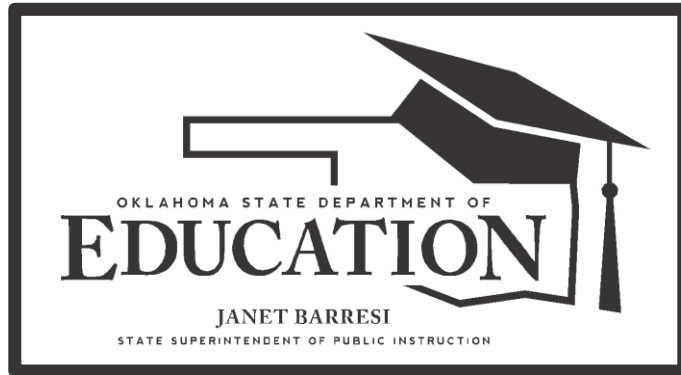


# Oklahoma School Testing Program



## Oklahoma Core Curriculum Tests

## Released Items

Aligned to Oklahoma Academic Standards  
for College and Career Readiness for 2014-2015

[\(Link to OAS\)](#)

Grade 6  
Mathematics

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Oklahoma State Department of Education  
Oklahoma City, Oklahoma



# Directions

Read each question and choose the best answer.

**1** A salesperson made 64 phone calls. Of these calls, 10 were wrong numbers. What is the ratio of wrong numbers to the total number of phone calls?

**A**  $\frac{5}{32}$

**B**  $\frac{5}{27}$

**C**  $\frac{27}{32}$

**D**  $\frac{32}{37}$

**2** The cost for a national 30-second TV commercial during a highly rated series is \$300,000. What is the cost per second?

**A** \$10,000 per second

**B** \$10,030 per second

**C** \$299,970 per second

**D** \$9,000,000 per second



- 3** A recipe uses 2 cups of beans to make 9 cups of soup. How many gallons of this soup can be made using 6 quarts of beans?

4 cups = 1 quart  
4 quarts = 1 gallon

- A**  $1\frac{1}{3}$  gallons  
**B**  $6\frac{3}{4}$  gallons  
**C** 27 gallons  
**D** 108 gallons

- 4** A herd of 19 hippos has a total weight of 77,634 pounds. What is the average weight of a hippo in the herd?

- A** 4,017 pounds  
**B** 4,086 pounds  
**C** 4,117 pounds  
**D** 4,186 pounds



**5** In February, the height of the water in a lake was 1,018.38 feet. The height of the water in the lake dropped an average of 0.08 feet each month for the next 7 months. What was the height of the water in the lake after the 7 months?

