

## Mathematics

**First Name**

**Last Name**

**School Name**

**Room Number / Class**

Choose a circle to show how much each sentence is like you

Very Unlike Me 1	Unlike Me 2	Like Me 3	Very Like Me 4
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**01.** It is very important to me to be good at maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**02.** I try to get more maths answers right than my friends.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**03.** I like hard, challenging maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**04.** I do as much school work as possible in maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**05.** I like to help my friends with their maths school work.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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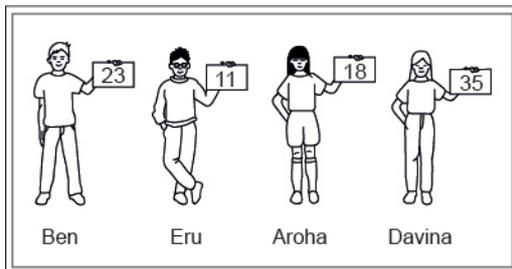
**06.** I like it when the maths examples are hard.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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## Practice Questions

These practice questions are to help you understand how to show your answer for different types of questions.

**P01.** Who is holding a card with an even number on it?

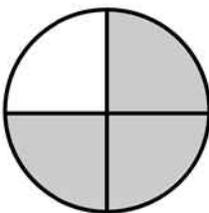


- Ben
- Eru
- Aroha
- Davina

**P02.** Complete this number pattern.

2, 4, \_\_\_\_\_, \_\_\_\_\_, 10

**P03.** What fraction of this circle is shaded?



\_\_\_\_\_



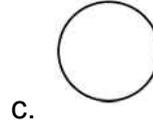
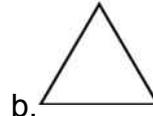
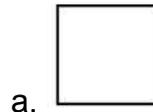
**P04.** Match the sentence with the correct shape.



1. I have three sides



2. I have 4 sides



**P05.** Which numbers make this number sentence **TRUE**?

$$2 + \star > 5$$

1

2

3

4

5

**P06.** Put the numbers 1, 2, 3, and 4 in the boxes to order these numbers from biggest (1) to smallest (4).



3



7



2



0

**P07.** Select whether the following statements are True or False.

In the number 213, the value of 1 is ten.

**TRUE**

**FALSE**

In the number 504, the value of 5 is fifty.

01. According to the graph below, which person's sales were **closest** to \$400 for the month?

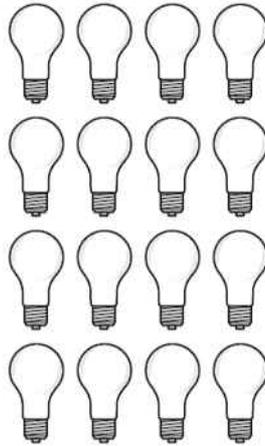


- Harriet
- Carl
- Jason
- Sammie

02. Which of these numbers is the smallest?

- 91.369
- 88.521
- 88.999
- 89.001

**03.** Jenna bought 4 sets of light bulbs. The bulbs come in sets of 4.  
How many light bulbs did she buy in all?



- 4
- 8
- 16

**04.** In which figure are one-half of the dots black?

- A square box containing 4 dots arranged in a 2x2 grid. The top-left dot is black, and the other three dots are white.
- A square box containing 6 dots arranged in two rows of three. The top row has 1 white, 1 black, and 1 white dot. The bottom row has 2 black and 1 white dot.
- A square box containing 3 dots. The top-left dot is white, the top-right dot is black, and the bottom-left dot is black.
- A square box containing 5 dots. The top-left dot is black, the top-right dot is white, the bottom-left dot is white, and the bottom-right dot is black. There is also a white dot in the center.

