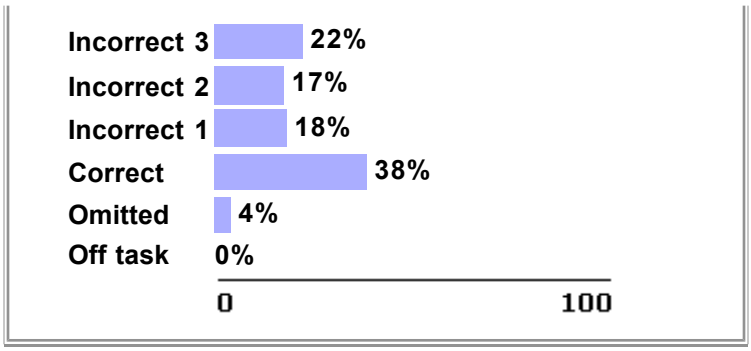
30 In each figure below, outline a triangle. The triangles must not be the same size.



Scorer Comments:
In this incorrect response, an attempt has been made to outline three triangles of different sizes. However, each of the triangles is incomplete, with only two sides drawn.

2007 National Performance Results

Score	Percentage of Students



Note:

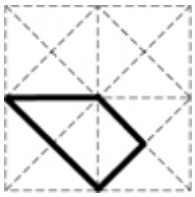
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 31

Scoring Guide

Solution:

Any four-sided shape EXCEPT a rectangle or a square. For example,

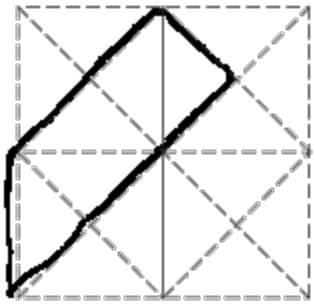


Note: A figure in which the interior is shaded should be counted as correct.

Score & Description
Correct Correct response
Incorrect 1 Figure is a rectangle or a square
Incorrect 2 Figure that is not four-sided

Correct - Student Response

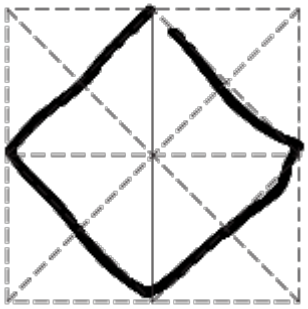
31 In the figure below, outline a four-sided shape that is not a rectangle (or a square).



Scorer Comments:
This response correctly outlined a four-sided figure.

Incorrect 1 - Student Response

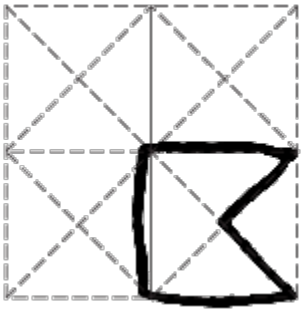
31 In the figure below, outline a four-sided shape that is not a rectangle (or a square).



Scorer Comments:
This incorrect response outlined a square.

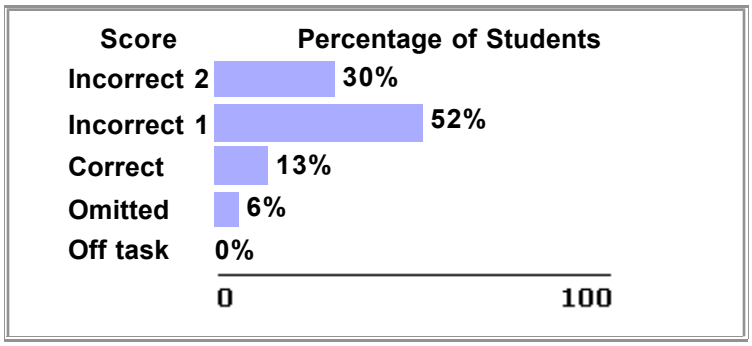
Incorrect 2 - Student Response

31 In the figure below, outline a four-sided shape that is <u>not</u> a rectangle (or a square).



Scorer Comments:
This incorrect response outlined a five-sided figure.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 32

Scoring Guide

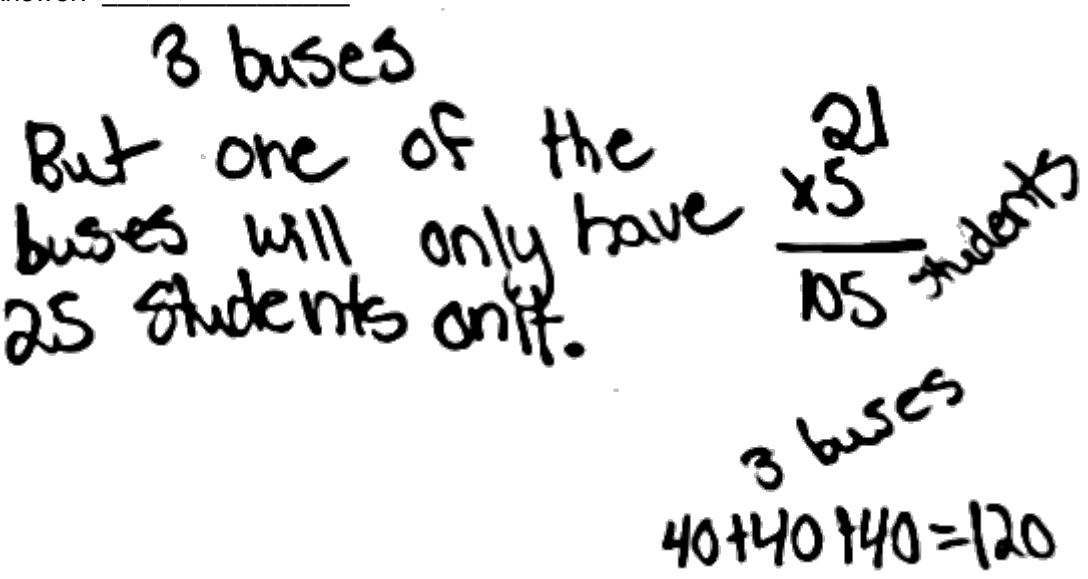
Solution:
3

Score & Description
Correct Correct response
Incorrect 1 2
Incorrect 2 Any other incorrect response

Correct - Student Response

32 Five classes are going on a bus trip and each class has 21 students. If each bus holds only 40 students, how many buses are needed for the trip?

