

# Ohio's State Tests

**PRACTICE TEST**

**GRADE 6  
MATHEMATICS**

**Student Name**

---

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.

Copyright © 2019 by the Ohio Department of Education. All rights reserved.

## Ohio's State Tests Reference Sheet

### Grades 6 and 7

1 mile = 1,760 yards

1 pound = 16 ounces

1 cup = 8 fluid ounces

1 mile = 5,280 feet

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 kilometer = 1,000 meters

1 kilogram = 1,000 grams

1 liter = 1,000 milliliters

1 meter = 100 centimeters

1 centimeter = 10 millimeters



- [illegible]

- Answer boxes
- Negative sign
- Fraction bar
- Decimal point
- Number bubbles



You can record a mixed number in several different ways. You can write it as:

<p>a. A whole number and a fraction (15 1/2). Be sure to include a space between the whole number and the fraction.</p> <div><table border="1"><tr><td>1</td><td>5</td><td></td><td>1</td><td>/</td><td>2</td><td></td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td></td><td>/</td><td>/</td><td>/</td><td>●</td><td>/</td><td></td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>●</td><td>1</td><td>1</td><td>●</td><td>1</td><td>1</td><td>1</td></tr><tr><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>●</td><td>2</td></tr><tr><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr><tr><td>5</td><td>●</td><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td></tr><tr><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td></tr><tr><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td></tr></table></div>	1	5		1	/	2		○	○	○	○	○	○	○		/	/	/	●	/		○	○	○	○	○	○	○	0	0	0	0	0	0	0	●	1	1	●	1	1	1	2	2	2	2	2	●	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	●	5	5	5	5	5	6	6	6	6	6	6	6	7	7	7	7	7	7	7	8	8	8	8	8	8	8	9	9	9	9	9	9	9	<p>b. An equivalent fraction (31/2)</p> <div><table border="1"><tr><td>3</td><td>1</td><td>/</td><td>2</td><td></td><td></td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td></td><td>/</td><td>●</td><td>/</td><td>/</td><td>/</td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>●</td><td>1</td><td>1</td><td>1</td><td>1</td></tr><tr><td>2</td><td>2</td><td>2</td><td>●</td><td>2</td><td>2</td></tr><tr><td>●</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr><tr><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td></tr><tr><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td></tr><tr><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td></tr></table></div>	3	1	/	2			○	○	○	○	○	○		/	●	/	/	/	○	○	○	○	○	○	0	0	0	0	0	0	1	●	1	1	1	1	2	2	2	●	2	2	●	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	9	<p>c. An equivalent decimal (15.5)</p> <div><table border="1"><tr><td>1</td><td>5</td><td>.</td><td>5</td><td></td><td></td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td></td><td>/</td><td>/</td><td>/</td><td>/</td><td>/</td></tr><tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>●</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr><tr><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr><tr><td>5</td><td>●</td><td>5</td><td>●</td><td>5</td><td>5</td></tr><tr><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td></tr><tr><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td></tr><tr><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td></tr></table></div>	1	5	.	5			○	○	○	○	○	○		/	/	/	/	/	○	○	○	○	○	○	0	0	0	0	0	0	●	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	●	5	●	5	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	9
1	5		1	/	2																																																																																																																																																																																																																																																																							
○	○	○	○	○	○	○																																																																																																																																																																																																																																																																						
	/	/	/	●	/																																																																																																																																																																																																																																																																							
○	○	○	○	○	○	○																																																																																																																																																																																																																																																																						
0	0	0	0	0	0	0																																																																																																																																																																																																																																																																						
●	1	1	●	1	1	1																																																																																																																																																																																																																																																																						
2	2	2	2	2	●	2																																																																																																																																																																																																																																																																						
3	3	3	3	3	3	3																																																																																																																																																																																																																																																																						
4	4	4	4	4	4	4																																																																																																																																																																																																																																																																						
5	●	5	5	5	5	5																																																																																																																																																																																																																																																																						
6	6	6	6	6	6	6																																																																																																																																																																																																																																																																						
7	7	7	7	7	7	7																																																																																																																																																																																																																																																																						
8	8	8	8	8	8	8																																																																																																																																																																																																																																																																						
9	9	9	9	9	9	9																																																																																																																																																																																																																																																																						
3	1	/	2																																																																																																																																																																																																																																																																									
○	○	○	○	○	○																																																																																																																																																																																																																																																																							
	/	●	/	/	/																																																																																																																																																																																																																																																																							
○	○	○	○	○	○																																																																																																																																																																																																																																																																							
0	0	0	0	0	0																																																																																																																																																																																																																																																																							
1	●	1	1	1	1																																																																																																																																																																																																																																																																							
2	2	2	●	2	2																																																																																																																																																																																																																																																																							
●	3	3	3	3	3																																																																																																																																																																																																																																																																							
4	4	4	4	4	4																																																																																																																																																																																																																																																																							
5	5	5	5	5	5																																																																																																																																																																																																																																																																							
6	6	6	6	6	6																																																																																																																																																																																																																																																																							
7	7	7	7	7	7																																																																																																																																																																																																																																																																							
8	8	8	8	8	8																																																																																																																																																																																																																																																																							
9	9	9	9	9	9																																																																																																																																																																																																																																																																							
1	5	.	5																																																																																																																																																																																																																																																																									
○	○	○	○	○	○																																																																																																																																																																																																																																																																							
	/	/	/	/	/																																																																																																																																																																																																																																																																							
○	○	○	○	○	○																																																																																																																																																																																																																																																																							
0	0	0	0	0	0																																																																																																																																																																																																																																																																							
●	1	1	1	1	1																																																																																																																																																																																																																																																																							
2	2	2	2	2	2																																																																																																																																																																																																																																																																							
3	3	3	3	3	3																																																																																																																																																																																																																																																																							
4	4	4	4	4	4																																																																																																																																																																																																																																																																							
5	●	5	●	5	5																																																																																																																																																																																																																																																																							
6	6	6	6	6	6																																																																																																																																																																																																																																																																							
7	7	7	7	7	7																																																																																																																																																																																																																																																																							
8	8	8	8	8	8																																																																																																																																																																																																																																																																							
9	9	9	9	9	9																																																																																																																																																																																																																																																																							