05. Which digit is in the hundreds place in the number 3174?

- 1
- 3
- 4
- 7

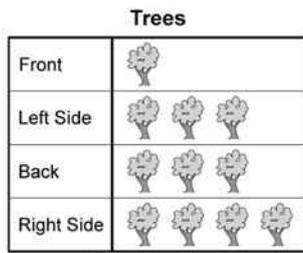
06. What fraction shows the number of blocks that are grey?



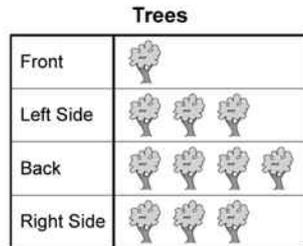
- $\frac{4}{6}$
- $\frac{4}{10}$
- $\frac{6}{10}$

07. The list below shows the number of trees in each side of a house.  
Which graph correctly shows how many trees are planted in each place?

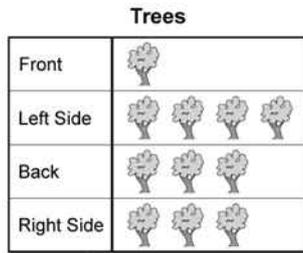
Place	Number of Trees
Front	3
Left Side	9
Back	12
Right Side	9



Each  means 3 trees.



Each  means 3 trees.



Each  means 3 trees.

08. Which number has a 9 in the tens place?

29

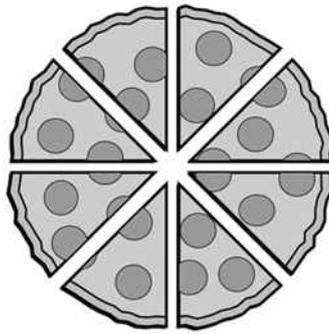
95

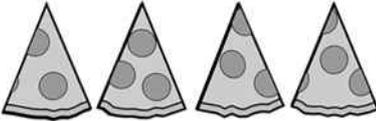
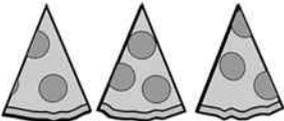
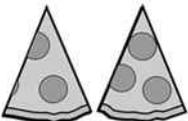
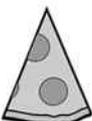
936

09. What number is four hundred and five and three-tenths?

- 45.3
- 405.3
- 453
- 4005.3

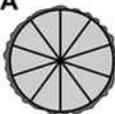
10. Lisa ate  $\frac{1}{8}$  of the pizza.  
How much of the pizza did she eat?



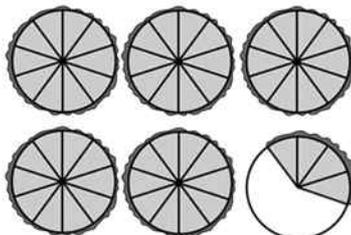
- 
- 
- 
- 

11. Part A represents 1 pie.  
Which number is represented by Part B?

PART A



PART B



- 0.45
- 0.54
- 4.5
- 5.4

Use the following information to answer questions 12 to 13.

Harold, Liu and Simima collect marbles.

Finish these sentences about Liu, Simima, Harold and their marbles.

Liu      Simima      Harold



12.

There are \_\_\_\_\_ marbles altogether.

13.

\_\_\_\_\_ has more marbles than \_\_\_\_\_

but fewer than \_\_\_\_\_.

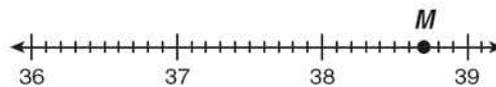
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End of Section