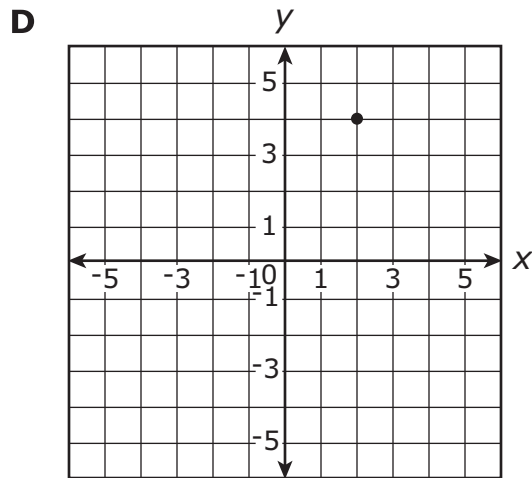
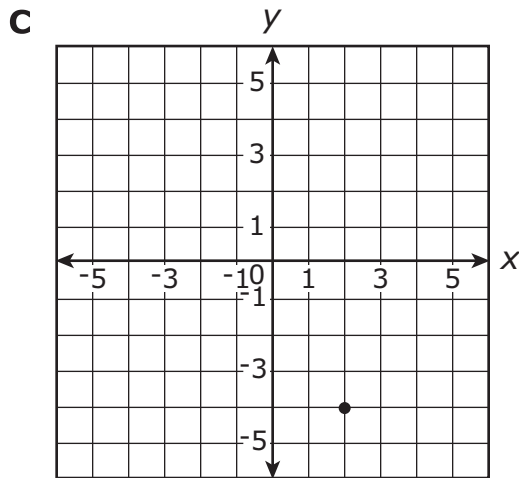
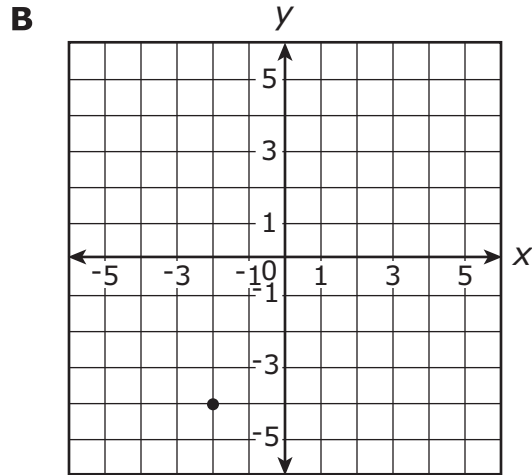
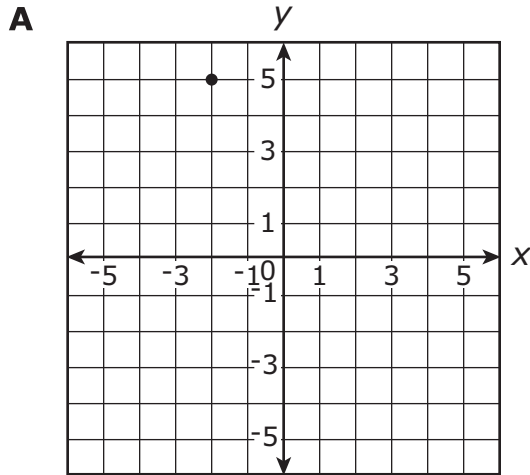
- A 962.38 feet
- B 1,012.78 feet
- C 1,017.82 feet
- D 1,018.22 feet

**6** Which situation has a total value of zero?

- A A student buys an item for \$8.60 and then buys another item for \$8.60.
- B A student buys an item for \$8.60 and then still has \$8.60.
- C A student has \$8.60 and then buys an item for \$8.60.
- D A student has \$8.60 and then earns another \$8.60.

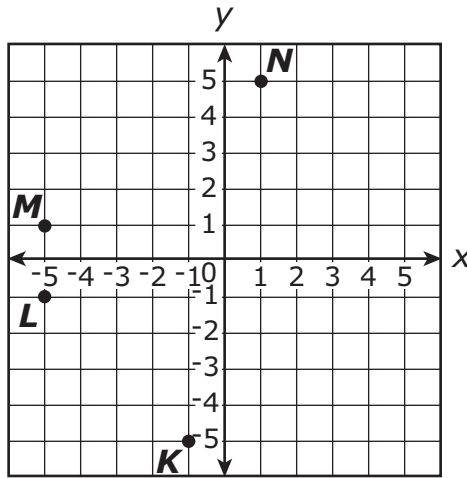


7 A teacher plotted point  $V(2, -4)$  on a coordinate plane. Which graph represents point  $V$ ?



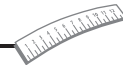


8



Which point is located at  $(-1, -5)$ ?

- A *K*
- B *L*
- C *M*
- D *N*



9 Which expression has a value of  $-27$ ?

- A  $|-27|$
- B  $-|-27|$
- C  $-(-27)$
- D  $-(-|27|)$

10 This table shows the low temperatures recorded at two weather stations in two states.

Low Temperatures

State	Station Location	Temperature
Oklahoma	Watts	$27^{\circ}\text{F}$ below zero
Texas	Seminole	$23^{\circ}\text{F}$ below zero

Which inequality shows the relationship between the two temperatures?