Answer: _____

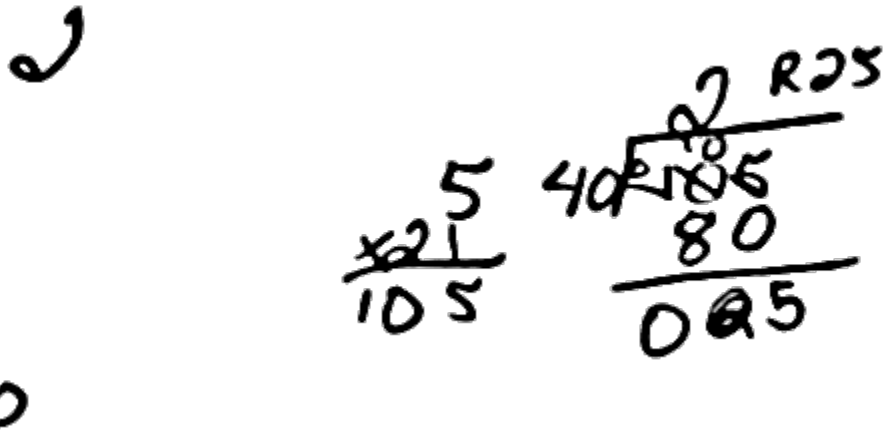


Scorer Comments:
This response correctly answered that 3 buses were needed and gave a full explanation, although no explanation was required for this question.

Incorrect 1 - Student Response

32 Five classes are going on a bus trip and each class has 21 students. If each bus holds only 40 students, how many buses are needed for the trip?

Answer: _____



Scorer Comments:
This response incorrectly answered that 2 buses were needed. This is a common misunderstanding of the role of the remainder in division problems in context. In this problem, two buses will be full and there will be 25 students left. These students will ride on a third bus.

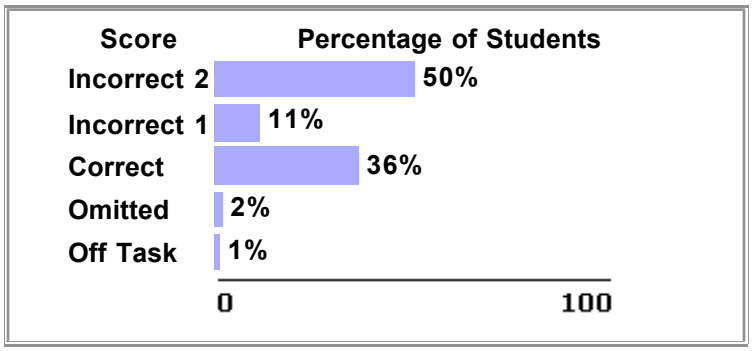
Incorrect 2 - Student Response

32 Five classes are going on a bus trip and each class has 21 students. If each bus holds only 40 students, how many buses are needed for the trip?

Answer: _____

Scorer Comments:
This incorrect response gave the total number of students instead of the number of buses that will be needed for the trip.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.

- Percentages may not add to 100 due to rounding.

Question 33

Key

33. In the pattern shown above, which of the following would go into the blank space?

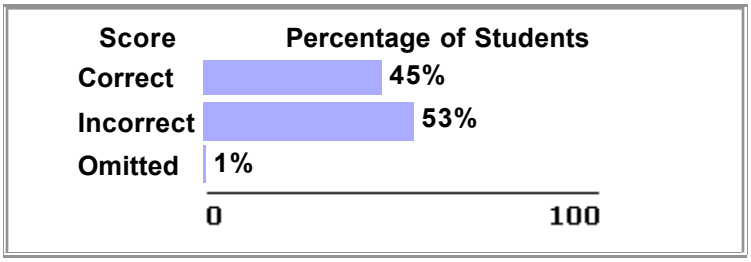
A) ◯

B) □

C) ○

D) △

2007 National Performance Results



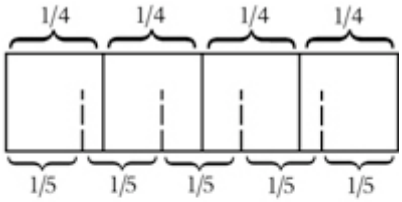
Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 34

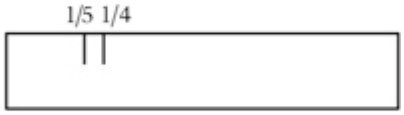
Scoring Guide

Solution:

A verbal explanation, such as: The more parts you divide something into, the smaller each part has to be.



OR



OR

Note: The divisions of the figures should approximate $\frac{1}{4}$ and $\frac{1}{5}$

Score & Description
Correct An adequate explanation or drawing is given
Incorrect Any incorrect explanation