14. Year 4 students went to a concert in 8 buses. Each bus took 45 students. How many students went to the concert?

- 320
- 360
- 380
- 3240

15. On the number line below, what number does point  $M$  represent?



- $36\frac{2}{5}$
- $37\frac{1}{5}$
- $38\frac{7}{10}$
- $39\frac{1}{10}$

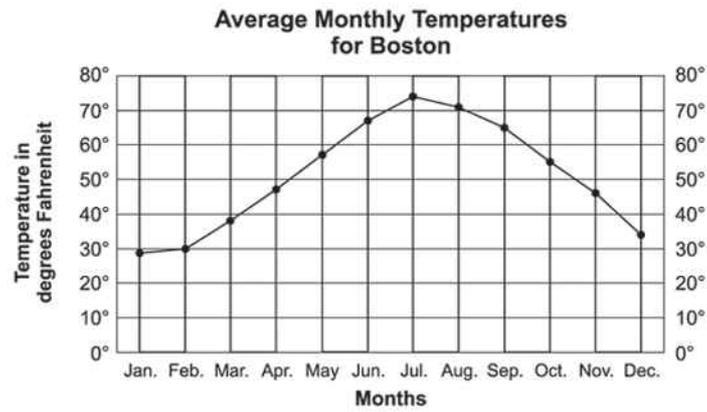
16. Which number sentence is **TRUE**?

549 > 550

549 > 552

549 > 539

17. What is the average temperature for October?



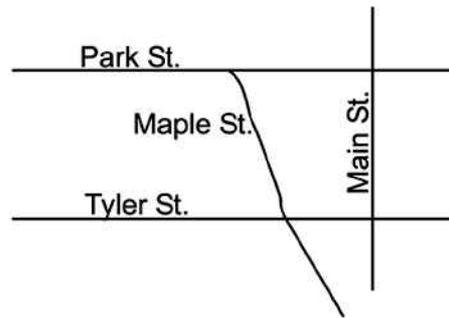
45°F

50°F

55°F

60°F

18. According to the map in the figure below, which streets appear to be parallel to each other?



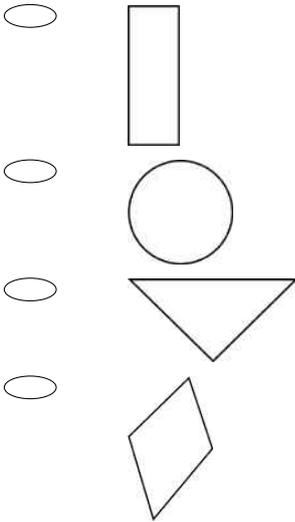
- Park and Main
- Tyler and Maple
- Park and Tyler
- Main and Tyler

19. Kere has read the first 78 pages in a book that has 130 pages. Which number sentence would Kere use to find the number of pages she must read to finish the book?

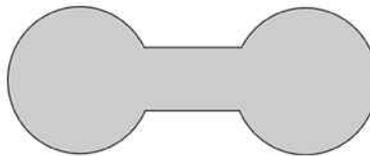
(N = number of pages to be read)

- $130 + 78 = N$
- $N - 78 = 130$
- $130 - 78 = N$
- $130 \div 78 = N$

**20.** Alan says that if a figure has four sides, it must be a rectangle. Gina does not agree. Which of the following figures shows that Gina is correct?



**21.** How many lines of symmetry does the figure below have?



- 6
- 4
- 2
- 1

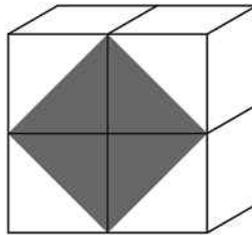
**22.** Tom read 11 books in Year 1, 16 books in Year 2, and 18 books in Year 3. Estimate how many books Tom has read.

- 10
- 30
- 50
- 70

**23.** Which number is missing from the numerical pattern?  
20, 36, 52, \_\_\_\_, 84, 100, 116

- 64
- 68
- 76
- 78

**24.** Look at the four blocks stacked below.  
What shape is formed by the shaded parts of the blocks?

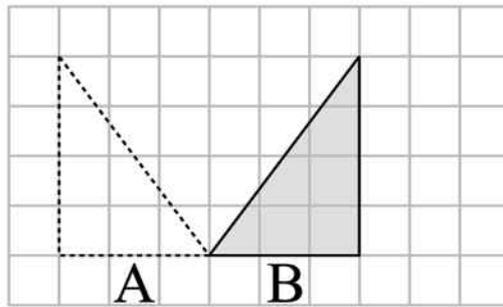


- A triangle
- A square
- A pentagon
- A hexagon

**25.** Luis had two apples and he cut each apple into fifths.  
How many pieces of apple did he have?

- $\frac{2}{5}$
- 2
- 5
- 10

26. What motion was used to move the triangle from A to B?



- A slide
- A flip
- A rotation (turn)
- It was not moved by any of these motions