- A  $-27 < -23$
- B  $-27 > -23$
- C  $27 < 23$
- D  $-27 > 23$



**11** A city map is on a coordinate grid. The playground is located at  $(-5, 4)$ . The zoo is located at  $(-5, -2)$ . If each grid line represents 1 mile, what is the distance between the playground and the zoo?

- A 2 miles
- B 3 miles
- C 5 miles
- D 6 miles

**12**

$$3^3 \div (12 - 8)^2$$

What is the value of this expression?

- A  $\frac{9}{16}$
- B  $1\frac{1}{8}$
- C  $1\frac{11}{16}$
- D  $3\frac{3}{8}$





**13** Which expression represents the product of 10 and  $x + 12$ ?

- A  $10x + 12$
- B  $10(x + 12)$
- C  $10 + x + 12$
- D  $10 + (x + 12)$

**14** Which term is the divisor in the expression  $18 \div (x + 5)$ ?

- A  $x$
- B 18
- C  $(x + 5)$
- D  $(18 \div x)$



**15** Which expression is equivalent to  $20 + 6(h + 8)$ ?

- A  $6h + 68$
- B  $6h + 28$
- C  $h + 68$
- D  $h + 34$

**16**

$$c \times 16 = 144$$

**Which statement about the solution to the equation is true?**

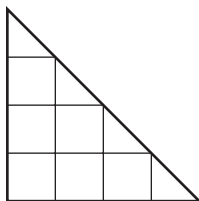
- A The solution is 9 because  $144 \div 16 = 9$ .
- B The solution is 16 because  $9 \times 16 = 144$ .
- C The solution is 128 because  $144 - 16 = 128$ .
- D The solution is 2,304 because  $16 \times 144 = 2,304$ .



**17** A bird watcher counted 64 birds in one park. The bird watcher counted 26 birds in a second park. Which equation can be used to find  $b$ , the difference in the numbers of birds at the two parks?

- A  $26 - b = 64$
- B  $64 - b = 26$
- C  $b - 26 = 64$
- D  $b - 64 = 26$

**18**



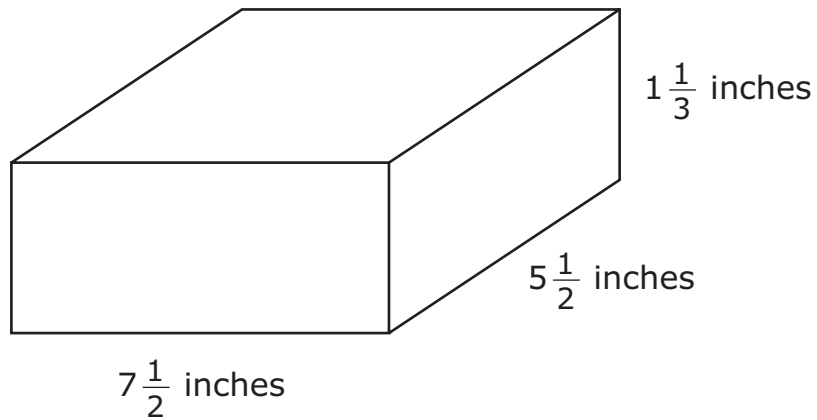
**Key:**  = 1 square yard

**What is the area of the triangle?**

- A 6 square yards
- B 8 square yards
- C 12 square yards
- D 16 square yards



19

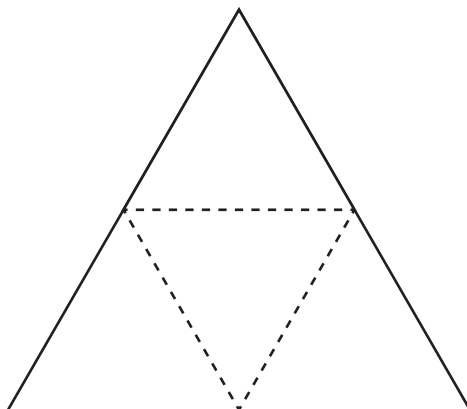


**What is the volume of this box?**

- A**  $14\frac{1}{3}$  cubic inches
- B**  $17\frac{1}{3}$  cubic inches
- C** 35 cubic inches
- D** 55 cubic inches



