hio Department

Student Name:

Ohio Achievement Assessments



Mathematics Student Test Booklet Large Print Spring 2010

This test was originally administered to students in Spring 2010.

Not all items from the Spring 2010 administration will be released in this document. According to Ohio Revised Code (ORC) 3301.07.11:4(b) ... not less than forty percent of the questions on the test that are used to compute a student's score shall be a public record. The department (of education) shall determine which questions will be needed for reuse on a future test and those questions shall not be public records and shall be redacted from the test prior to its release as public record.

This publicly released material is appropriate for use by Ohio teachers in instructional settings. This test is aligned with Ohio's Academic Content Standards for Mathematics.

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Directions:

Today you will be taking the Ohio Grade 5 Mathematics Achievement Assessment. Three different types of questions appear on this test: multiple choice, short answer and extended response.

There are several important things to remember:

- Read each question carefully. Think about what is being asked. Look carefully at graphs or diagrams because they will help you understand the question. Then, choose or write the answer you think is best.
- 2. Use <u>only</u> a #2 pencil to answer questions on this test. You may use a protractor on this test.
- 3. For multiple-choice questions, fill in the circle next to your answer choice. Mark <u>only</u> one answer for each question. If you change your answer, make sure you erase your old answer completely. Do not cross out or make any marks on the other choices.
- For constructed-response questions, write your answer neatly, clearly and <u>only</u> in the space provided in your Answer Document. Any responses written in your Student Test Booklet will <u>not</u> be scored.

- 5. Short-answer questions are worth two points. Extended-response questions are worth four points. Point values are printed near each question in your Student Test Booklet. The amount of space provided for your answers is the same for all two- and four-point questions.
- You may use the blank areas of your Student Test Booklet or the optional grid paper in your Answer Document to work out and solve problems. Do <u>not</u> tear out the optional grid paper from your Answer Document.
- If you do not know the answer to a question, skip it and go on to the next question. If you have time, go back to the questions you skipped and try to answer them before turning in your Student Test Booklet and Answer Document.
- 8. Check over your work when you are finished.

Item 1 has not been slated for public release in 2010.



2. A tree is 78 inches tall.

Mathematics

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How tall is the tree in feet?

- A. $2\frac{1}{2}$ feet
- B. 6 feet
- C. $6\frac{1}{2}$ feet
- D. 7 feet

- Max knows that 60% of his classmates are girls.
 Which decimal represents 60%?
 - A. 60.0
 - B. 6.0
 - C. 0.60
 - D. 0.060



4. A pipe leaks 3.5 gallons of water each hour.

Which table represents the total amount of water leaked at the end of each hour?

Time (hours)	Water Wasted (gallons)
1	3.5
2	3.5
3	3.5
4	3.5
5	3.5

Α.

Time (hours)	Water Wasted (gallons)
1	3.5
2	7
3	10.5
4	14
5	17.5

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Β.

Mathe	ematics

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	Time (hours)	Water Wasted (gallons)
C	1	3.5
	2	7
	3	21
	4	84
	5	420

Time (hours)Water Wasted
(gallons)13.5212.25342.884150.065525.22

Items 5-7 have not been slated for public release in 2010.

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 On Sunday, Justin has 25 bottle caps in his collection. Starting on Monday, he will get 4 new bottle caps every day.

Which expression could be used to determine the number of bottle caps Justin will have after *n* days?

- A. 21*n*
- B. 29n
- C. 4n + 25
- D. 25n + 4

Item 9 has not been slated for public release in 2010.



10. Eric subtracted $\frac{1}{8}$ from $\frac{4}{8}$. Then he subtracted $\frac{1}{4}$ from the difference. Eric's work is shown in Steps 1 and 2.

Mathematics

Step 1:
$$\frac{4}{8} - \frac{1}{8} = \frac{3}{8}$$

Step 2: $\frac{3}{8} - \frac{1}{4} = \frac{2}{8}$

In your **Answer Document**, explain whether Eric's work in Step 1 and Step 2 is correct.

