

### Grade 4 Test Specs

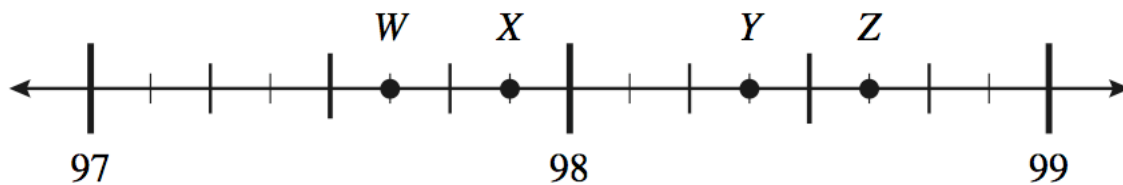
#### Multiple Choice

Identify the choice that best completes the statement or answers the question.

\_\_\_\_\_ 1. Mr. Desai has 112 art students. He gave each student 150 dried beans to use for a project. What is the total number of dried beans Mr. Desai gave his students?

- a. 267
- b. 1680
- c. 5600
- d. 16800

\_\_\_\_\_ 2. Naomi plotted four points on the number line below.



Which letter represents the point plotted at  $98\frac{3}{8}$ ?

- a. W
- b. X
- c. Y
- d. Z

Name: \_\_\_\_\_

ID: A

- \_\_\_\_\_ 3. At a county fair, four farmers entered their hogs in a contest. The weights of their hogs are shown in the table below.

### HOG CONTEST

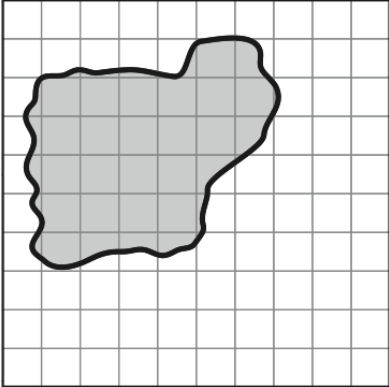
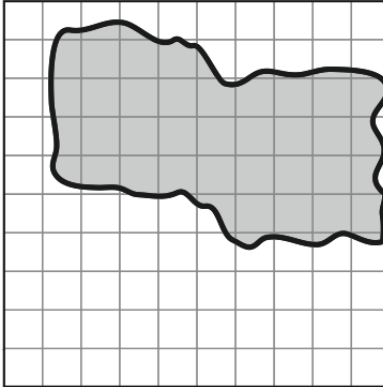
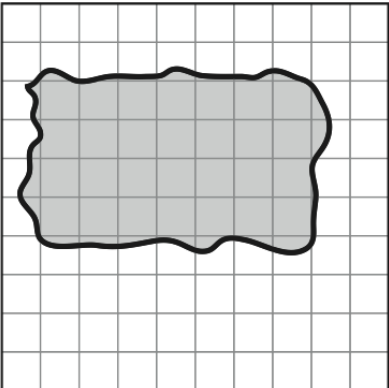
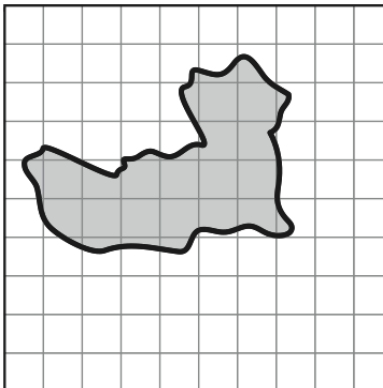
Farmer	Weight of Hog (in pounds)
Ethan	252.09
Gina	247.99
Miguel	252.8
Rebecca	236.9

According to the table, which farmer's hog weighed the most?

- a. Ethan's
- b. Gina's
- c. Miguel's
- d. Rebecca's

- \_\_\_\_\_ 4. Carla drew a picture of the shape of a pond at the park. It has an area of about 28 square yards. Which of the following could be Carla's picture of the pond?

<b>SCALE</b>
□ = 1 square yard

<p>a. </p>	<p>c. </p>
<p>b. </p>	<p>d. </p>

- \_\_\_\_\_ 5. Mr. Clark hired workers to construct an in-ground pool in his backyard. For which of the following situations might the workers have used the area formula when constructing the pool?

- |  |   |
|--|---|
| <p>a. determining the amount of water needed to fill the pool</p> <p>b. determining the amount of fencing to put around the pool</p> | <p>c. determining the amount of ground the bottom of the pool will cover</p> <p>d. determining the amount of dirt that will need to be dug for the pool</p> |
|--|---|

- \_\_\_\_\_ 6. Mr. Hanson is getting new carpet in his classroom. Which is the best estimate of the total amount of carpet needed to cover the entire floor of a classroom?