**20** The net of a triangular pyramid is shown.



**The area of each triangle is 6 square centimeters. What is the surface area of the triangular pyramid?**

- A** 72 square centimeters
- B** 36 square centimeters
- C** 24 square centimeters
- D** 10 square centimeters



**21** The table shows the number of days each track team member practiced over the past 100 days.

**Track Team**

Total Number of Days Members Practiced	Number of Track Team Members
45	1
53	1
81	2
85	2
93	3
100	1

**Which statement correctly compares the median and the range of the data?**

- A** The median is 26 days more than the range.
- B** The median is 30 days more than the range.
- C** The median is 38 days more than the range.
- D** The median is 55 days more than the range.



**22** Which two values for a data set describe measures of center?

- A mean and median
- B range and median
- C interquartile range and median
- D interquartile range and range

**23** Two numbers will be added to the data set.

70, 95, 75, 90, 80, 90, 70,   ?  ,   ?  

Which two numbers could be added to the data set so the median will remain the same and the range will be 30?

- A 30 and 65
- B 65 and 70
- C 75 and 95
- D 75 and 100



This is an example of a technology-enhanced item: instead of students choosing the correct answer from given choices, they drag the numbers into the appropriate boxes, using all given choices.

**24** Order the five numbers from least to greatest.

Click and drag the numbers into the boxes.

Least

Greatest

$|-7|$

$-5$

$0$

$-3$

$|4|$





This is an example of a two-part evidence-based assessment item for which students answer the first part, then answer a related second question and explain that answer.

**25 Part 1**

The table shows the elevation of some cities in the United States.

**Elevation of Cities**

<b>City</b>	<b>Elevation in Feet Compared to Sea Level</b>
Honolulu	0
Long Beach	-7
New Orleans	-8
Washington, D.C.	1

Which list correctly shows the elevations in order from greatest to least?

- A** -8, -7, 0, 1
- B** -8, -7, 1, 0
- C** 1, 0, -7, -8
- D** 1, 0, -8, -7



**Part 2**

1. In Long Beach there is a sea wall, built to protect the beaches from erosion. The sea wall is 20 feet tall. How much higher than the city's elevation is the top of the sea wall?
2. Explain how you got your answer.

<p><b>Evidence Statement</b></p>	<p>Students understand ordering of rational numbers, and they can use positive and negative numbers to represent quantities in real-world applications.</p>
<p><b>Rubric</b></p>	<p>Student responses may include, but are not limited to, this:                      a. Explains that the top of the sea wall is 20 feet more than the city's elevation, so <math>(-7) + 20 = 13</math> feet higher.</p>



# Oklahoma 2014-2015

## Released Items Answer Key Grade 6

Item Number	Correct Answer	Domain	Standard
1	A	Ratios & Proportional Relationships	1
2	A	Ratios & Proportional Relationships	2
3	B	Ratios & Proportional Relationships	3
4	B	The Number System	2
5	C	The Number System	3
6	C	The Number System	5
7	C	The Number System	6
8	A	The Number System	6
9	B	The Number System	7
10	A	The Number System	7
11	D	The Number System	8
12	C	Expressions & Equations	1
13	B	Expressions & Equations	2
14	C	Expressions & Equations	2
15	A	Expressions & Equations	3
16	A	Expressions & Equations	5
17	B	Expressions & Equations	6
18	B	Geometry	1
19	D	Geometry	2
20	C	Geometry	4
21	B	Statistics & Probability	2
22	A	Statistics & Probability	3
23	D	Statistics & Probability	5
24	-5, -3, 0,  4 ,  -7	The Number System	7
25	Part A: C Part B1: Ron's house will be flooded by 2 ft. of water. $-7 + 14 = 7$ (wave ht.) $7 - 5 = 2$ . Part B2: See Rubric for sample correct answer.	The Number System	7