## Directions:

Today you will be taking the Ohio Grade 6 Mathematics Practice Assessment.

There are several important things to remember:

1. 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 in your Answer Document.
2. Use only a #2 pencil to answer questions on this test.
3. For questions with bubbled responses, choose the correct answer and then fill in the circle with the appropriate letter in your Answer Document. Make sure the number of the question in this Student Test Booklet matches the number in your Answer Document. 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.
4. For questions with response boxes, write your answer neatly, clearly and only in the space provided in your Answer Document. Any responses written in your Student Test Booklet will not be scored. Make sure the number of the question in this Student Test Booklet matches the number in your Answer Document.
5. 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.
6. Check over your work when you are finished.

1.

This item cannot be rendered as a paper/pencil item.

2.

This item cannot be rendered as a paper/pencil item.



3. Which number is the farthest from  $-2$  on the number line?

- A. 6
- B. 0
- C.  $-1$
- D.  $-9$



4. In the **Answer Document**, select the **three** statements that represent a unit rate.

- A. Carrots cost \$2 per pound.
- B. Sylvia buys 5 shirts for \$75.
- C. It takes Juan 3 hours to drive 165 miles.
- D. A recipe calls for 2 cups of sugar for every gallon of water.
- E. A teacher divides her students so that there are 11 students per group.

5. What is the distance between  $(-2, 4)$  and  $(5, 4)$  on a coordinate grid?

Complete the response grid in the **Answer Document**.



6.

This item cannot be rendered as a paper/pencil item.

7. In the **Answer Document**, select the **three** expressions that are equivalent to  $8h + 4g$ .

- A.  $2h + g$
- B.  $4(2h + g)$
- C.  $4h + 4h + 3g + g$
- D.  $\frac{1}{4}(2h + g)$
- E.  $2(4h + 2g)$
- F.  $\frac{1}{8}(8h + 4g)$



8.

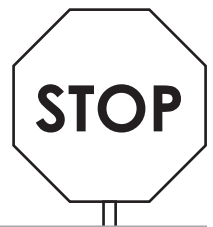
This item cannot be rendered as a paper/pencil item.

9.

This item cannot be rendered as a paper/pencil item.

10. In the **Answer Document**, select a box to match each expression on the left to its equivalent expression.

	$30 + 24$	$30 + 27$	$42 + 12$	$42 + 36$
$3(10 + 9)$	<input type="text" value="A"/>	<input type="text" value="B"/>	<input type="text" value="C"/>	<input type="text" value="D"/>
$6(5 + 4)$	<input type="text" value="E"/>	<input type="text" value="F"/>	<input type="text" value="G"/>	<input type="text" value="H"/>
$6(7 + 6)$	<input type="text" value="I"/>	<input type="text" value="J"/>	<input type="text" value="K"/>	<input type="text" value="L"/>