- |   |   |
|---|---|
| <p>a. 6 square feet</p> <p>b. 6 square inches</p> | <p>c. 600 square feet</p> <p>d. 600 square inches</p> |
|---|---|

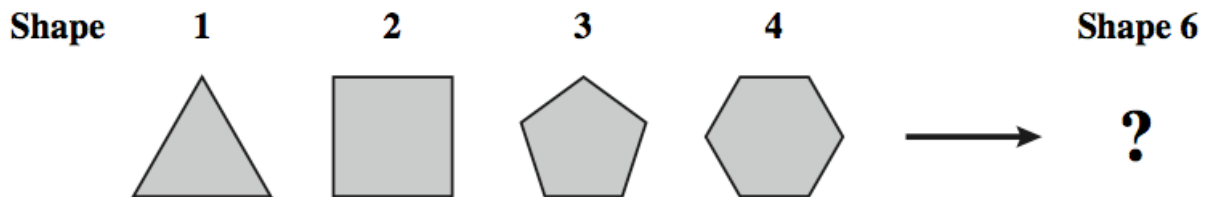
\_\_\_\_\_ 7. A number pattern is shown below:

3, 6, 9, 12, 15, 18 ...

What algebraic rule can be used to describe the pattern?

- a. add 1 to the previous number  
 b. add 3 to the previous number  
 c. multiply the previous number by 3  
 d. multiply the previous 2 numbers

\_\_\_\_\_ 8. Several shapes are shown below:



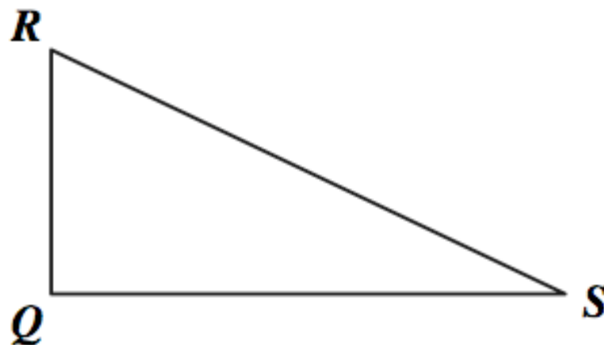
There is a relationship between the number of the shape and the number of sides that each shape has. If this same pattern continues, which expression below can be used to find the number of sides of Shape 6?

- a.  $6 + 1$   
 b.  $6 + 2$   
 c.  $6 \times 1$   
 d.  $6 \times 2$

\_\_\_\_\_ 9. Alex is 4 years more than twice as old as Sawyer. Which expression gives Alex's age using  $s$  for Sawyer's age?

- a.  $(4 + 2) \times s$   
 b.  $(s + 4) \times 2$   
 c.  $4s + 2$   
 d.  $2s + 4$

\_\_\_\_\_ 10. Lakia drew triangle QRS, as shown below.



Which is closest to the measure of  $\angle Q$ ?

- a.  $45^\circ$   
 b.  $90^\circ$   
 c.  $180^\circ$   
 d.  $360^\circ$

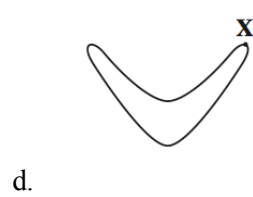
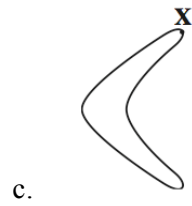
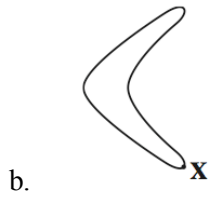
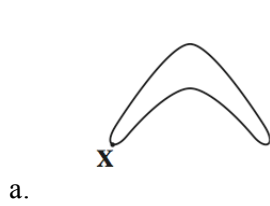
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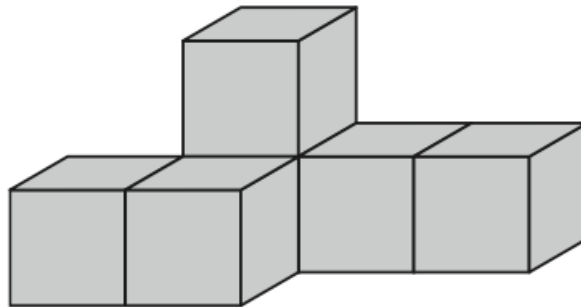
\_\_\_\_ 11. Native Australians sometimes used boomerangs. A picture of a boomerang is shown below.