27. Mr Hall is providing orange slices for the 27 students in his class. Each student will receive 2 slices. He plans to cut each orange into 4 slices. How many oranges will Mr Hall need?

- 11
- 12
- 13
- 14

28. Kiri conducted a survey. She asked every student in Year 9, "What is your favourite subject or activity at school?"

She recorded her results in the table.

Kiri decided to display her data in a strip graph, using the key below.

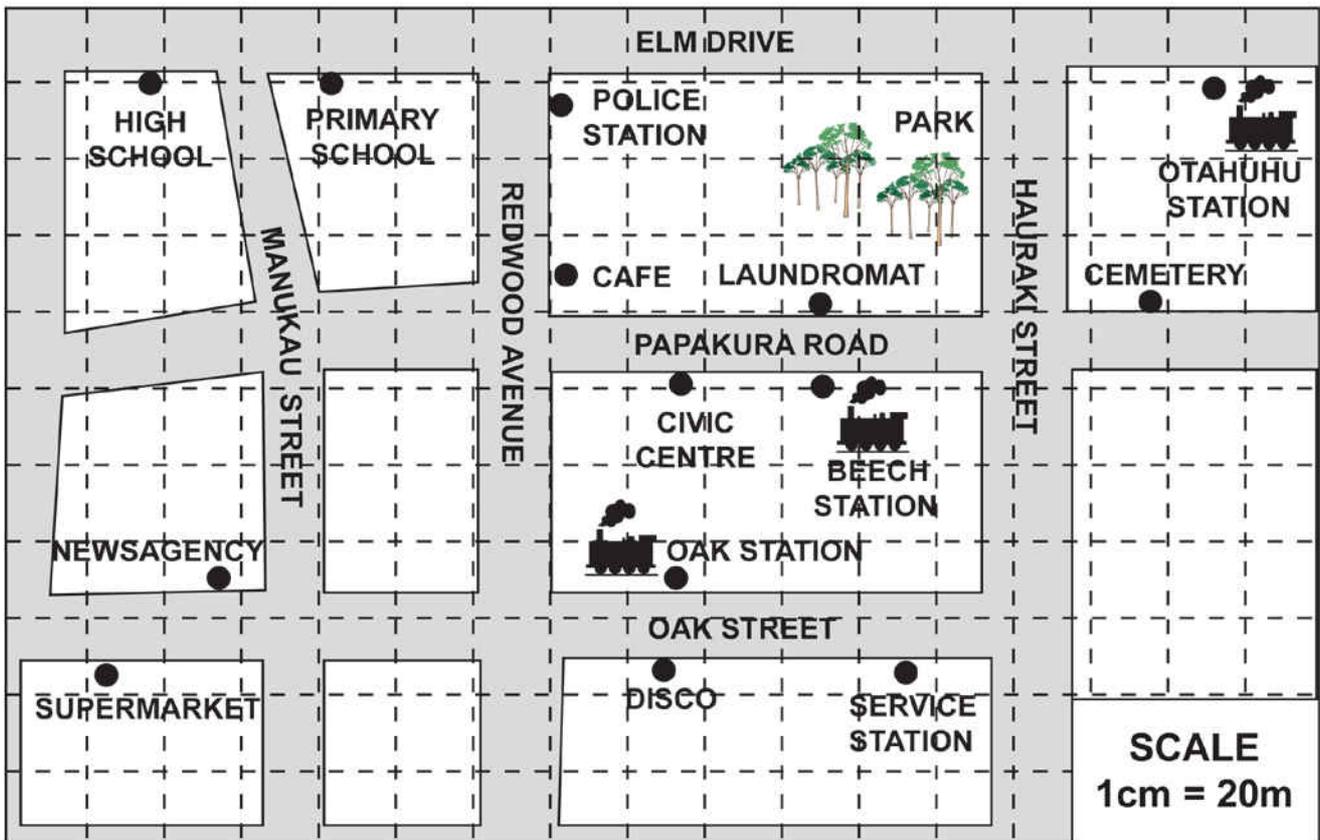
Which strip graph **BEST** represents Kiri's data?

