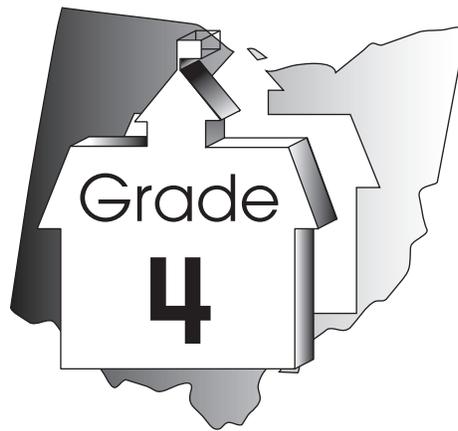


Student Name: \_\_\_\_\_

# Ohio Achievement Tests



## Mathematics

### Student Test Booklet

Half-Length Practice Tests

The Ohio Department of Education does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in employment or the provision of services.

**Directions:**

Today you will be taking the Ohio Grade 4 Mathematics Practice Test. This is a test of how well you understand mathematics. The test consists of questions about numbers, measurement, shapes, graphs, and patterns. Two different types of questions appear on this test: multiple choice and constructed response.

There are several important things to remember:

1. Read each question carefully. Think about what is being asked. If a graph or other diagram goes with the question, look at it carefully to help you answer the question. Then choose or write the answer that you think is best.
2. When you write your answers, write them neatly and clearly in the space provided using a pencil.
3. When you answer a multiple choice question, make sure you fill in the circle next to the answer. Mark only one answer.
4. If you do not know the answer to a question, skip it and go on. If you have time, go back to the questions you skipped and answer them before you hand in your Student Test Booklet.
5. If you finish the test early, you may check over your work. When you are finished and your Student Test Booklet has been collected, you may take out your silent work.

# M

## Mathematics

1. Camille buys a pair of shoes for \$15.95. She gives the clerk \$20.00.

How much change should Camille receive?

- A. \$4.00
- B. \$4.05
- C. \$4.15
- D. \$5.05
2. Ramón's uncle is buying an automobile. He needs to choose an outside color and an inside color.

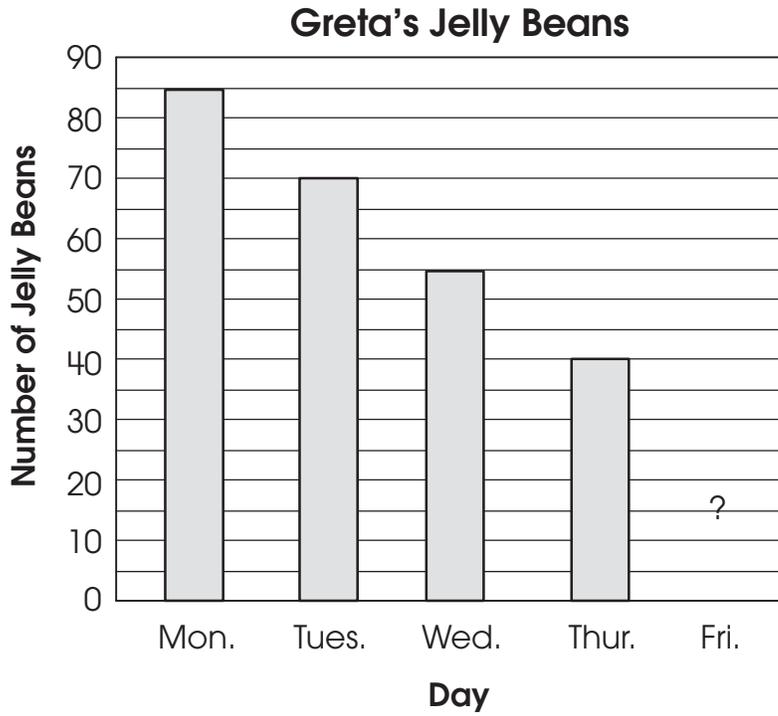
**Color Choices**

Outside Color	Inside Color
Blue	Gray
Red	Tan

What are all the possible combinations of one outside color and one inside color that he could choose?

- A. blue and gray, blue and tan, red and gray, red and tan
- B. blue and red, blue and gray, blue and tan, blue and blue
- C. gray and tan, red and blue
- D. gray and red, gray and blue

3. The bar graph shows the total number of jelly beans that Greta has each day. The pattern for the number of jelly beans will continue.



How many jelly beans will Greta have on Friday?

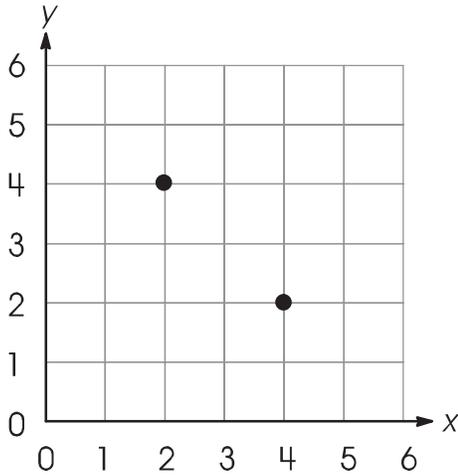
- A. 15
- B. 25
- C. 30
- D. 35



# M

## Mathematics

4. Two points are shown on the coordinate grid.



Plot two more points on the grid so that the four points make a square. Label the new points J and K.

What are the coordinates of points J and K?

Point J \_\_\_\_\_

Point K \_\_\_\_\_

5. Shiloh has 823 pennies. Lester has 988 pennies.

How many pennies do Shiloh and Lester have together?