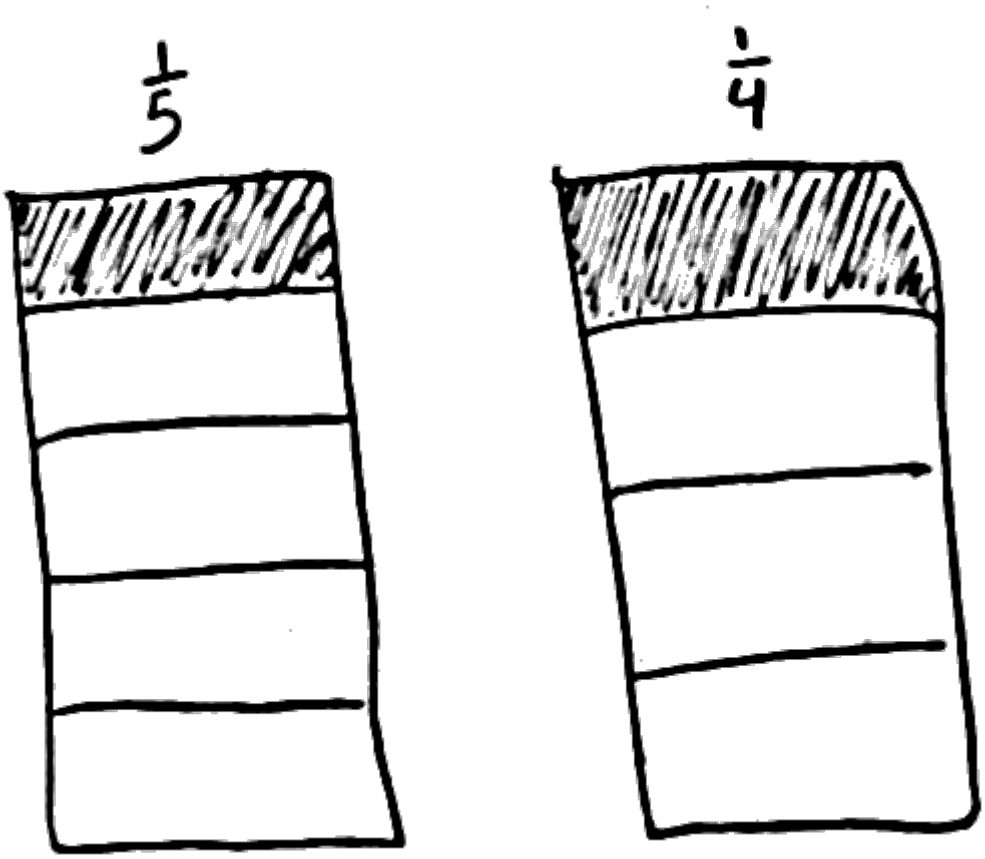
Correct - Student Response

34 Mark says $\frac{1}{4}$ of his candy bar is smaller than $\frac{1}{5}$ of the same candy bar.

Is Mark right? ○ Yes ○ No

○ Yes ● No

Draw a picture or use words to explain why you think Mark is right or wrong.



Scorer Comments:
A common correct response to this question was to draw two candy bars of equal size, one divided into fourths and the other divided into fifths, to show that 1/4 is larger than 1/5.

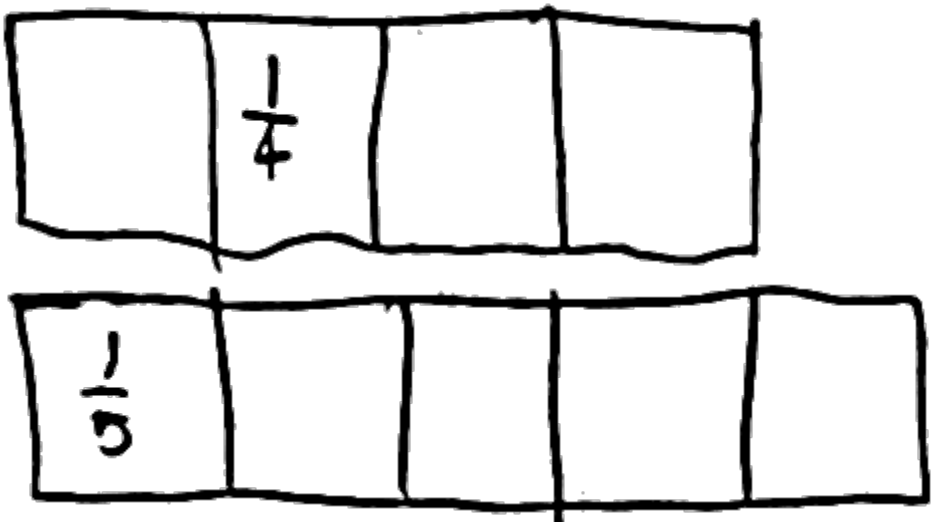
Incorrect - Student Response

34 Mark says $\frac{1}{4}$ of his candy bar is smaller than $\frac{1}{5}$ of the same candy bar.

Is Mark right? ⬭ Yes ⬭ No

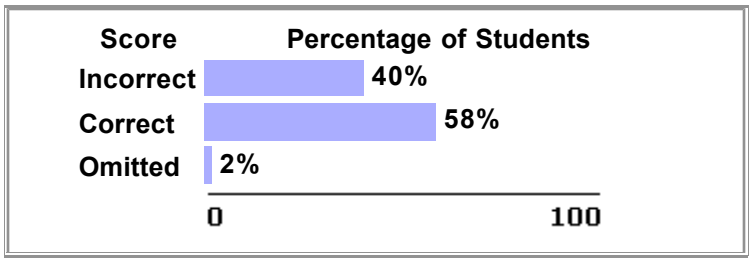
● Yes ⬭ No

Draw a picture or use words to explain why you think Mark is right or wrong.



Scorer Comments:
This response incorrectly drew the whole candy bars, showing each part, whether it represented 1/4 or 1/5, as the same size.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

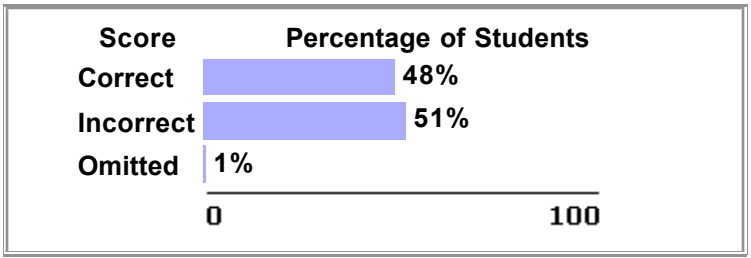
Question 35

Key

35. If the area of the shaded triangle is 4 square inches, what is the area of the entire square?

A) 2 square inches
B) 4 square inches
C) 8 square inches
D) 16 square inches

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 36

Scoring Guide

Solution:

Spinner labeled correctly (6 blues and 3 reds) and numbers on lines correct, and an explanation like one of these:

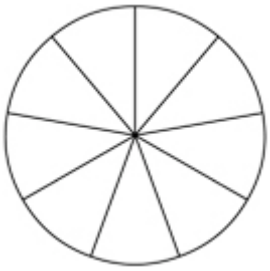
- I decided that if it has to be twice the chance of landing on blue, I had to put 2 blues in between every red. Then you would have 2 times the chance of landing on blue.
- There are 9 spaces and $\frac{2}{3}$ has to be blue so it's 6 and the others had to be 3 because 9 - 6 = 3.
- I found my answer because there are 9 equal shares. I divided by 3 and I got 3 so 3 reds x 2 = 6 blues.

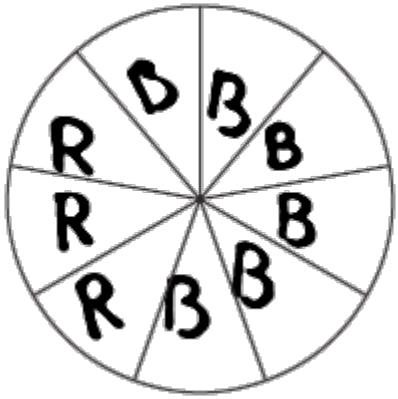
Score & Description
Extended Explanation is clear and complete and spinner is labeled.
Satisfactory Correctly labels spinner and has 6 blues and 3 reds, but explanation incomplete OR Has correct and complete explanation with 6 blues and 3 reds but spinner is not labeled or numbers on lines are missing or incorrect.
Partial Correctly labels spinner and/or has 6 blues and 3 reds on answer line but has no explanation or incorrect explanation OR Has correct and complete explanation but does not have 6 blues and 3 reds on lines or spinner
Minimal Indicates on spinner and/or answer lines more sections blue than red (but not 6B, 3R) and has an explanation that is related to chance. OR Indicates 6R, 3B and has an explanation that is related to chance. OR Explains process (RRB) and this process is confirmed by spinner (arrangement RRB in spinner)
Incorrect Incorrect response

Extended - Student Response

36 Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

Show how he could label his spinner.