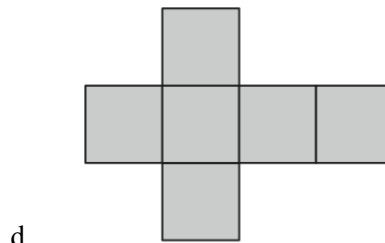
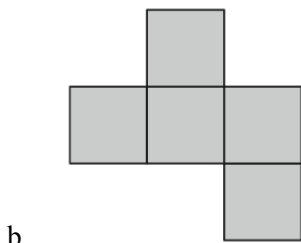
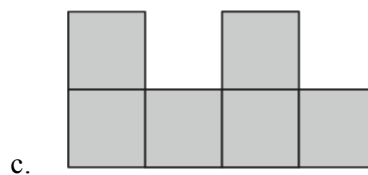
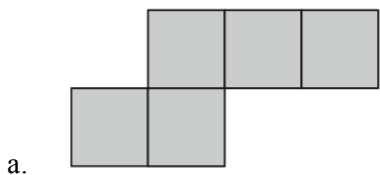
Which of the following pictures shows the boomerang rotated 90° counterclockwise around point X?



\_\_\_\_\_ 12. In art class, Duncan used wooden blocks to make the figure shown below.



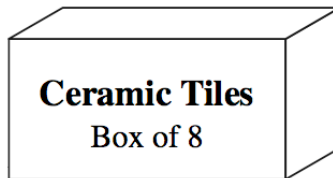
Which shows what Duncan's figure would look like when viewed from the top?



\_\_\_\_\_ 13. As of 2008, the number of seats at Ben Hill Griffin Stadium in Gainesville, Florida, was 88,548. At a certain event, 9,325 of the seats were empty. Which is the best estimate of the number of seats that were NOT empty at the event?

- a. 110,000
- b. 100,000
- c. 90,000
- d. 80,000

\_\_\_\_\_ 14. Ms. Parker is buying ceramic tiles to put on the floor of her shop. The tiles come 8 to a box.



Ms. Parker needs 176 tiles. Which of the following could be used to find  $n$ , the number of boxes of tiles Ms. Parker needs to buy?

- a.  $176 \times 8 = n$
- b.  $8 \div 176 = n$
- c.  $n \times 8 = 176$
- d.  $n \div 176 = 8$

\_\_\_\_\_ 15. On Sally's swim team,  $\frac{14}{20}$  of the team members are boys. Which fraction is equal to  $\frac{14}{20}$ ?

a.  $\frac{3}{4}$

c.  $\frac{7}{10}$

b.  $\frac{4}{5}$

d.  $\frac{20}{14}$

\_\_\_\_\_ 16. Megan's father won first place in a bicycle race. The race was divided into equal sections, each measuring exactly 7 miles in length. Which number could be the total number of miles of the race?