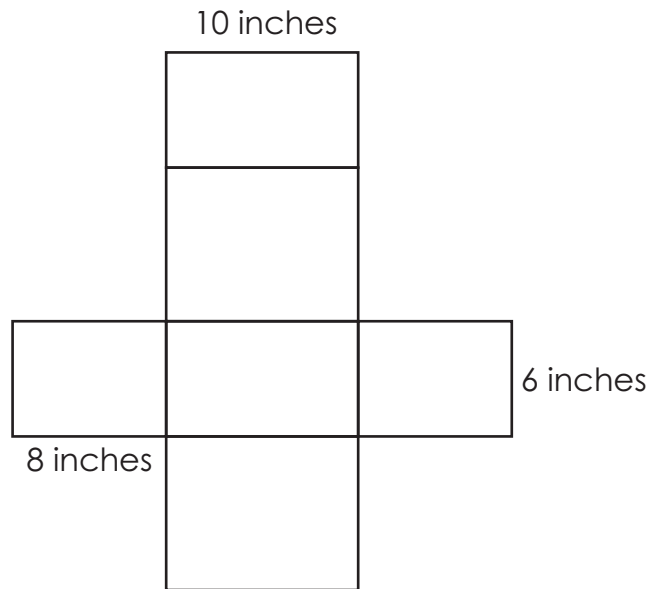


Do not go on

Do not go on

## Grade 6 Math—Part 2

1. Janice makes a box in the shape of a rectangular prism. A net of the box is shown.



What is the surface area of the box?

Complete the response grid in the **Answer Document**.

2.

This item cannot be rendered as a paper/pencil item.

3.

This item cannot be rendered as a paper/pencil item.





4. Students at a school went on a trip. The given equation models the total cost of the trip, where  $x$  is the number of students who went on the trip.

$$18x = 900$$

How many students went on the trip?

Complete the response grid in the **Answer Document**.

5. The area of a rectangular tabletop is 4 square feet ( $\text{ft}^2$ ). Cassie will cover the tabletop with square tiles that each have an area of 1 square inch ( $\text{in}^2$ ).

How many tiles does Cassie need to completely cover the tabletop?

Complete the response grid in the **Answer Document**.

6. Ethan asks his seventh-grade class at Harmon Middle School four questions.

Which question that Ethan asks is a statistical question?

- A. What is your favorite subject this year?
- B. Who is the principal of Harmon Middle School?
- C. How many subjects are there in seventh grade?
- D. How many students enrolled in seventh grade at the start of this year?



7.

This item cannot be rendered as a paper/pencil item.

8. A chef makes 3 containers of soup that fill a total of 120 soup bowls. Each container of soup costs \$30 to make.

What is the cost per bowl for the soup?

Complete the response grid in the **Answer Document**.

9. An expression is given.

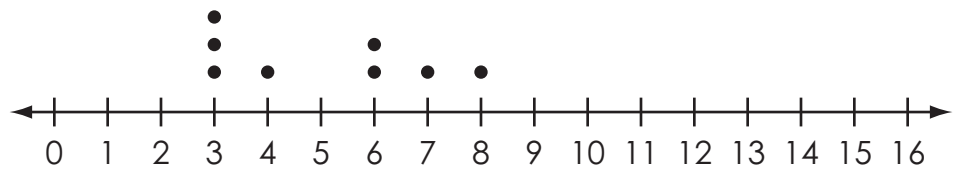
$$7b - 3$$

Which phrase describes the expression?

- A. the difference of 7 plus a number  $b$  and 3
- B. 7 times the difference of a number  $b$  and 3
- C. 3 subtracted from the product of 7 and a number  $b$
- D. the product of 3 subtracted from 7 and a number  $b$



10. A data set is displayed in the dot plot shown.



What is the mean of the data set?

Complete the response grid in the **Answer Document**.

11. What is 58% of 18?

Complete the response grid in the **Answer Document**.

12. An expression is shown.

$$\frac{1}{2}(a + b) - c$$

In the **Answer Document**, select all of the descriptions that apply to each part of the expression.

	Factor	Sum	Term
$(a + b)$	<div>A</div>	<div>B</div>	<div>C</div>
$\frac{1}{2}$	<div>D</div>	<div>E</div>	<div>F</div>
$c$	<div>G</div>	<div>H</div>	<div>I</div>

13.

This item cannot be rendered as a paper/pencil item.

14.

This item cannot be rendered as a paper/pencil item.

15. A bank converts U.S. dollars to European euros at a rate of \$1 for 0.88 euros. Kelsey wants 100 euros for her trip to Europe.

How much money, in dollars, does Kelsey need to give the bank?

Complete the response grid in the **Answer Document**.



16.

This item cannot be rendered as a paper/pencil item.

17.

This item cannot be rendered as a paper/pencil item.