Number of blues: _____

6

Number of reds: _____

3

Explain how you found your answer.

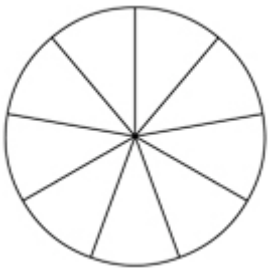
Well first I counted the spaces and got 9. Then I used $\frac{3}{\times 2}$ and got six. 6 is twice the number of 3, and $\frac{6}{9}$.

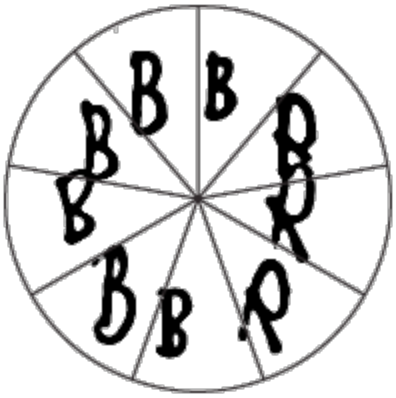
Scorer Comments:
This response correctly labeled the spinner and indicated that there would be 6 blues and 3 reds. The explanation was correct and complete, showing how the answer was obtained and verifying that there were a total of 9 spaces on the spinner with twice as many blues as red.

Satisfactory - Student Response

36 Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

Show how he could label his spinner.





Number of blues: _____

6

Number of reds: _____

3

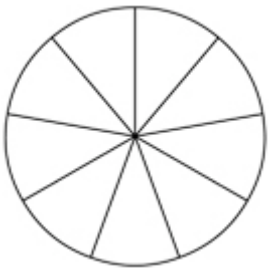
Explain how you found your answer.

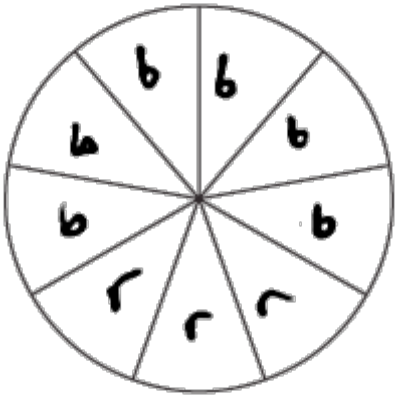
Scorer Comments:
This response correctly labeled the spinner and indicated that there would be 6 blues and 3 reds, but the explanation was incomplete.

Partial - Student Response

36 Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

Show how he could label his spinner.





Number of blues: _____

6

Number of reds: _____

3

Explain how you found your answer.

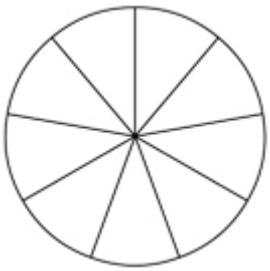
Because I just put 2 more blues than red.

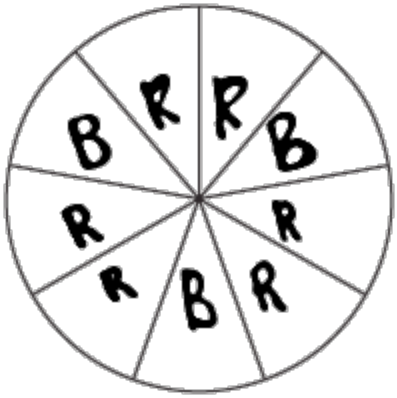
Scorer Comments:
This response correctly labeled the spinner and indicated that there would be 6 blues and 3 reds. The incorrect explanation was based on the misconception that “twice as many blues as reds” means “two more blues than reds.”

Minimal - Student Response

36 Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

Show how he could label his spinner.





Number of blues: _____

3

Number of reds: _____

6

Explain how you found your answer.

I used a pattern

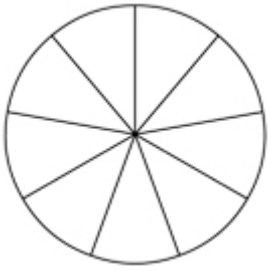
r, r, b, r, r, b...

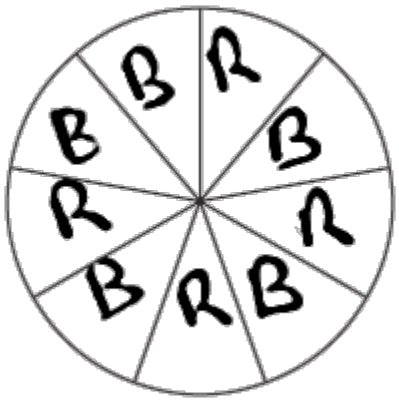
Scorer Comments:
This response incorrectly interpreted the statement that “the chance of landing on blue will be twice the chance of landing on red” as R, R, B, R, R, B, R, R, B. (2 reds for every blue) This was an acceptable method for solving this problem, but the correct pattern is B, B, R, B, B, R, B, B, R (2 blues for every red).

Incorrect - Student Response

36 Luis wants to make a game spinner in which the chance of landing on blue will be twice the chance of landing on red. He is going to label each section either red (R) or blue (B).

Show how he could label his spinner.





Number of blues: _____

5

Number of reds: _____

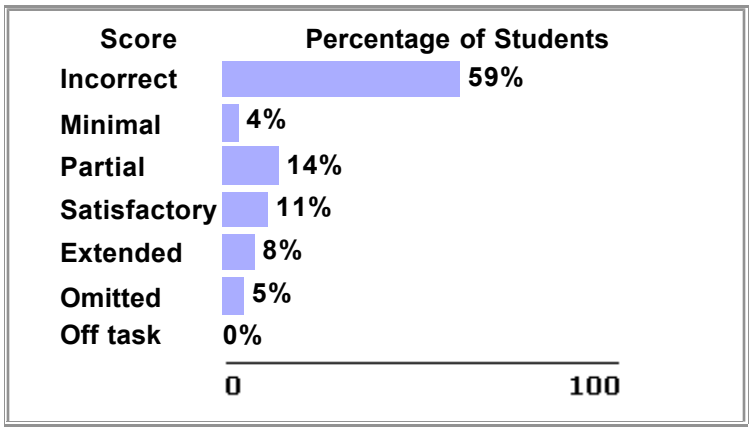
4

Explain how you found your answer.