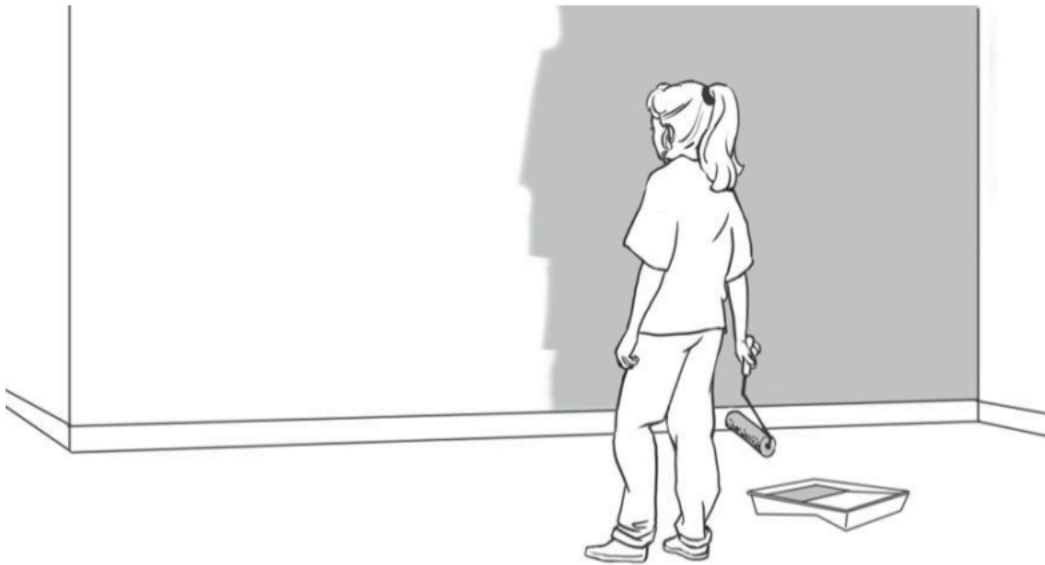
a. 17

c. 43

b. 28

d. 54

\_\_\_\_\_ 17. Alexis is repainting one of the walls in her bedroom. She painted 50% of the wall yesterday.



the following is equal to 50%?

Which of

a.  $\frac{1}{2}$

c. 0.10

b.  $\frac{5}{100}$

d. 0.20

\_\_\_\_\_ 18. The table below shows the land area, in square miles, of four states in the southeast.

**Land Area of Southeastern States**

State	Area (in square miles)
<b>Alabama</b>	50,744
<b>Georgia</b>	57,906
<b>Florida</b>	53,927
<b>South Carolina</b>	30,109

Which is the best estimate of a range of numbers for the **total** land area, in square miles, of the four states listed in the table?

- |                       |                       |
|-----------------------|-----------------------|
| a. 100,000 to 125,000 | c. 150,000 to 175,000 |
| b. 125,000 to 150,000 | d. 175,000 to 200,000 |

**Other**

19. Mrs. Pate is displaying science projects on tables in the lunch room for the science fair. She can display 6 projects on each table. If there are 72 projects to display, what is the total number of tables Mrs. Pate will need?

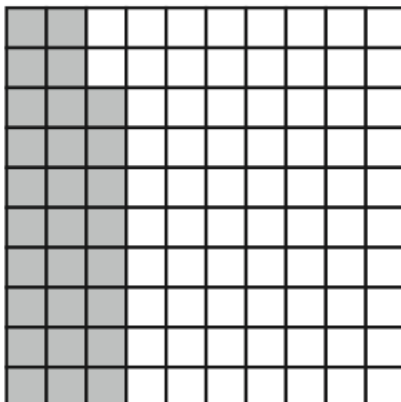




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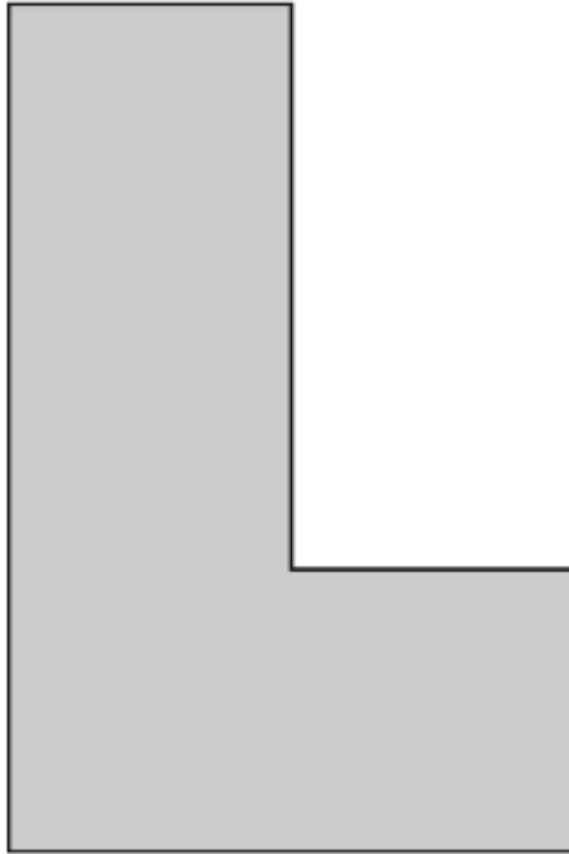
20. The figure below represents the number 1. What decimal is represented by the shaded part of the figure?



Name: \_\_\_\_\_

ID: A

21. Lana bought a patch in the shape of an “L” to sew onto the back of her denim jacket. The size of the patch is shown below.



Using the provided ruler, what is the area, in **square centimeters**, of Lana’s patch?



22. Elijah made a pattern using squares for his social studies project on pyramids. The first four figures in the pattern are shown below.

