

# **D**irections

Read each question and choose the best answer.

Jonah has a jar of pencils. The table shows the number of pencils remaining in the jar each week.

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Jonah's Pencil Jar

Week	Number of Pencils	
0	100	
2	92	
4	84	
6	76	

At the beginning of each week he takes the same number of pencils out of the jar. How many pencils does Jonah remove from the jar each week?

- A 2 pencils
- **B** 4 pencils
- C 8 pencils
- **D** 12 pencils
- Malia incorrectly graphed the equation  $y = \frac{2}{3}x + 12$  with a slope of  $\frac{3}{2}$ .

What should Malia's corrected graph look like?

- **A** vertical
- **B** horizontal
- C less steep
- **D** more steep

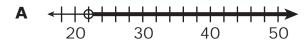


Shelley and her dad were building a wall with 63 bricks. Shelley carried 3 bricks at a time to the wall. Her dad carried only one pile of 6 bricks. The equation can be used to find the number of times, x, it took Shelley to carry the rest of the bricks to the wall.

$$63 = 3x + 6$$

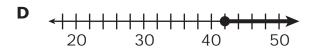
How many times, x, will it take Shelley to carry the rest of the bricks to the wall?

- A 10 times
- **B** 15 times
- C 19 times
- **D** 23 times
- 4 Mara read that the temperature had to be more than 10 degrees above freezing (32 degrees) for a decal to stick to a surface. Which graph represents all of the temperatures that will allow a decal to stick?











Harold experimented with a recipe by changing the number of cups of flour used. He tried four different changes in the original recipe.

Changes in Original Recipe

Recipe	Change in Cups of Flour	
1	1/3	
2	<del>-</del> 1/2	
3	$1\frac{1}{4}$	
4	- <u>3</u>	

Which recipe used the least amount of flour?

- A recipe 1
- **B** recipe 2
- **C** recipe 3
- **D** recipe 4
- The length of one side of a square is approximately  $\sqrt{181}$  inches. Which could be the length of one side of the square?
  - A 13.5 inches
  - **B** 19 inches
  - **C** 90.5 inches
  - **D** 109 inches



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- **7** Keisha has a square jigsaw puzzle with an area of 41 square inches. Which is the best estimate of the length of each side of Keisha's puzzle?
  - A 4 inches
  - **B** 6 inches
  - C 10 inches
  - **D** 20 inches
- Sarah is making pillows. She uses  $2\frac{1}{3}$  yards (yd) of fabric to make

  5 pillows. How many yards of fabric will Sarah use to make 20 pillows?
  - **A**  $6\frac{1}{3}$  yd
  - **B**  $9\frac{1}{3}$  yd
  - **C**  $17\frac{1}{3}$  yd
  - **D**  $42\frac{6}{7}$  yd
- Paul made 8 out of 10 free throw attempts during basketball practice. How many free throws must Edward make out of 5 attempts in order to make the same ratio as Raul?
  - **A** 4 free throws
  - **B** 3 free throws
  - C 2 free throws
  - **D** 1 free throw

#### Mathematics -



10 Beth correctly answered 5 out of 6 questions on her test. What percent of the 6 questions did Beth answer correctly?

- **A**  $16\frac{2}{3}\%$
- **B** 56%
- **C** 65%
- **D**  $83\frac{1}{3}\%$

11 After taking 20% off of the original price, Victor paid \$14 for a book. What was the original price of the book?

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**A** \$14.20

- **B** \$14.80
- **C** \$16.80
- **D** \$17.50

12 What is the value of the expression shown below?

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- **A** -49
- **B** -45
- **C** -33
- **D** -25



Triangle XYZ is obtuse. Which list could represent the angle measures of triangle XYZ?

**A** 20°, 60°, 100°

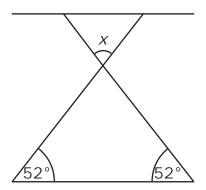
**B** 30°, 60°, 90°

**C** 50°, 50°, 80°

**D** 60°, 60°, 60°

14 Curt drew this figure using two parallel lines.





What is the measure of x?

