

Grade 4 Form F

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 number is represented by the phrase "four hundred twenty five"?



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.
 - 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.
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.

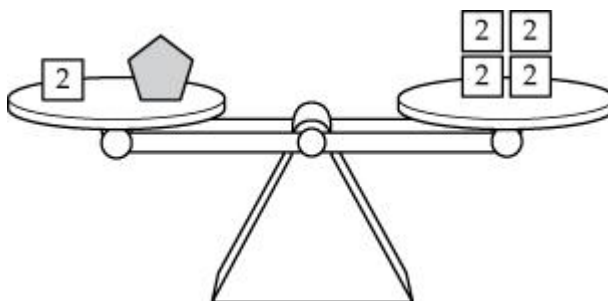
Use the blank space in this Test Booklet to do your work. Then mark your Answer Sheet for the answer you have chosen.

1. What number should go in the to make this number sentence true?

$$8 + 4 = \square + 7$$

- A. 19
- B. 12
- C. 5
- D. 4

For numbers 2–4, 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.



For each statement, determine whether the statement is True or False.

- | | | | |
|----|-------------------------------|----------|-----------|
| 2. | $2 + \text{pentagon} = 8$ | (T) True | (F) False |
| 3. | $\text{pentagon} - 2 = 8$ | (T) True | (F) False |
| 4. | $2 + 2 + 2 = \text{pentagon}$ | (T) True | (F) False |

5. The number 3.24 is equal to three and twenty-four —

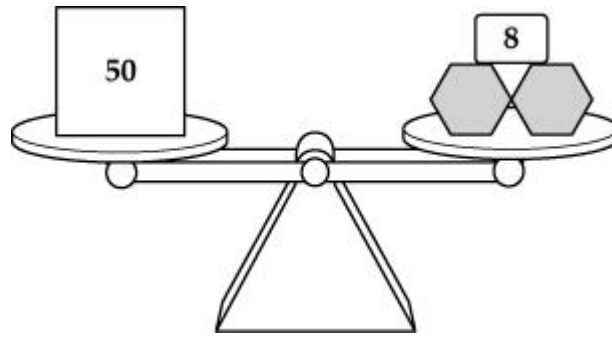
- A. ones
- B. tenths
- C. hundredths
- D. thousandths

For numbers 6–8, identify whether each number sentence is True or False.

- | | | | |
|----|-----------------------|----------|-----------|
| 6. | $4 + 6 = 5 \times 2$ | (T) True | (F) False |
| 7. | $314 + 287 = 314,287$ | (T) True | (F) False |
| 8. | $14 + 119 = 119 + 14$ | (T) True | (F) False |



9. 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?



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 ?

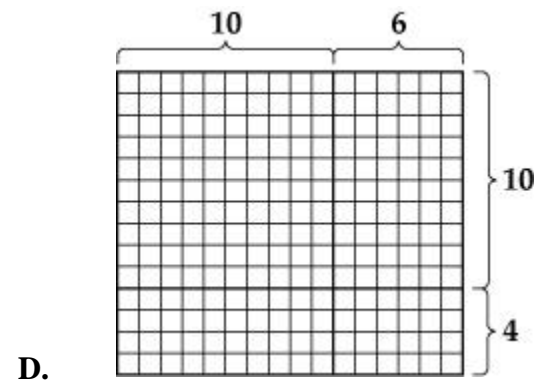
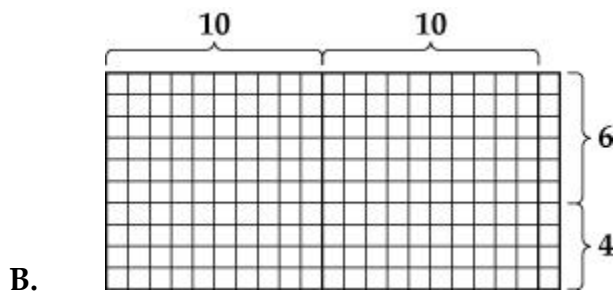
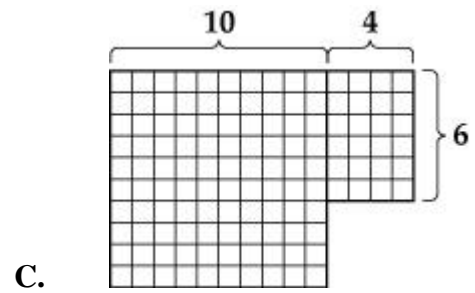
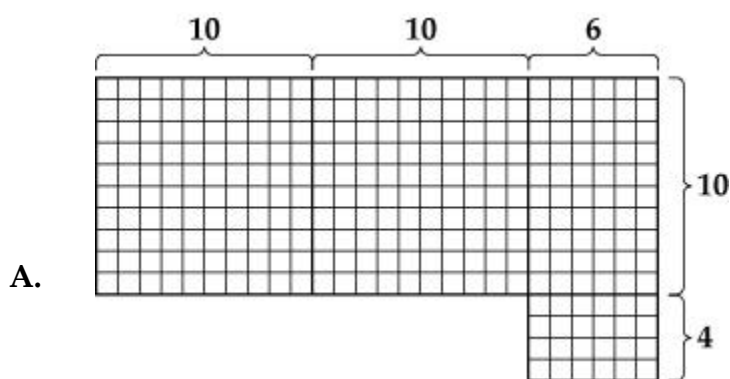
- A. 8
- B. 6
- C. 4
- D. 2