Justify your explanation by using diagrams, words or numbers. (2 points)









12. An angle is shown.



Mathematics

Which is a reasonable estimate for the measure of angle KLM?

- A. 15°
- B. 45°
- C. 75°
- D. 135°

Item 13 has not been slated for public release in 2010.



14. According to the International Olympic Committee, in 1928, Ethel Catherwood won the first Olympic women's high jump.

Mathematics

The height of her jump in inches can be determined by this expression:

 $36 \times 1 + 12 \times 2$

What was the height of her jump in inches?

- A. 51 inches
- B. 60 inches
- C. 96 inches
- D. 936 inches

Items 15–21 have not been slated for public release in 2010.

On the Spring 2010 Grade 5 Mathematics Achievement Assessment, items 22–27 are field-test items, which are not released.



28. Bonnie used a rule to create the input-output table shown.

Input	Output
4	11
6	17
10	29
20	59

Which could be the rule Bonnie used?

- A. add 7 to the input
- B. add 11 to the input
- C. double the input and add 3
- D. triple the input and subtract 1





29. Mrs. Smith planned parent-teacher conferences for her 21 students beginning next week. She scheduled conferences from 2:00 p.m. to 5:00 p.m. each day.

- The conferences begin on Monday.
- She scheduled 20 minutes for each conference.
- The first conference each day begins at 2:00 p.m.
- The last conference each day ends by 5:00 p.m.
- She scheduled 21 conferences.

In your **Answer Document**, use a table, words or numbers to determine the day and time Mrs. Smith's last conference is scheduled to end. Show or explain how you found the day and time for the last conference. (2 points)



30. Jill's teacher said there are 12 ways to pair one member of Team A and one member of Team B for chess matches.

Jill knows that there are 4 members on Team A.

How many members must Team B have?

A. 3

B. 4

- C. 8
- D. 12

Item 31 has not been slated for public release in 2010.



32. Four points are shown on the coordinate plane.



Which point is located at (4, -2)?

- A. S
- Β. Τ
- C. U
- D. V





33. The graph shows the number of cans collected by two classes during a food drive.



Canned Food Drive

Mr. Henry's class claimed they collected more cans every day than Mr. Tillson's class.

In your **Answer Document**, explain whether you agree or disagree with the claim. Support your answer, using specific information from the graph. (2 points)



34. Simplify: 3(4 + 5)

A. 12

B. 17

C. 27

D. 60

Items 35–37 have not been slated for public release in 2010.



Mathematics



38. Stan is making a triangular desk to fit in a corner. One angle needs to measure 90°. He wants the other two angles to be congruent to each other.

In your **Answer Document**, draw Stan's desk and determine the measure of the other two angles.

Explain how you found the measures of the other two angles. (2 points)





39. This map shows where Todd and his friends live.

> Todd found the shortest distance to each friend's house traveling only on the gridlines.

Which two friends live the same distance from Todd?

- A. Marcus and Tara
- B. Lisa and Marcus
- C. Sam and Tara
- D. Sam and Lisa



Item 40 has not been slated for public release in 2010.



41. A model is shown.



Mathematics

Which fraction of the model is shaded?



Item 42 has not been slated for public release in 2010.





- 43. Which statement describes the relationship between the diameter and the radius of a circle?
 - A. The radius is half of the diameter.
 - B. The radius is two times the diameter.
 - C. The radius is three times the diameter.
 - D. The radius is one-third of the diameter.



44. A number line is shown.



Which point on the number line represents 7 less than 4?

- A. E
- B. F
- C. G
- D. H



45. Charlie asked his friends how many movies they watched over the summer. The table shows his results.

Number of Movies Watched

Name	Number of Movies
Charlie	2
Kelly	6
Alex	4
Maria	4
Matt	9

What is the mean number of movies the group of friends watched over the summer?

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- A. 4 B. 5
- C. 7
- D. 25

Item 46 has not been slated for public release in 2010.

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