Hey is 9 parts
So I started to put B first
then I put R.

Scorer Comments:
This response labeled the spinner with an alternating pattern of red and blue spaces on the spinner, but it showed no attempt to account for the given condition that there were twice as many chances of landing on blue as landing on red.

2007 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

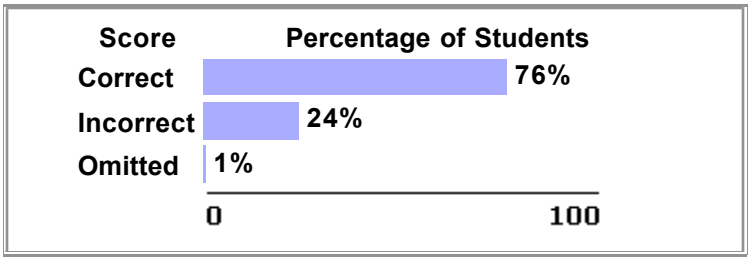
Question 37

Key

37. What is being measured?

A) The amount of water in the cup
B) The height of the water in the cup
C) The weight of the cup of water
D) The temperature of the water

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 38

Key

38. Based on the key above, which of these equals 352?

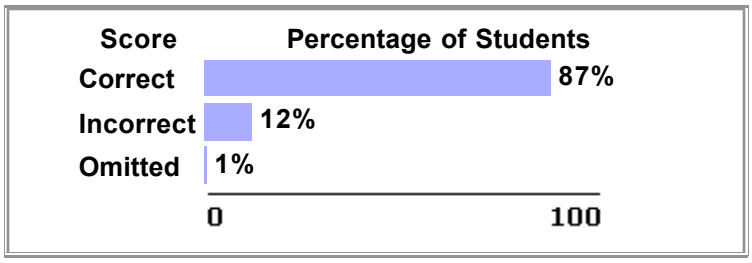
A) ● ● ● △ △ △ △ △ ☆ ☆

B) ● ● ● ☆ ☆ ☆ ☆ ☆ △ △

C) ☆ ☆ ☆ △ △ △ △ △ ● ●

D) △ △ △ ● ● ● ● ● ☆ ☆

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

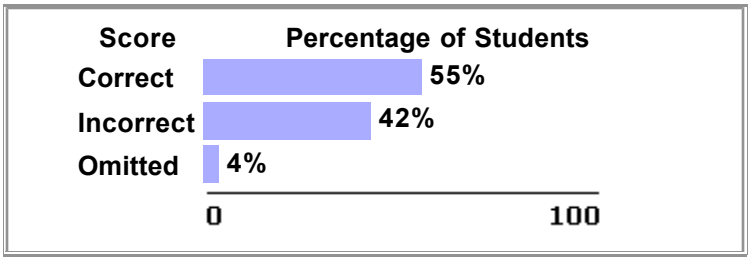
Question 39

Key

39. The numbers in the pattern above are increasing by 12. Which of these numbers is part of the pattern?

A) 52
B) 58
C) 60
D) 62

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 40

Scoring Guide

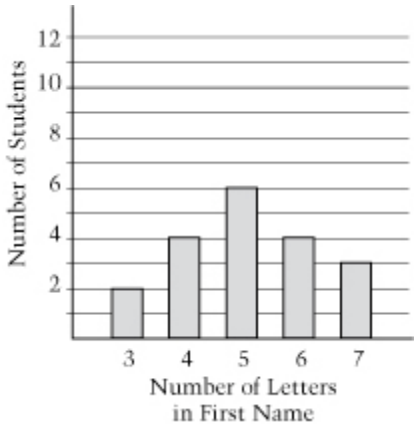
Solution:

Extends the bar labeled 6 up to 5

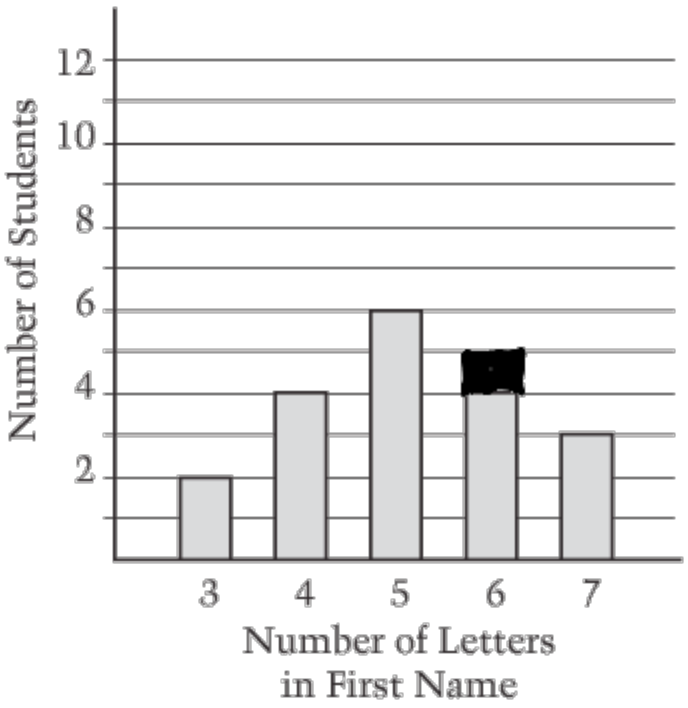
Score & Description
Correct Correct response
Incorrect Incorrect response

Correct - Student Response

40 The students in a class each counted the number of letters in their first names. The class made the graph below of the results.



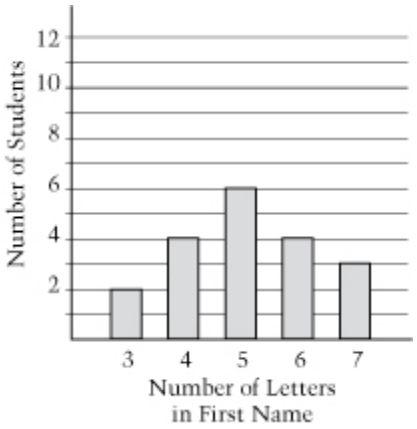
A new student, Victor, joined the class. Draw on the graph to include the data for Victor.