- A. 1,701
- B. 1,711
- C. 1,801
- D. 1,811

6. A bakery offers a special deal when buying muffins. The table shows how the price per muffin changes.

**Muffin Prices**

Number of Muffins	Price per Muffin
6	\$1.00
12	\$0.75
18	\$0.60
24	\$0.50

Which describes how the price per muffin changes as the number of muffins bought increases?

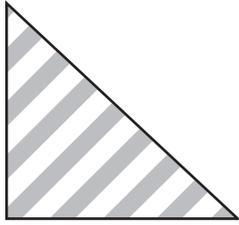
- A. For every 6 muffins bought, the price per muffin decreases by \$0.25.
- B. For every 6 muffins bought, the price per muffin is halved.
- C. For every 6 muffins bought, the price per muffin decreases.
- D. For every 6 muffins bought, the price per muffin increases.
7. Rachel's father is filling a small swimming pool. He has a one-cup container and a one-gallon container.

Tell which container is more reasonable to use to fill the pool and explain why.

# M

## Mathematics

8. Jill has a triangular flag. The flag has a right angle and two acute angles.



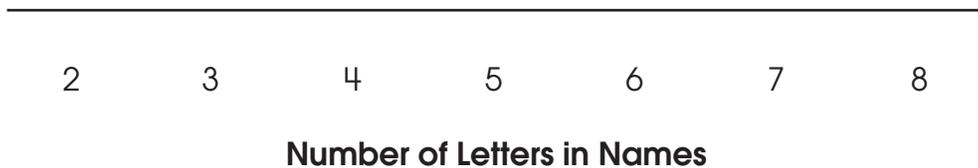
What type of triangle is the flag?

- A. acute
  - B. equilateral
  - C. obtuse
  - D. right
9. Kimberly has \$2.31 in one pocket and \$1.94 in another.
- How much money does Kimberly have in both pockets?
- A. \$0.37
  - B. \$1.37
  - C. \$3.25
  - D. \$4.25

10. Twelve students wrote their names and the number of letters in their names on cards as shown.

Grant 5	Ali 3	Courtney 8	Kim 3	Owen 4	Heidi 5
Katie 5	Mark 4	Linda 5	June 4	Abdul 5	Connie 6

Use the line to construct a line plot of the information on the students' cards. Use **X** to show the data.



Find the median, mode and range of the data on the cards.

Median: \_\_\_\_\_

Mode: \_\_\_\_\_

Range: \_\_\_\_\_

# M

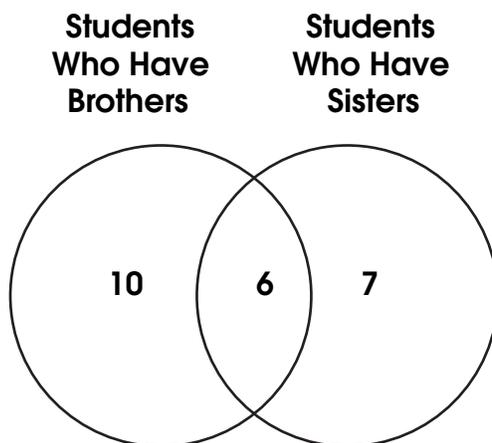
## Mathematics

11. Four girls ran in a race. Their times are shown in the table.

Runner	Time (seconds)
June	12.03
Beth	12.3
Meg	12.033
Sarah	12.303

Which list shows the students' times from least time to greatest time?

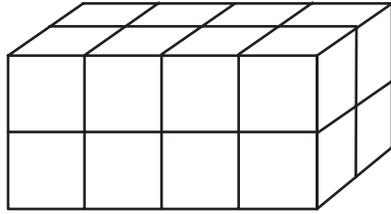
- A. 12.033; 12.03; 12.3; 12.303
- B. 12.03; 12.033; 12.3; 12.303
- C. 12.03; 12.033; 12.303; 12.3
- D. 12.3; 12.03; 12.033; 12.303
12. The Venn diagram shows the number of students in a class who have brothers and sisters.



Which statement is true?

- A. Exactly 6 students in the class have brothers.
- B. Exactly 10 students in the class have brothers.
- C. Exactly 16 students in the class have brothers.
- D. Exactly 23 students in the class have brothers.

13. Becky stacked blocks as shown. Each block has a volume of one cubic inch.



What is the volume of Becky’s stack of blocks?

- A. 12 cubic inches
  - B. 13 cubic inches
  - C. 16 cubic inches
  - D. 20 cubic inches
14. Heidi and James each have a bottle of juice that is the same size. Heidi drank  $\frac{1}{4}$  of her juice. James drank  $\frac{1}{3}$  of his juice.

Who drank more juice? \_\_\_\_\_

Use pictures, words or numbers to show how you know.

15. Which letter has a pair of parallel line segments?

A. **A**

B. **H**

C. **L**

D. **K**

16. Riley is making a pattern with numbers.

3, 12, 21, 30

What is the rule for this pattern?

A. add 3

B. multiply by 4

C. add 9

D. multiply by 10

17.

What is a prime number?

Give three examples of prime numbers.

18. Kyle measured an object and found it to be 100 cubic centimeters.

Which could Kyle have measured?

- A. area of a floor tile
- B. height of a stool
- C. perimeter of a picture frame
- D. volume of a small box

# M

## Mathematics

19. Stamps are sold in rolls of 100 and books of 20. Zoe bought two rolls and eight books of stamps.

What is the total number of stamps Zoe bought?

- A. 240
- B. 360
- C. 960
- D. 1,200

20. Kim is making cookies. She puts 3 raisins on each cookie.

How many raisins does she need to make 15 cookies? \_\_\_\_\_

Now, write an expression that tells the number of raisins Kim needs to make any number of cookies. Use  $n$  to represent the number of cookies.