Table	Subject/Activity	No. of students	Key
	English	5	English
	Maths	15	Maths
	Sport	15	Sport
	Lunch	5	Lunch
	Other	10	Other

- 
- 
- 
- 

Use the following information to answer question 29..

### MAP OF KURANUI



**29.** Michelle rode her bike along Elm Drive from the high school to Otahuhu Station. Use the scale to find out how far she rode.

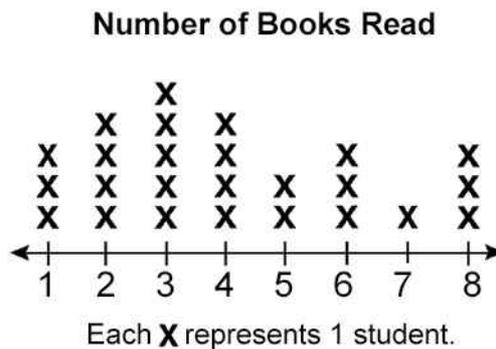
Michelle rode

- 200 m
- 280 m
- 2000 m
- 2800 m

End of Section

**30.** The line plot below shows the number of books each student in Marcia's class read over the summer.

How many more students read exactly 3 books than students who read exactly 7 books?



- 4
- 5
- 6
- 7

31. Six students bought exactly enough pens to share equally among themselves. Which of the following could be the number of pens they bought?

- 46
- 48
- 50
- 52

32. Hiram read about a "Buy 2, Get 1 Free" sale on socks. If he buys 2 pairs of socks, he will get the 3rd pair free. He started the list below to find out how many free pairs of socks he would get. What is the **least** number of pairs of socks Hiram would have to buy in order to get 4 free pairs?

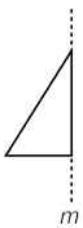
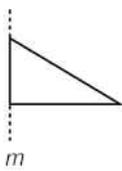
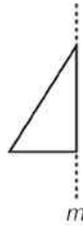
Buy	Free Pairs
2	1
3	1
4	2
5	2

- 7
- 8
- 9
- 12

33. Carl has 3 empty egg cartons and 34 eggs. Each carton holds 12 eggs. How many more eggs are needed to fill all 3 cartons?

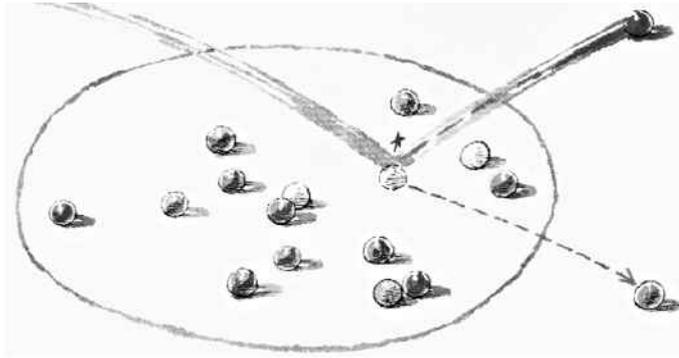
- 2
- 3
- 4
- 6

34. Which of the following shows the result of flipping (reflecting) the triangle over the line  $m$ ?



Use the following information to answer question 35..

