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



# **Grade 8 Practice Test**

# English Language Arts Mathematics Science Social Studies

February 2002

Louisiana Department of Education Cecil J. Picard, Superintendent





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### Introduction to Students

This is a Practice Test to show you what each part or "session" of the real LEAP 21 (Louisiana Educational Assessment Program for the 21<sup>st</sup> Century) is like. The Practice Test looks similar to the real test.

You may use the Practice Test at home or at school to become familiar with what the real test is like. This can help you feel more relaxed when you take the real test.

On the real test, you will write your answers in an "answer document," and some test sessions are in the answer document. However, on this Practice Test, all of the test sessions are in this test booklet, where you may write your answers.

Some sessions of the Practice Test are shorter than those on the real test. After each session, look for the "NOTE" that tells you the number of questions that are on the real test.

In March, you will take the LEAP 21, a test that will measure your skills in English language arts, mathematics, science, and social studies. The LEAP 21 will help to determine whether you have the skills and knowledge you need to succeed in the next grade.

Answers to the questions for the Practice Test are in the back of this booklet.

For more information regarding the LEAP 21, go to www.louisianaschools.net, and click on "The Tests."

# Mathematics Grade 8 Practice Test

**NOTE:** You will be given a Mathematics Reference Sheet to use for the entire Mathematics test.

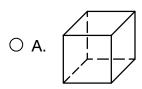
# **Session 1 — Mathematics (No Calculator)**

Please mark your answers for questions 1 through 8 in the circles provided to the left of each answer choice. Mark only one answer for each question.

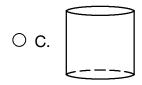


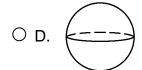
You may NOT use a calculator for this session.

1. A straight line segment could **not** be drawn on the surface of which of the following solids?









2. Donna brought 3 baseball cards to school on Monday. Every day that week she brought twice as many baseball cards as the day before. How many baseball cards did Donna bring to school on Friday?

O A. 15

O B. 24

O C. 30

O D. 48

3. A farmer's cornfield has 617 rows of corn. Harvesting the first 50 rows yielded 8 truckloads of corn. Which of the following is the best estimate of the total number of truckloads the farmer will get from the cornfield?

O A. 400 truckloads

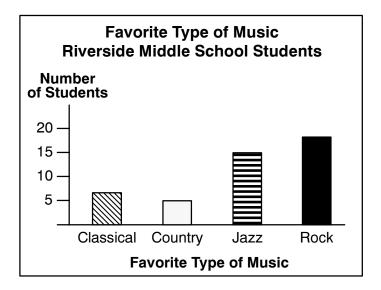
O B. 200 truckloads

O C. 100 truckloads

O D. 70 truckloads

## Use the information and graph below to answer question 4.

A sample of 45 students at Riverside Middle School was surveyed about their favorite type of music. The graph below shows the survey results.



- **4.** If there is a total of 270 students at Riverside School, about how many of them would be expected to prefer Jazz music?
  - O A. 108
  - O B. 90
  - O C. 18
  - O D. 15
- **5.** A restaurant has small tables (*s*) and large tables (*l*). Small tables seat four people each, and large tables seat eight people each. Which inequality shows the maximum number of people (*p*) that can be seated at the restaurant?
  - $\bigcirc$  A.  $p \ge 8l + 4s$
  - $\bigcirc$  B.  $p \le 8l + 4s$
  - $\bigcirc$  C. p > 8l + 4s
  - $\bigcirc$  D. p < 8l + 4s

**6.** Which equation represents the data shown in the table?

X	у
3	9
3 2	7
1	5
0	3
-1	1
-2	-1
-3	-3

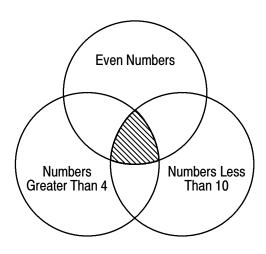
$$\bigcirc$$
 A.  $y = x + 6$ 

$$\bigcirc$$
 B.  $y = 3x + 2$ 

$$\bigcirc$$
 C.  $y = 2x + 3$ 

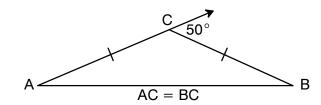
$$\bigcirc$$
 D.  $y = 4x - 2$ 

Use the Venn diagram shown below to answer question 7.



