

Grade 5 Form K

Student Name

Teacher Name

Sample 1: Exactly how many sides does a triangle have?

- A. 2
- B. 3
- C. 4
- D. 5

Sample 2: Identify whether each number sentence is True or False.

- a* $3 \times 4 = 12$ (T) True (F) False
- b* $18 \div 3 = 6$ (T) True (F) False
- c* $4 \times 5 = 9$ (T) True (F) False



Sample 3: What is $10 + 14$?



Sample 4: What decimal number is represented by the phrase "four and five tenths"?



This symbol appears next to questions that require you to fill in your answers on a grid on the Answer Sheet. Directions for completing the Response Grid:

1. Work the problem and find an answer.

2. Write your answer in the answer boxes at the top of the grid.

For whole-number grids:

- Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right.
- Print only one digit in each answer box. Do NOT leave a blank answer box in the middle of an answer.

For decimal grids:

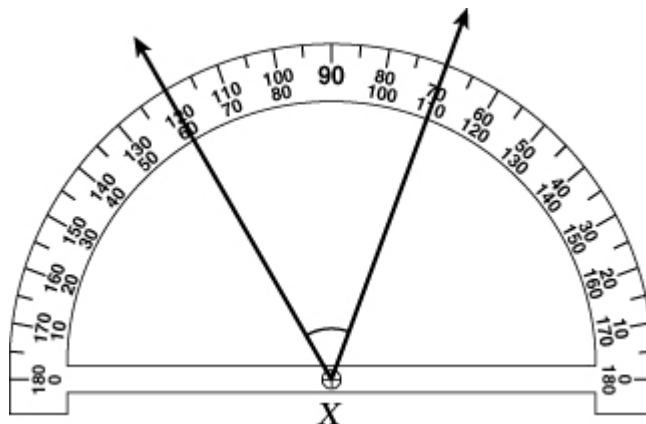
- Use the decimal point to decide where to start printing your answer.

3. Fill in a bubble under each answer box that you used to write your answer.

- Fill in one and ONLY one bubble for each answer box. Do NOT fill in a bubble under an unused answer box.
- Fill in each bubble by making a solid black mark that completely fills the circle.
- You MUST fill in the bubbles accurately to receive credit for your answer.

Use the blank space in this Test Booklet to do your work. Then mark your Answer Sheet for the answer you have chosen.

1. Angle X is shown in the picture below.

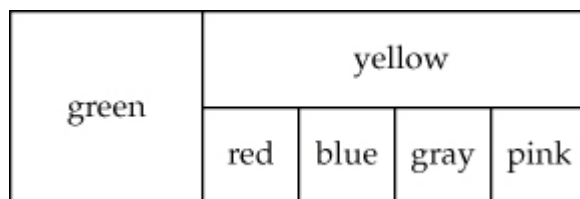


What is the measure of angle X to the nearest degree?

- A. 50°
- B. 60°
- C. 110°
- D. 120°

Use the following information to answer numbers 2–5.

Roberto drew a rectangle and divided it into 6 smaller rectangles, as shown below.

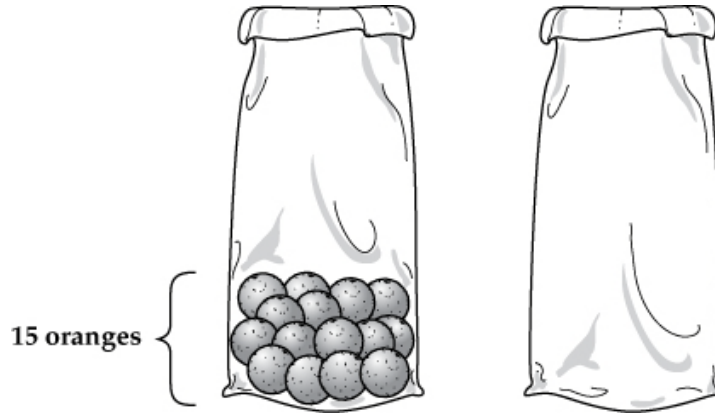


Based on this diagram, determine whether each statement appears to be true.