Matthew had 28 marbles and Robert had 14 marbles.



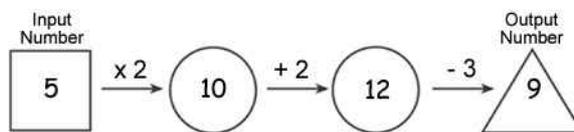
**35.** How many marbles does Matthew have to give Robert so that they both have the same amount of marbles?

\_\_\_\_\_

End of Section

**36.** A number machine takes a number and operates on it. When the Input Number is 5, the Output Number is 9, as shown below.

When the Input Number is 7, which of these is the Output Number?

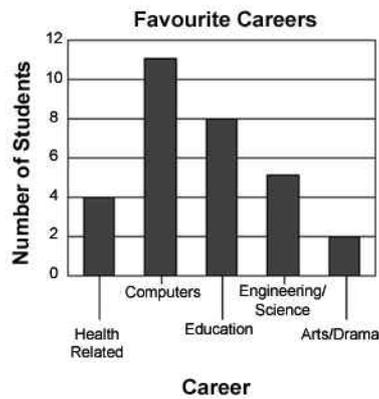


- 11
- 13
- 14
- 25

37. Bill is 42 inches tall. Tom is twice as tall as Bill.  
How tall are the two boys together?

- 72 inches
- 84 inches
- 126 inches
- 168 inches

38. Rhea took a survey of the students in her class to find out their career interests. The results are shown in the graph below.  
The mode of the data is associated with which career?



- Health Related
- Engineering/Science
- Education
- Computers

39. Tran and Rajesh completed a class survey on favourite fizzy drinks. The results were recorded in this table. The survey shows us that

FAVOURITE DRINK	BOYS	GIRLS
Supa Kola	4	1
Top Pop	4	4
Dewy Mist	5	2
Lemonade	2	1
Don't like fizzy drink	1	3

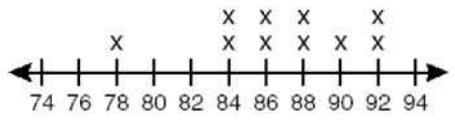
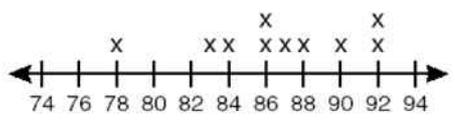
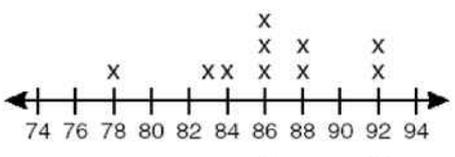
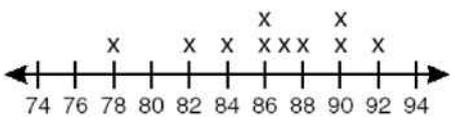
- more girls than boys drink fizzy drink.
- Dewy Mist is the most popular drink.
- everybody likes fizzy drink.
- lemonade is the least popular fizzy drink.

40. Which number goes into the box to make the statement **TRUE**?

$$4 \square 76\ 192 < 4\ 578\ 136$$

- 7
- 6
- 3
- 8

41. Sam listed his scores from history class.  
 84, 86, 83, 78, 92, 87, 92, 90, 88, 86  
 Which line plot correctly displays his scores?



42. What is 18 565 rounded to the nearest thousand?

18 000

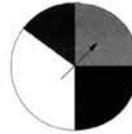
18 600

19 000

20 000

43. Helen made a spinner divided into four parts.  
 Helen then numbered the parts 1, 2, 3 and 4.  
 Two of the parts had the same area.  
 She used the spinner 100 times and recorded the results in a table.  
 From Helen's results, the two numbered parts on the spinner that are **MOST** likely to have the same area are

Number showing on the spinner	1	2	3	4
Frequency	26	16	24	34



- 1 and 2.
- 1 and 3.
- 2 and 4.
- 3 and 4.