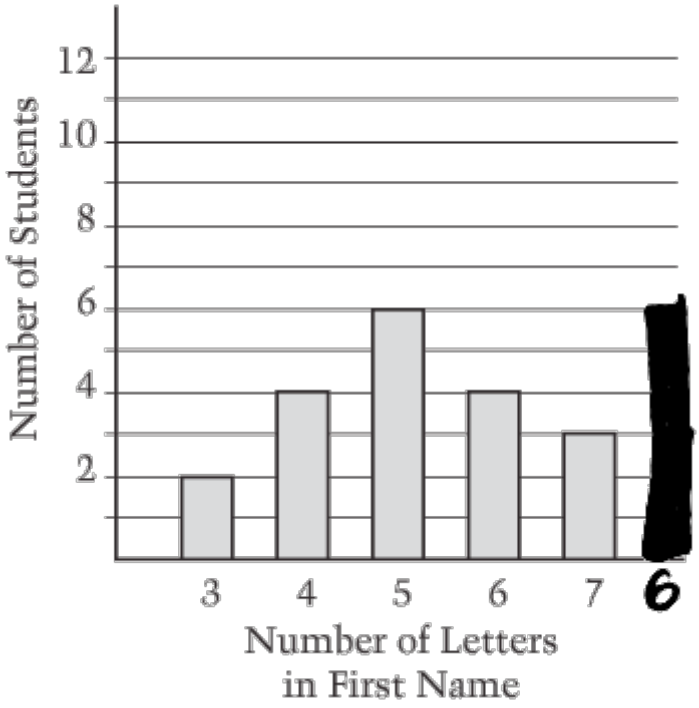
Scorer Comments:
This response correctly extended the bar representing 6-letter names from 4 to 5.

Incorrect - Student Response

40 The students in a class each counted the number of letters in their first names. The class made the graph below of the results.

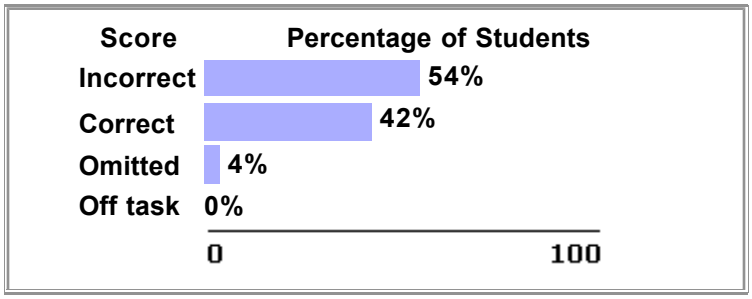


A new student, Victor, joined the class. Draw on the graph to include the data for Victor.



Scorer Comments:
A common incorrect response to this problem was to add a new bar to the graph that was labeled “6” and extended to the line for 6 students.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

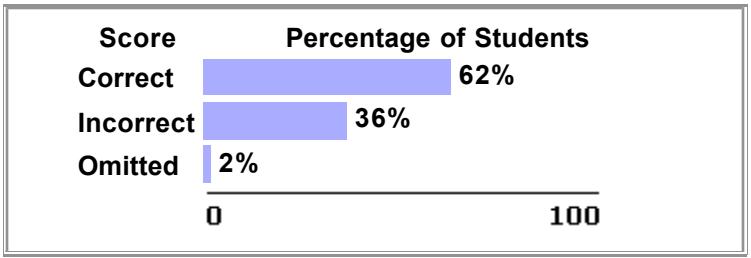
Question 41

Key

41. By how much will the value of the number 4,372 increase if the 3 is replaced with a 9 ?

A) 6
B) 60
C) 600
D) 6,000

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

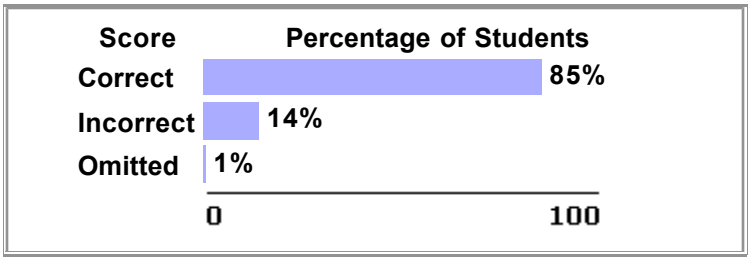
Question 42

Key

42. The pictograph shows how all the 4th graders at Smith School get to school. According to the pictograph, how many 4th graders attend Smith School?

A) 95
B) 100
C) 105
D) 110

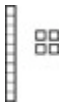
2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

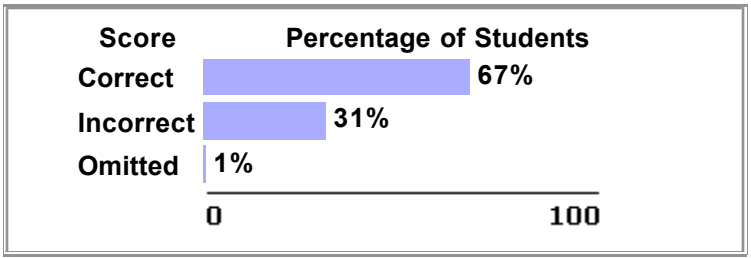
Question 43

Key

43. The figure above represents 237. Which number is  more than 237?

A) 244
B) 249
C) 251
D) 377

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 44

Key

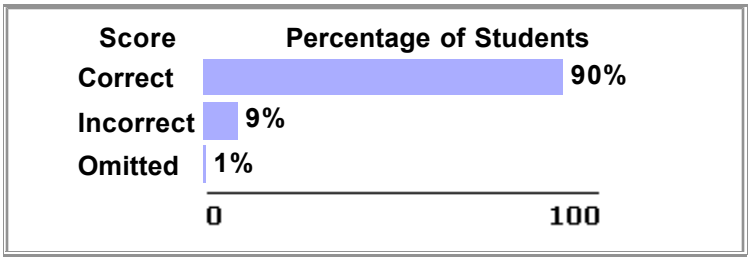
44. Melissa chose one of the figures above.

- The figure she chose was shaded.
- the figure she chose was not a triangle.

Which figure did she choose?