- 7. If you put the numbers 1–12 in the appropriate areas of the Venn diagram, which numbers would be in the shaded area?
  - O A. 10, 12
  - O B. 2, 4
  - O C. 5, 7, 9
  - O D. 6,8

Use the figure below to answer question 8.



- 8. In  $\triangle ABC$ , the measure of  $\angle A$  is
  - A. 25°.
  - B. 40°.
  - C. 45°.
  - D. 50°.

**NOTE:** On the real test, this session has 30 questions.

# **Session 2 — Mathematics (Calculator)**

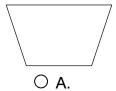
Please mark your answers for questions 9 through 16 in the circles provided to the left of each answer choice. Mark only one answer for each question.



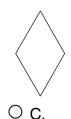
You MAY use a calculator for this session.

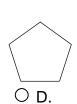
- 9. Sarah's car gets about 27 miles per gallon and can travel a maximum of 408 miles without refueling. What is the maximum number of gallons of gas that the tank in Sarah's car can hold?
  - O A. 13 gallons
  - O B. 15 gallons
  - O C. 24 gallons
  - O D. 27 gallons
- 10. Gena's living room has an area of 36 square yards. What is the area of Gena's living room in square feet?
  - O A. 36
  - O B. 72
  - O C. 144
  - O D. 324

- 11. An electronic device beeps every 21 seconds. Another beeps every 28 seconds. If they both start beeping at the same time, how many seconds will it be before the next time they beep together?
  - O A. 588 seconds
  - O B. 196 seconds
  - O C. 84 seconds
  - O D. 49 seconds
- **12.** Which figure has exactly one line of symmetry?









**13.** What number goes in the box in the following sequence?

- O A. 58
- O B. 47
- O C. 46
- O D. 41

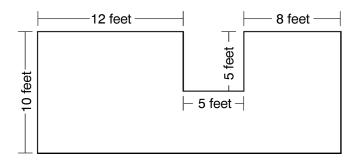
Use the table below to answer question 14.

### Math Test Results— Ms. Washington's Class

Time to Complete Test (in minutes)	Number of Students
38	7
36	3
34	1
32	6
30	10

- **14.** What is the probability that a student in Ms. Washington's class completed the test in 30 minutes?
  - $\bigcirc$  A.  $\frac{1}{20}$
  - $\bigcirc$  B.  $\frac{10}{17}$
  - $\bigcirc$  C.  $\frac{10}{27}$
  - $\bigcirc$  D.  $\frac{10}{30}$

**15.** Mary plans to put carpeting in her house. The floor plan shows the part of her house that will be carpeted. How many square feet of carpet does she need?



- O A. 175 square feet
- O B. 200 square feet
- O C. 225 square feet
- O D. 250 square feet
- **16.** Mei's bank balance was \$42.67. Her deposits and withdrawals since then can be represented as +\$50, -\$15, -\$21, +\$16.25, +\$25. What is her bank balance now?
  - O A. \$ 55.25
  - O B. \$ 97.92
  - O C. \$107.42
  - O D. \$127.25

**Note:** On the real test, this session has 30 questions.

# **Session 3 — Mathematics Constructed Response**

Please write your answers to question 17, parts A, B, and C, in the spaces provided. This question has more than one part. Be sure to show all of the work you do to find your answers. Even if you cannot answer all parts, answer as many as you can. On the real test, you can still get points for answering part of the question. Write your answers clearly.



#### You MAY use a calculator for this session.

17. Leanne goes to college in Louisiana, and her family lives in New York. Last week, Leanne's mother made four evening telephone calls to her. Listed below are the charges for the telephone calls.

CHARGES	MINUTES
\$0.60	4
\$1.50	10
\$1.80	12
\$4.50	30

- A. Based on this information, what would be the charge for a 50-minute evening phone call?
- **B.** What is the maximum number of minutes a phone call could be made for less than \$5.00? Explain your reasoning.
- **C.** What would be the cost (c) of an n-minute phone call to Leanne from her mother? Write your answer in the form of an equation where c is the cost, and n is the number of minutes.

**NOTE:** On the real test, this session has four questions.