

Student Name: _____

Ohio Achievement Assessments



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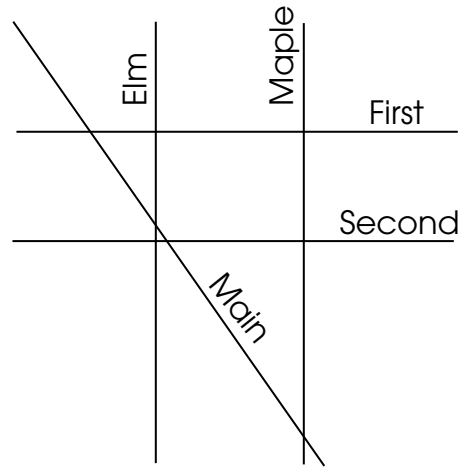
Mathematics Student Test Booklet Spring 2011

This test was originally administered to students in Spring 2011.

Not all items from the Spring 2011 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.

1. Five streets are shown.



Which street appears to be parallel to Elm Street?

- A. First Street
 - B. Main Street
 - C. Maple Street
 - D. Second Street
2. Which list includes all the factors of 21?
- A. 1, 2
 - B. 3, 7
 - C. 1, 21
 - D. 1, 3, 7, 21



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3. Shanelle grows pumpkins. The table shows the number of pumpkins she grew each year.

Year	Number of Pumpkins
2000	28
2001	36
2002	44
2003	52

Which statement describes the pattern in the number of pumpkins Shanelle grew from 2000 to 2003?

- A. Shanelle grew exactly 28 pumpkins each year.
 - B. Shanelle grew 8 more pumpkins each year than the year before.
 - C. Shanelle grew 28 more pumpkins each year than the year before.
 - D. Shanelle grew 8 times as many pumpkins each year than the year before.
4. Tamika is packing small objects in a shoe box. She needs to know the volume of the box.

Which unit of measure would she use to describe the volume?

- A. feet
- B. yards
- C. cubic inches
- D. square miles



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Item 5 has not been slated for public release in 2011.



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6. A book store is having a sale. Every poster now costs \$11 less than the original price. A table was created to show the original price and the sale price of the posters.

Which table can be used to find the cost of the posters during this sale?

A.

Original Price	\$16	\$19	\$21
Sale Price	\$5	\$30	\$11

B.

Original Price	\$16	\$19	\$21
Sale Price	\$5	\$8	\$10

C.

Original Price	\$16	\$19	\$21
Sale Price	\$27	\$30	\$32

D.

Original Price	\$16	\$19	\$21
Sale Price	\$11	\$11	\$11



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Item 7 has not been slated for public release in 2011.

8. The temperature was 12°F and it dropped 9°F .

Let t = the new temperature.

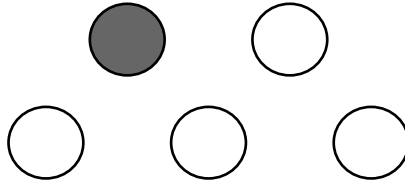
Which equation could be used to find the new temperature?

- A. $t = 12 - 9$
- B. $t = 12 + 9$
- C. $12 = t - 9$
- D. $9 = t - 12$



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9. A set of five circles is shown. Tina shaded one of the circles to represent a fraction.



Which model represents an equivalent fraction?

- A.
- B.
- C.
- D.

Item 10 has not been slated for public release in 2011.



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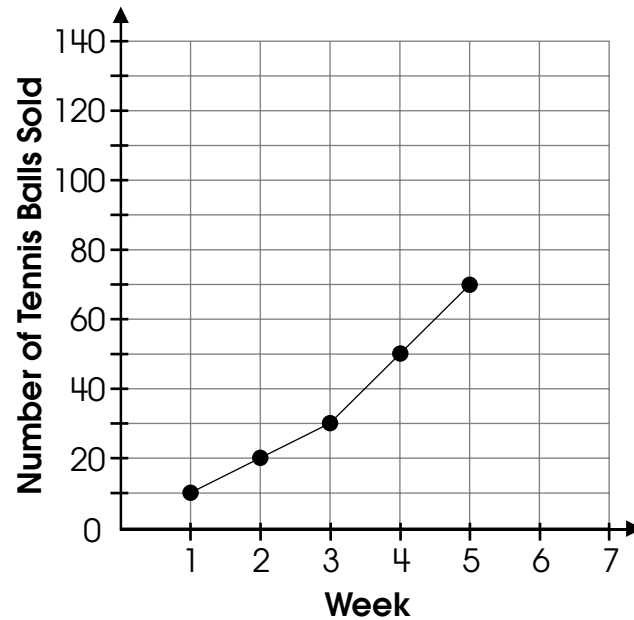
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11. The graph shows the number of tennis balls sold at Jane's Sports Shop by the end of weeks 1, 2, 3, 4, and 5.

Tennis Balls Sold at Jane's Sports Shop



Which is an appropriate prediction for the number of tennis balls that will be sold by the end of week 7?