A) A
B) B
C) C
D) D

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

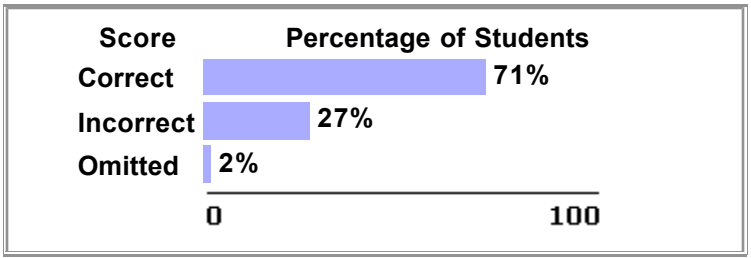
Question 45

Key

45. Which of these would be easiest to solve by using mental math?

A) $65.12 - $28.19
B) 358 x 2
C) 1,625 ÷ 3
D) $100.00 + $10.00

2007 National Performance Results

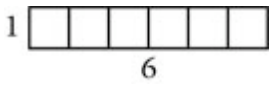


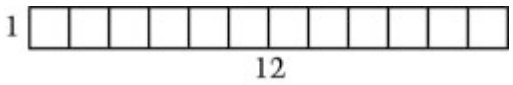
Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

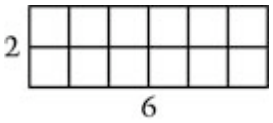
Question 46

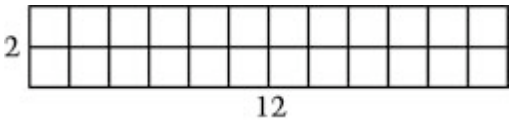
Key

46. Which rectangle below has the same perimeter (distance around) as the rectangle above?

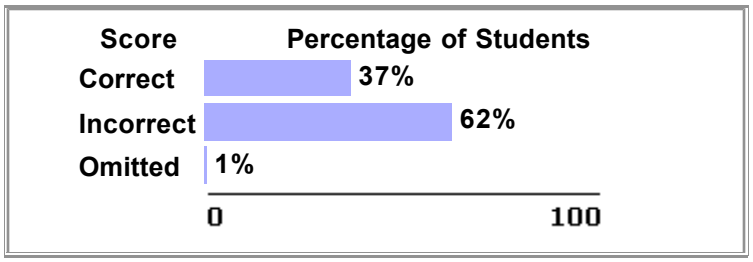
A) 

B) 

C) 

D) 

2007 National Performance Results



Note:
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- Percentages may not add to 100 due to rounding.

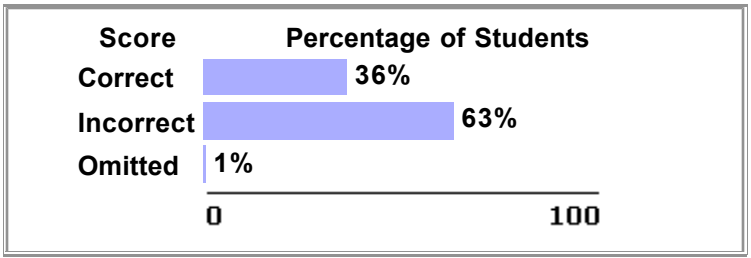
Question 47

Key

47. The Ben Franklin Bridge was 75 years old in 2001. In what year was the bridge 50 years old?

A) 1951
B) 1976
C) 1984
D) 1986

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

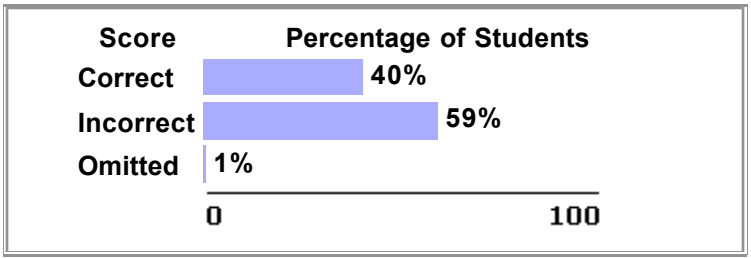
Question 48

Key

48. The picture shows Rachel's path to school. How many right angle turns does Rachel make to get to school?

A) Two
B) Three
C) Five
D) Seven

2007 National Performance Results



Note:
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- Percentages may not add to 100 due to rounding.

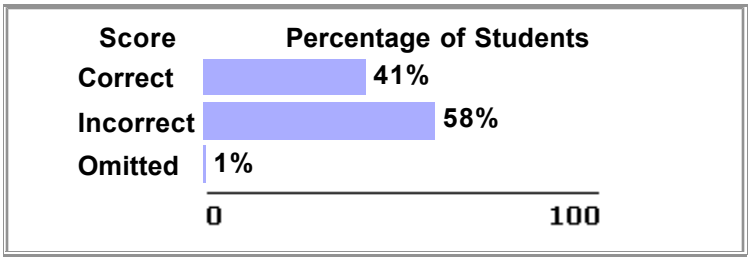
Question 49

Key

49. Which number is forty-five and six hundredths?

A) 45.6
B) 45.06
C) 456.0
D) 645.0

2007 National Performance Results



Note:
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- Percentages may not add to 100 due to rounding.

Question 50

Scoring Guide

Solution:

The sides are all equal. To find the perimeter add up all 8 sides or multiply 8 by 10 (or 10 by 8)

OR

Ryan pluses all sides together.

Perimeter: 80

Score & Description
Correct Correct response
Partial Gives a correct explanation but does not have the perimeter or has the wrong perimeter OR Gives the correct perimeter but explanation is missing or incorrect
Incorrect Incorrect response

Correct - Student Response

50 A stop sign has 8 sides of equal length. Ryan knows that the length of each side is 10 inches.

Explain how Ryan can find the perimeter (distance around) of the sign.

Ryan can multiply 8 x 10 to find the perimeter because there are 8 sides and each side is 10 in. long.

What is the perimeter of the sign?

Answer: _____ inches

80

Scorer Comments:
This response gave the correct answer of 80 inches along with a correct and complete explanation of how Ryan could find the perimeter of the stop sign using the given information.

Partial - Student Response

50 A stop sign has 8 sides of equal length. Ryan knows that the length of each side is 10 inches.

Explain how Ryan can find the perimeter (distance around) of the sign.

Ryan used a ruler to find the perimeter

What is the perimeter of the sign?

Answer: _____ inches

80

Scorer Comments:
This response earned partial credit for correctly answering that the perimeter was 80 inches. However, the explanation was insufficient because it did not explain how to find the perimeter using the information that was given.