13. By how much will the value of the number 4,253 increase if the “2” is replaced with a “9”?

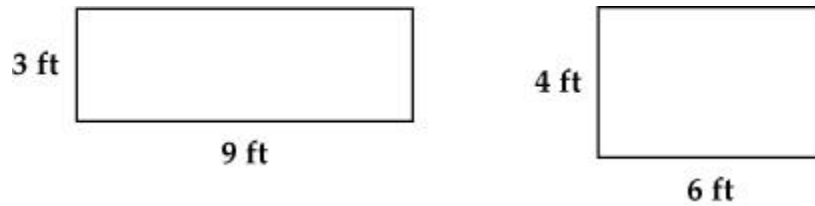
A. 7
 B. 70
 C. 700
 D. 7,000

14. Which model shows a correct way to find the answer to the multiplication problem shown below?

$$\begin{array}{r} 14 \\ \times 16 \\ \hline \end{array}$$



15. Dericka correctly found the areas of the two rectangles below.



She then computed the difference between the two areas and reported the answer to be 3 square feet. Which expression below supports Dericka's correct computation of the difference of the areas?

- A. $9 - 6$
 - B. $23 - 20$
 - C. $(3 \times 9) - (4 \times 6)$
 - D. $(9 - 3) \div (6 - 4)$
16. Hannah has 2 large candy bars. She cuts each candy bar into fifths. How many pieces of candy bar does Hannah have now?

- A. $\frac{1}{10}$
- B. $\frac{2}{5}$
- C. 5
- D. 10

Use the following information to answer numbers 17–20.

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

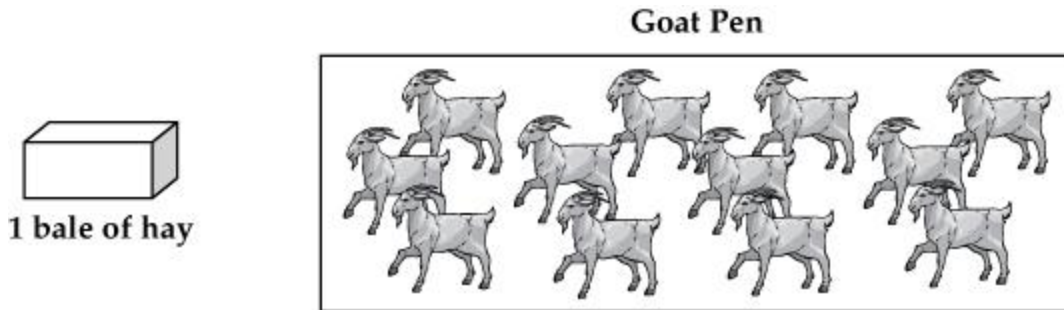
$$\begin{array}{r} 49 \\ \times 5 \\ \hline \end{array}$$

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

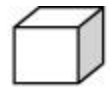
- | | | | |
|-----|---|---------|--------|
| 17. | Multiply 50 and 5, and then subtract 5. | (Y) Yes | (N) No |
| 18. | Multiply 50 and 5, and then subtract 49. | (Y) Yes | (N) No |
| 19. | Multiply 9 and 5, then multiply 4 and 5, and then add the two products together. | (Y) Yes | (N) No |
| 20. | Multiply 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 21–23.

Farmer Brown has 12 goats in a pen. Each day he places exactly enough bales of hay in the pen to feed all 12 goats with no hay left over.



21. How many bales of hay should Farmer Brown place in the pen each day to feed his goats if each goat eats $\frac{1}{2}$ bale of hay?



$\frac{1}{2}$ bale of hay



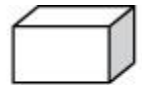
22. How many bales of hay should Farmer Brown place in the pen each day to feed his goats if each goat eats $\frac{1}{4}$ bale of hay?