- A. 20 tennis balls
- B. 70 tennis balls
- C. 80 tennis balls
- D. 110 tennis balls

On the Spring 2011 Grade 4 Mathematics Achievement Assessment, items 12–17 are field-test items, which are not released.

Items 18–24 have not been slated for public release in 2011.



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25. Which unit is appropriate for measuring the area of a postage stamp?
- A. cubic centimeter
 - B. cubic meter
 - C. square centimeter
 - D. square meter

Item 26 has not been slated for public release in 2011.



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27. Carl had \$95. He bought 3 CDs for \$15 each.

Which number sentence can be used to find how much money, m , Carl has left?

- A. $95 - 3 + 15 = m$
- B. $95 - (3 \times 15) = m$
- C. $95 - (3 \times m) = 15$
- D. $95 - 3 + m = 15$

Item 28 has not been slated for public release in 2011.



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29. Mr. Scott is rolling a cube with the faces numbered from 1 through 6.

What is the likelihood that Mr. Scott will roll an 8?

- A. 0
- B. $\frac{1}{8}$
- C. $\frac{1}{6}$
- D. 1

Items 30–32 have not been slated for public release in 2011.



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33. A headline states: "Attendance at Fair About 3,600."

The exact attendance was rounded to the nearest hundred.

Which could be the exact attendance?

- A. 3,509
- B. 3,543
- C. 3,624
- D. 3,699

Items 34–39 have not been slated for public release
in 2011.



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40. Patty is ordering a cake from the choices shown.

Choices

Cake	Frosting
Yellow	Cherry
Marble	Vanilla
White	Chocolate

How many different combinations of one kind of cake and one kind of frosting can Patty choose?

- A. 2
- B. 3
- C. 6
- D. 9
41. Which is equal to $\frac{5}{5}$?

- A. $\frac{1}{5}$
- B. 0.55
- C. 1
- D. 5.5



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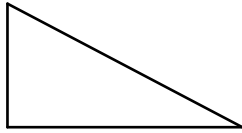


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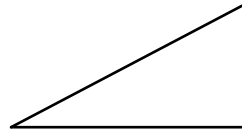


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43. Lucy drew triangle 1.



Triangle 1



Triangle 2

Which transformation did Lucy use to make triangle 2?

- A. reflection (flip)
- B. no transformation
- C. translation (slide)
- D. rotation (turn)



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44. Gary is making lemonade, using a recipe that calls for $1\frac{1}{4}$ cups of sugar. He has already added $\frac{3}{4}$ cup of sugar to the pitcher.

How much more sugar does Gary need to add to the pitcher to make the lemonade? _____

Use pictures or numbers to show how you determined how much sugar he needs to add.



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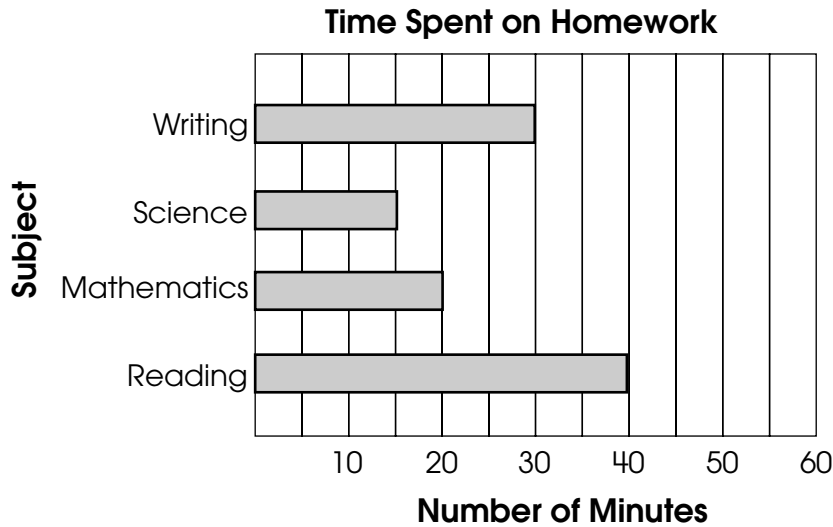


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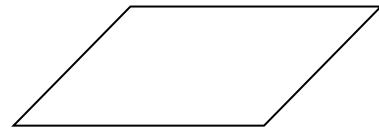
45. The graph shows the amount of time Chaz spent on his homework assignments during one week.



How much more time did Chaz spend doing reading homework than science homework?

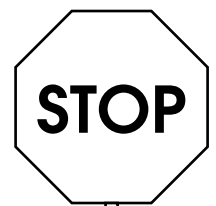
- A. 15 minutes
- B. 25 minutes
- C. 40 minutes
- D. 55 minutes

46. Kim drew the shapes shown.



Which statement is true about the shapes that Kim drew?

- A. Each shape appears to have 4 acute angles.
- B. Each shape appears to have 4 congruent angles.
- C. Each shape appears to have 2 pairs of parallel sides.
- D. Each shape appears to have at least 1 pair of parallel sides.



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