Incorrect - Student Response

50 A stop sign has 8 sides of equal length. Ryan knows that the length of each side is 10 inches.

Explain how Ryan can find the perimeter (distance around) of the sign.

He can add 10+8=18.

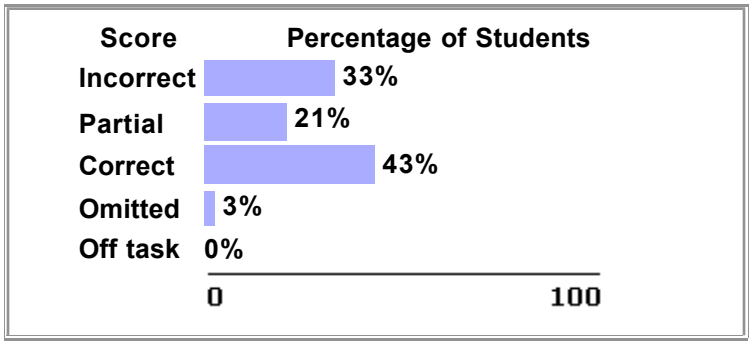
What is the perimeter of the sign?

Answer: _____ inches

18

Scorer Comments:
A common incorrect response for this problem was to add 10 and 8.

2007 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

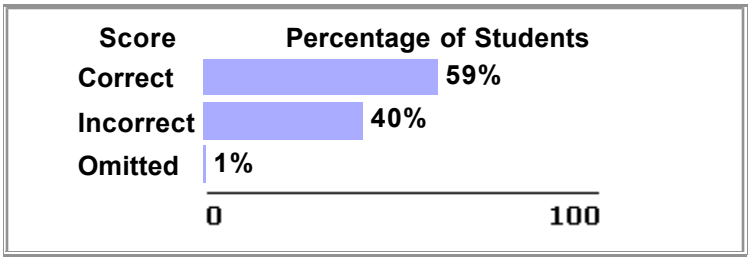
Question 51

Key

51. Stickers come in small booklets of 100 and in rolls of 1,000. On the store shelf, there are 6 booklets and 4 rolls of stickers. How many stickers are on the shelf?

A) 1,100
B) 4,600
C) 6,400
D) 10,000

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 52

Scoring Guide

Solution:

Red

1/2

Score & Description
Correct Correct response
Partial Gives red as most likely to be picked but does not give the probability OR Gives the probability but does not give red
Incorrect Incorrect response

Correct - Student Response

52 There are 6 cubes of the same size in a jar.

2 cubes are yellow.

3 cubes are red.

1 cube is blue.

Chuck is going to pick one cube without looking. Which color is he most likely to pick?

What is the probability of this color being picked?

Scorer Comments:
This paper gave the correct responses that the red cube was the most likely to be picked, with a probability of 3/6 (or 1/2).

Partial - Student Response

52 There are 6 cubes of the same size in a jar.

2 cubes are yellow.

3 cubes are red.

1 cube is blue.

Chuck is going to pick one cube without looking. Which color is he most likely to pick?

What is the probability of this color being picked?

Scorer Comments:
This paper gave the correct response that the red cube was the most likely to be picked. Answering that there were 3 cubes for the second part was a common mistake.

Incorrect - Student Response

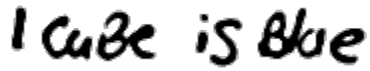
52 There are 6 cubes of the same size in a jar.

2 cubes are yellow.

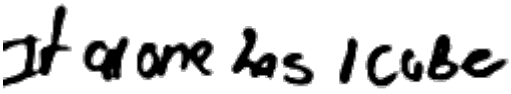
3 cubes are red.

1 cube is blue.

Chuck is going to pick one cube without looking. Which color is he most likely to pick?

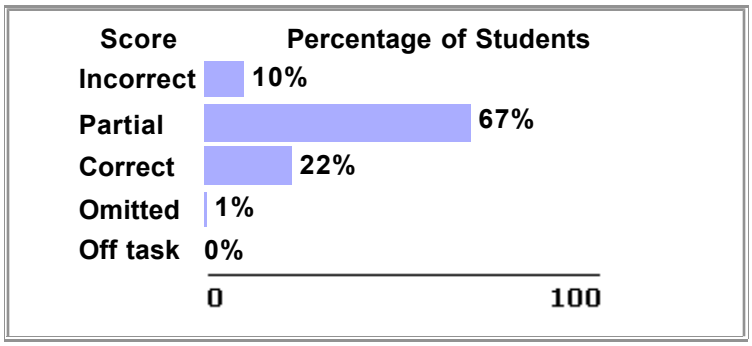


What is the probability of this color being picked?



Scorer Comments:
A common incorrect response to this question was a blue cube.

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Question 53

Key

53. Which set of numbers is listed from the smallest to largest?

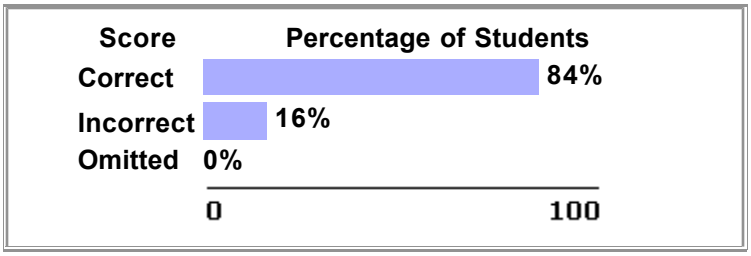
A) 1,001 1,100 1,011

B) 2,200 2,022 2,020

C) 3,030 3,003 3,300

D) 4,004 4,040 4,044

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

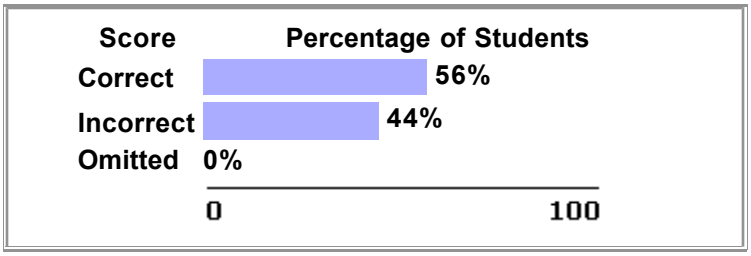
Question 54

Key

54. Sierra built the block tower with 1-foot cubes. How many cubes did she use?

A) 4
B) 6
C) 8
D) 10

2007 National Performance Results



Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.