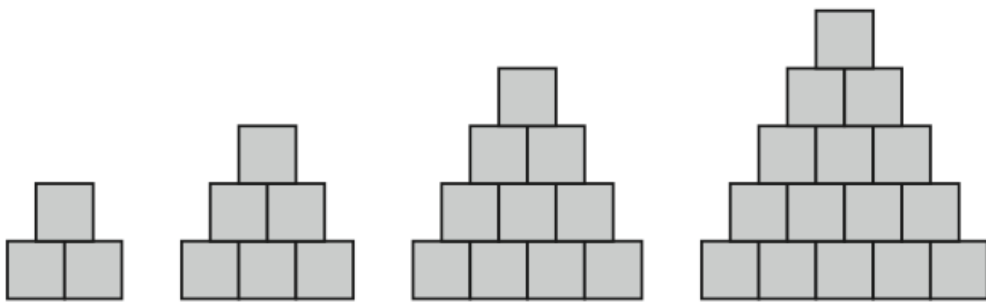


Figure 1

Figure 2

Figure 3

Figure 4

?

Figure 5

If Elijah continues the pattern, what should be the total number of squares in Figure 5?



23. Mr. Fallon is buying spoons for an ice cream party. The spoons are sold 8 to a package. The expression below can be used to determine the total number of spoons, where  $p$  represents the number of packages of spoons Mr. Fallon bought.

$$8p$$

If Mr. Fallon buys 9 packages of spoons, what is the total number of spoons he will have?



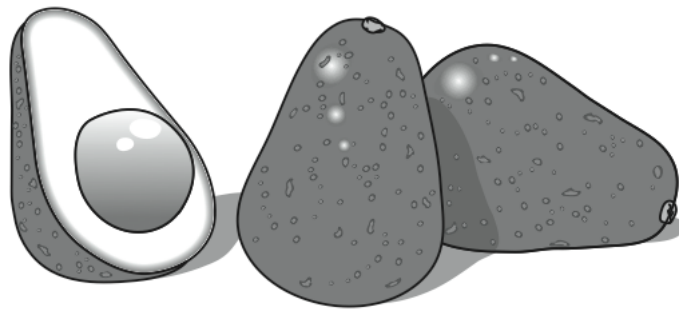
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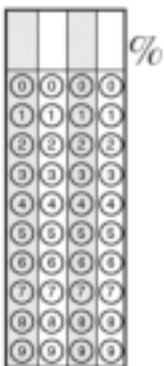
24. Derek read that the population of his city was 1,575,204. Last year, the population was 1,571,692. By how much did the population in Derek's city increase from last year to this year?



25. About  $\frac{9}{10}$  of avocados grown in the United States are grown in California.



What percent is equal to  $\frac{9}{10}$ ?



## Grade 4 Test Specs Answer Section

### MULTIPLE CHOICE

1. ANS: D	PTS: 1	STA: MA.4.A.1.2
2. ANS: C	PTS: 1	STA: MA.4.A.2.3
3. ANS: C	PTS: 1	STA: MA.4.A.2.4
4. ANS: B	PTS: 1	STA: MA.4.G.3.1
5. ANS: C	PTS: 1	STA: MA.4.G.3.2
6. ANS: C	PTS: 1	STA: MA.4.G.3.3
7. ANS: B	PTS: 1	STA: MA.4.A.4.1
8. ANS: B	PTS: 1	STA: MA.4.A.4.2
9. ANS: D	PTS: 1	STA: MA.4.A.4.3
10. ANS: B	PTS: 1	STA: MA.4.G.5.1
11. ANS: A	PTS: 1	STA: MA.4.G.5.2
12. ANS: A	PTS: 1	STA: MA.4.G.5.3
13. ANS: D	PTS: 1	STA: MA.4.A.6.1
14. ANS: C	PTS: 1	STA: MA.4.A.6.2
15. ANS: C	PTS: 1	STA: MA.4.A.6.3
16. ANS: B	PTS: 1	STA: MA.4.A.6.4
17. ANS: A	PTS: 1	STA: MA.4.A.6.5
18. ANS: D	PTS: 1	STA: MA.4.A.6.6

### OTHER

19. ANS: 12		
PTS: 1		
20. ANS: 0.28		
PTS: 1	STA: MA.4.A.2.3	
21. ANS: 16		
PTS: 1	STA: MA.4.G.3.3	
22. ANS: 21		
PTS: 1	STA: MA.4.A.4.1	

23. ANS:  
72

PTS: 1

STA: MA.4.A.4.2

24. ANS:  
3512

PTS: 1

STA: MA.4.A.6.1

25. ANS:  
90

PTS: 1

STA: MA.4.A.6.5