44. These figures form a pattern.



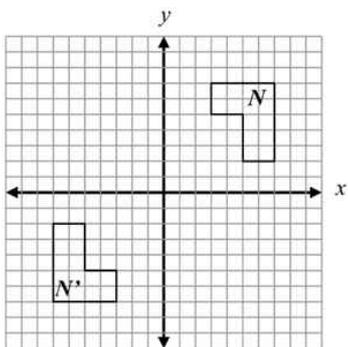
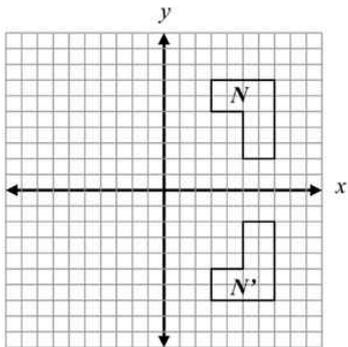
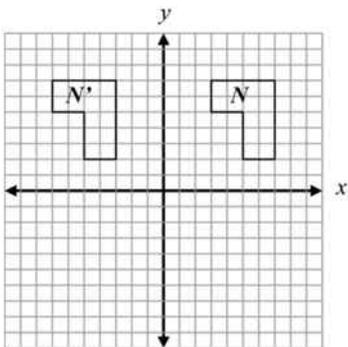
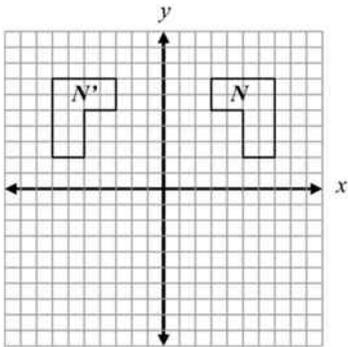
Which of the figures **BEST** continues the pattern?

- 
- 
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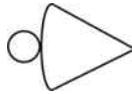
**45.** Sharice scored the following numbers of points in 5 dart games.  
88, 96, 112, 135, 144  
What is the median of these numbers?

- 56
- 88
- 112
- 115

46. Which of the following is a single reflection of figure  $N$  over the  $y$ -axis to form  $N'$ ?



47. This net represents the surface area of a solid figure.  
Which is a drawing of the figure?

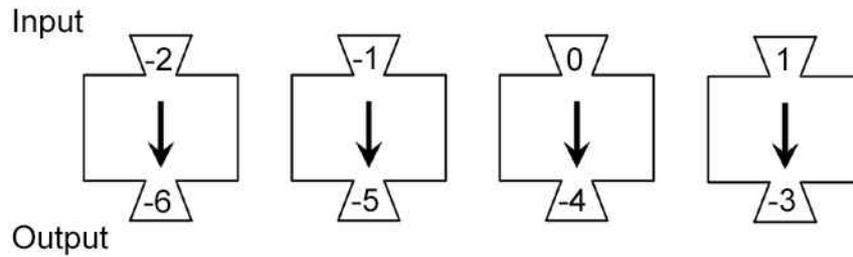


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48. For the spring concert, chorus members may wear blue, white, or black pants and black, red, or white T-shirts.  
How many different outfits can be made?

- 3
- 8
- 6
- 9

49. Which of these could be the rule for the input/output machine shown below?



- Input times 3 equals output.
- Input plus 4 equals output.
- Input plus -4 equals output.
- Input divided by 3 equals output.

50. Christy has 88 photographs to put in her album.  
If 9 photographs will fit on each page, how many pages will she need?

- 8
- 9
- 10
- 11

51. The letters  $S$  and  $T$  stand for numbers.  
If  $S - 100 = T - 100$ , which statement is **TRUE**?

- $S = T$
- $S > T$
- $S = T + 100$
- $S > T + 100$