$\frac{1}{4}$ bale of hay



23. How many bales of hay should Farmer Brown place in the pen each day to feed his goats if each goat eats $\frac{3}{4}$ bale of hay?




$\frac{3}{4}$ bale of hay

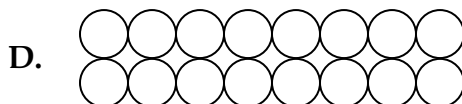
24. Farmer Gray has some goats in a pen. Each day he places exactly enough bales of hay in the pen to feed all his goats with no hay left over. He knows that every goat eats $\frac{2}{3}$ bale of hay. What is the total number of goats that Farmer Gray has if he places 24 bales of hay in the pen each day and no hay is left over?

- A. 12 goats
- B. 16 goats
- C. 24 goats
- D. 36 goats

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

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

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



Bailey has ten U.S. coins in her purse. She knows that the total value of these ten coins is between \$1.00 and \$1.25. Identify whether each combination of coins shown in numbers 27–30 could be the coins in Bailey’s purse.

27. 4 quarters, 6 nickels (Y) Yes (N) No

28. 1 quarter, 9 dimes (Y) Yes (N) No

29. 2 quarters, 5 dimes, 3 nickels (Y) Yes (N) No

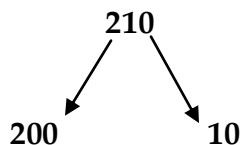
30. 3 quarters, 4 dimes, 3 nickels (Y) Yes (N) No

31. Tom’s math assignment was to show his work for the following problem.

What is $\frac{1}{2}$ of 210 ?

The steps he took to solve the problem are shown below. If there is a mistake in his work, mark the letter that matches the Step in which he made his first mistake. If Tom made no mistake, mark the letter D.

Step 1: I separated 210 into two parts as shown below.



Step 2: I know that half of 200 is 100 and half of 10 is 5.

Step 3: Therefore, half of 210 is equal to $100 + 5$, which is 105.

- A. Step 1
- B. Step 2
- C. Step 3
- D. There is no mistake.

Go On ➞

32. Jackie solved a multiplication problem as shown below. There are errors in her work.

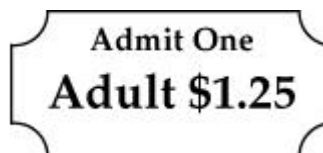
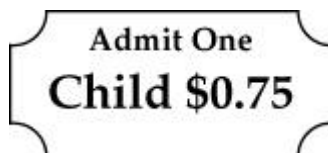
$$\begin{array}{r} 2 \text{ Row 1} \\ 35 \\ \times 14 \\ \hline 140 \text{ Row 2} \\ + 55 \text{ Row 3} \\ \hline 195 \text{ Row 4} \end{array}$$

In which row is an error first recorded?

- A. Row 1
- B. Row 2
- C. Row 3
- D. Row 4

Use the following information to answer numbers 33–35.

Madison is planning to go to the museum. Prices for museum tickets are shown below.



Madison claims that each combination of tickets listed below can be purchased with \$5.00 or less. For each combination, determine whether her claim is True or False.

- | | | | |
|-----|---------------------|----------|-----------|
| 33. | 6 child and 4 adult | (T) True | (F) False |
| 34. | 3 child and 2 adult | (T) True | (F) False |
| 35. | 2 child and 3 adult | (T) True | (F) False |

36. Which situation below can be represented by $30 - n = 6$?

- A.** Carter had 30 crayons. He gave some crayons to his sister, leaving him only 6 crayons. How many crayons did Carter give his sister?
- B.** Carter had 30 crayons. This amount was 6 times as many crayons as his friend had. How many crayons did his friend have?
- C.** Carter had 30 crayons. He received 6 more crayons from his brother. How many crayons did Carter have then?
- D.** Carter had 30 crayons. He shared them equally among 6 friends. How many crayons did each friend get?

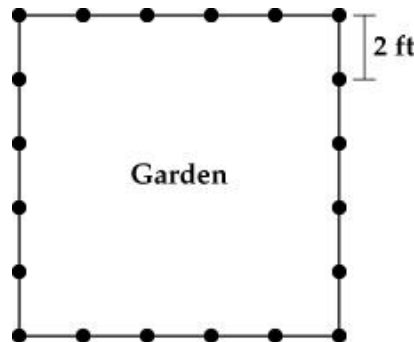
For numbers 37–38, determine whether each equation is true.

37. $0.75 = \frac{3}{4}$ (Y) Yes (N) No

38. $1.4 = 1\frac{4}{5}$ (Y) Yes (N) No

Use the information below to answer numbers 39–41.

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



39. 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.



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



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