- 2. The red section plus the blue section is the same size as the green section. (Y) Yes (N) No
- 3. The yellow section is the same size as the green section. (Y) Yes (N) No
- 4. The pink section is $\frac{1}{6}$ of Roberto's original rectangle. (Y) Yes (N) No
- 5. The green section is $\frac{1}{3}$ of Roberto's original rectangle. (Y) Yes (N) No



6. In the first bag, there are 15 oranges.



Miguel must fill both bags to the top. Which is closest to the total number of oranges it takes to fill both bags?

- A. 30 oranges
- B. 42 oranges
- C. 84 oranges
- D. 110 oranges

7. Each number shown below is either a composite or prime number.



Which of the following correctly identifies all the prime numbers shown above?

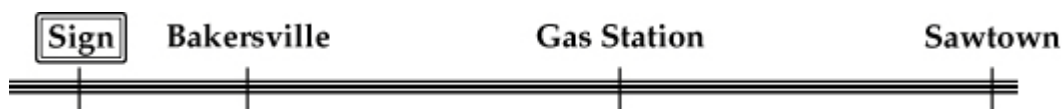
- A. 31, 33, 35, 37
- B. 31, 33, 37
- C. 30, 32, 34, 36
- D. 31, 37

Use the information below to answer numbers 8–9.

Kyle is traveling along a road toward Sawtown and sees the following sign.

Bakersville	6 miles
Sawtown	50 miles

A gas station is located halfway between Bakersville and Sawtown as shown on this diagram.



8. How many miles is it from Bakersville to Sawtown?



9. How many miles is it from the sign to the gas station?

Use the following information to answer numbers 10–11.

Lin is going to the county fair tonight. His mother gave him \$24 to spend on ride tickets. Tickets for fast rides cost \$3 each, and tickets for slow rides cost \$2 each.



10. Lin plans to spend all of the money his mother gave him on fast-ride tickets. What is the total number of fast-ride tickets that Lin can buy?



11. Which statement could represent the word problem above?

- A. number of fast-ride tickets = 24×3
- B. number of fast-ride tickets = $24 \div 3$
- C. number of fast-ride tickets = 24×2
- D. number of fast-ride tickets = $24 \div 2$

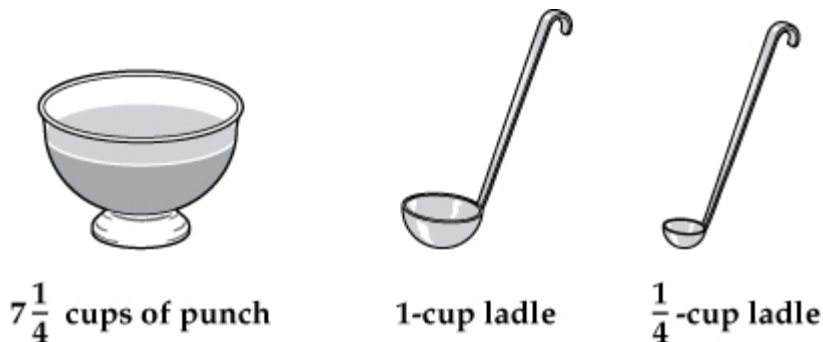
12. What is the total number of different factors for the number 24 ?

- A. 8
- B. 6
- C. 4
- D. 2

13. There will be 27 people at a party, and each person will get 2 slices of pizza. Each pizza has 8 slices. How many pizzas need to be ordered for the party?

A. 6
B. 7
C. 16
D. 54

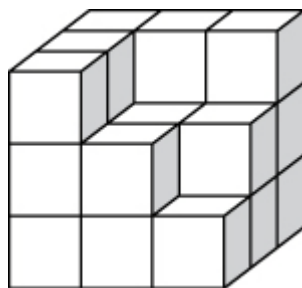
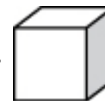
14. Hilary is serving punch out of a bowl using a 1-cup ladle and a $\frac{1}{4}$ -cup ladle. Before she begins serving, the bowl is filled with $7\frac{1}{4}$ cups of punch.



Which combination of servings would completely empty the punch bowl?