**A** 38°

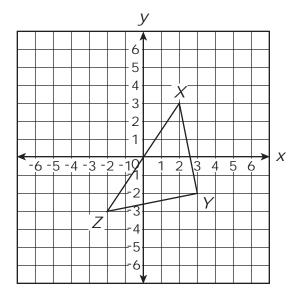
**B** 52°

**C** 76°

**D** 128°



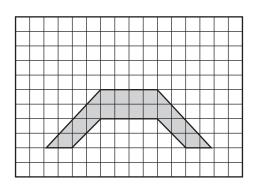
Triangle XYZ is to be translated 4 units to the right and 1 unit down to create triangle X' Y' Z'.



- What will be the coordinates of point X'?
- **A** (6, 2)
- **B** (-2, 4)
- **C** (4, -2)
- **D** (2, 6)

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Key:  $\square = 1$  sq unit

What is the area of the shaded figure?

- A 10 sq units
- **B** 15 sq units
- C 20 sq units
- **D** 25 sq units

Diane is planning to carpet the floor of her rectangular room. The length of the room is 12 feet, and the width of the room is 9 feet. How many square yards (sq yd) of carpet will it take to cover Diane's floor?

- **A** 12 sq yd
- **B** 21 sq yd
- **C** 36 sq yd
- **D** 108 sq yd



Oliver made a pizza that was the same size as the pizza pan he used. The area of the pizza pan was  $16\pi$  square inches. What will be the circumference, in inches, of his pizza?

- **A**  $4\pi$  inches
- **B**  $8\pi$  inches
- **C**  $16\pi$  inches
- **D**  $32\pi$  inches

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José designed a sign for his shop window using one rectangle and 2 identical semicircles with radius of 4 inches (in.). Which expression can be used to find the perimeter of the sign?

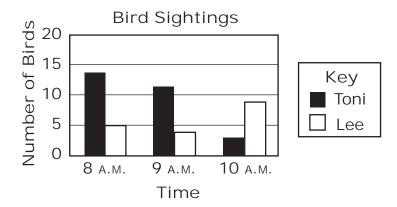
$$\mathbf{circumference}_{\mathbf{circle}}\mathbf{=}\,\pi\boldsymbol{d}$$

- **A** 2(24) + 3.14(4)
- **B** 2(24) + 3.14(8)
- **C**  $2(24) + 3.14(0.5 \cdot 4)$
- **D**  $2(24) + 3.14(0.5 \cdot 8)$



Toni and Lee went bird watching. The double bar graph shows the number of birds each saw at different times.

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#### According to the graph, which statement is true?

- **A** For every hour, Toni saw more birds than Lee saw.
- **B** For every hour, Lee saw more birds than Toni saw.
- **C** Lee saw more than half the total number of birds that Toni saw.
- **D** Toni saw more than twice the total number of birds that Lee saw.



The teacher randomly selected one of these students to make a presentation.

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### Students' Names

Ray

Brad

Sarah

Atiene

Anish

Rachel

Brandon

Rohan

What is the probability that the student's name began with an A or B?

- **A** 25%
- **B** 38%
- **C** 50%
- **D** 75%
- There are 3 red, 4 blue, 1 green, and 2 pink gumballs in a bowl. What is the probability of picking a blue gumball and then a pink gumball without replacement?
  - $\mathbf{A} = \frac{3}{5}$
  - **B**  $\frac{6}{19}$
  - $c = \frac{2}{25}$
  - **D**  $\frac{4}{45}$



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9, 7, 5, 6, 7, *x* 

Which value of *x* would make the mean and the median of the data set the same?

- **A** 4
- **B** 7
- **C** 8
- **D** 9

## Oklahoma 2011-2012 Released Items Answer Key Grade 7

Item Number	Correct Answer	Standard	Objective	Skill
1	В	1	1	
2	С	1	1	
3	С	1	2	
4	С	1	3	
5	D	2	1	a
6	A	2	1	b
7	В	2	1	b
8	В	2	2	a
9	A	2	2	a
10	D	2	2	b
11	D	2	2	b
12	C	2	2	c
13	A	3	1	
14	C	3	2	
15	A	3	3	
16	C	4	1	
17	A	4	1	
18	В	4	2	
19	В	4	3	
20	C	5	1	
21	C	5	2	
22	D	5	2	
23	C	5	3	