- A. two(2) 1-cup servings and twelve(12) $\frac{1}{4}$ -cup servings
B. two(2) 1-cup servings and five(5) $\frac{1}{4}$ -cup servings
C. six(6) 1-cup servings and five(5) $\frac{1}{4}$ -cup servings
D. six(6) 1-cup servings and one(1) $\frac{1}{4}$ -cup serving

15. Malik built the solid figure below by stacking together some unit cubes.



What is the total number of unit cubes in Malik's solid figure?

- A. 9
- B. 14
- C. 22
- D. 27

Use the following information to answer numbers 16–19.

Jenna knows that she could solve the following multiplication problem using several different methods and still get the correct answer.

$$\begin{array}{r} 49 \\ \times 5 \\ \hline \end{array}$$

Which of the following methods would result in a correct answer for this problem?

- | | | | |
|-----|---|---------|--------|
| 16. | Multiply 50 and 5, and then subtract 5. | (Y) Yes | (N) No |
| 17. | Multiply 50 and 5, and then subtract 49. | (Y) Yes | (N) No |
| 18. | Multiply 9 and 5, then multiply 4 and 5, and then add the two products together. | (Y) Yes | (N) No |
| 19. | Multiply 40 and 5, then multiply 9 and 5, and then add the two products together. | (Y) Yes | (N) No |

Use the following information to answer numbers 20–24.

Harry has a box of 24 crayons. He shares his crayons with 3 friends so that he and his friends each have 6 crayons. Based on this situation, determine whether each of the following statements must be true.

20. Each child now has more than $\frac{1}{2}$ of the original number of crayons.

(Y) Yes (N) No

21. Each child now has exactly $\frac{1}{6}$ of the original number of crayons.

(Y) Yes (N) No

22. Each child now has more than 0.75 of the original number of crayons.


(Y) Yes (N) No

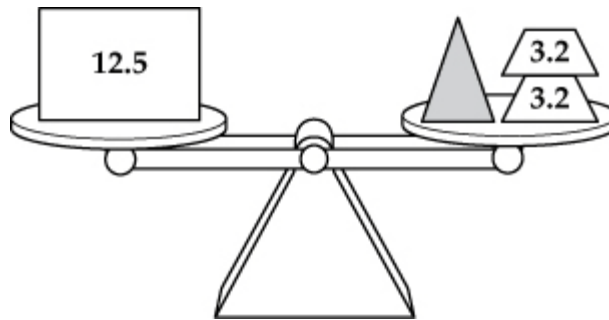
23. Each child now has less than 0.50 of the original number of crayons.

(Y) Yes (N) No

24. Each child now has exactly $\frac{1}{4}$ of the original number of crayons.


(Y) Yes (N) No

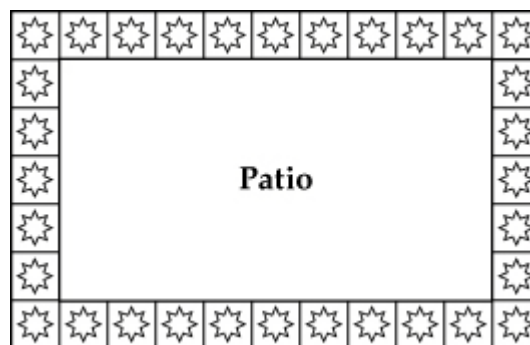
-  25. For the question below, shapes are assigned a weight. Identical shapes have the same weight. This scale is balanced so that the total weight on each of the sides is the same.



What is the value of the weight for this shape?



-  26. Chloe has a rectangular patio in her backyard. The patio is surrounded by 1-foot-square decorative tiles, as shown in the picture below.




What is the perimeter of Chloe's patio, in feet, not including the decorative tiles?

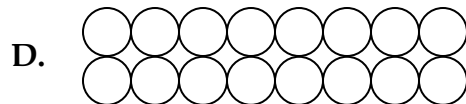


27. What is the least common multiple (LCM) of 8 and 12 ?



28. If $a + b = 5$, what does $18 + b + a$ equal?

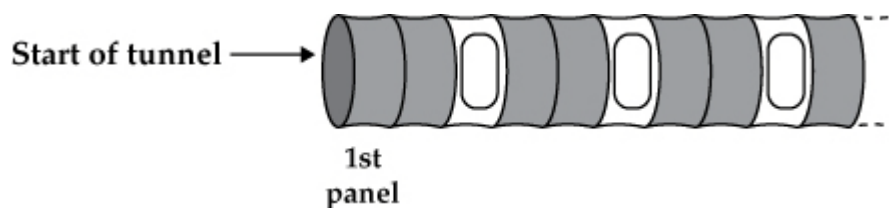
- A. 13
- B. 23
- C. 28
- D. 33

29.  represents $\frac{1}{4}$ of a set of circles. Which of the following could represent the whole set of circles?



Use the following information to answer numbers 30–33.

A play tunnel is made by repeating groups of three panels using solid panels  and window panels  as described in the picture below. The picture shows the first ten panels of the tunnel.



30. Which section of panels below continues the pattern in this tunnel for the 11th through 13th panels?



For each of the following patterns, determine whether it follows the same rule as the pattern in the play tunnel above.

31. G G R G G R G G R G . . . (Y) Yes (N) No

32.          . . . (Y) Yes (N) No

33.            . . . (Y) Yes (N) No

Use the information below to answer numbers 34–37.

The two fastest times recorded for running a 200-meter race are 19.19 seconds, by Usain Bolt, and 19.32 seconds, by Michael Johnson.



Identify whether each decimal number below is greater than 19.19 and less than 19.32.

34. 19.309 (T) True (F) False


35. 19.8 (T) True (F) False

36. 19.247 (T) True (F) False

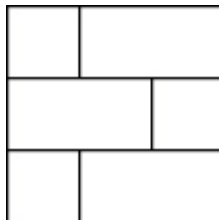
37. 19.031 (T) True (F) False

38. The areas of two shapes are shown.

- The area of  is 18 square units.

- The area of  is 9 square units.

What is the area of the figure shown below?



- A. 6 square units
- B. 54 square units
- C. 81 square units
- D. 162 square units

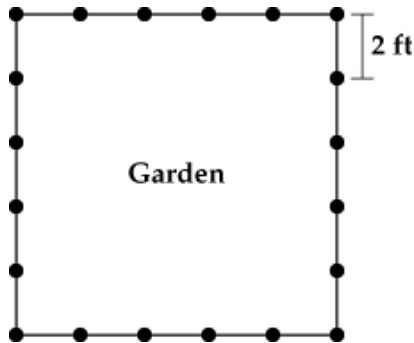
For numbers 39–40, determine whether each equation is true.

39. $0.56 = \frac{5}{6}$ (Y) Yes (N) No

40. $1.6 = 1\frac{3}{5}$ (Y) Yes (N) No

Use the information below to answer numbers 41–43.

Mr. Reyes built a fence to enclose his square garden. He used 20 fence posts and placed them 2 feet apart, as shown below.



41. Based on this information, which statement must be true?
- A. The length of the garden is greater than the width of the garden.
 - B. The width of the garden is greater than the length of the garden.
 - C. The value of the perimeter is greater than the value of the area of the garden.
 - D. The value of the area is greater than the value of the perimeter of the garden.



42. What is the perimeter, in feet, of the garden?

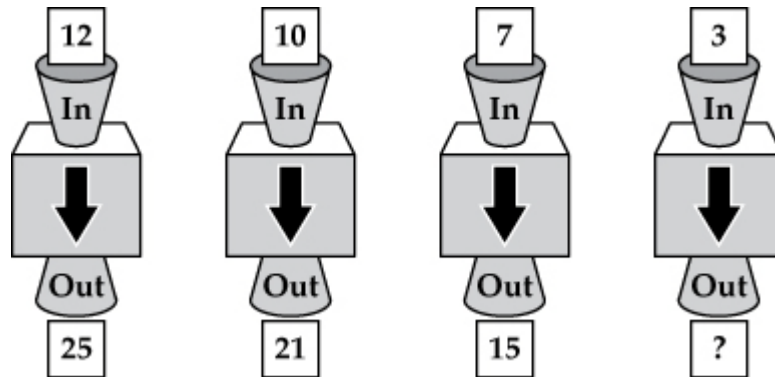


43. What is the area, in square feet, of the garden?



44.

A number machine applies the same rule to all numbers that are put into it. The picture below shows the numbers that came out of this number machine after three different numbers were put into it and the rule was applied.



What number should come out of this machine when 3 is put in?

