Canguro Matemático Costarricense

Ecolier Test
Third grade

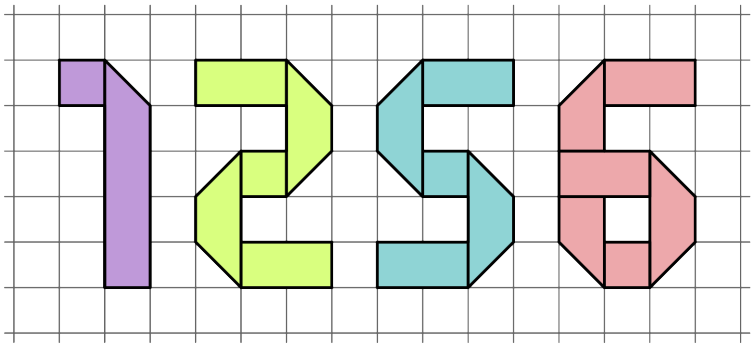
Name of the student:_____

Name of the institution:_____

Kangourou Sans Frontières
Costa Rica 2024

3 points

1. Each number below is made using a piece of ribbon.

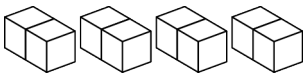


Which piece of ribbon is the longest?

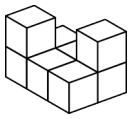
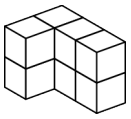
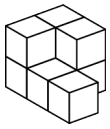
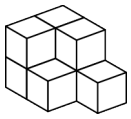
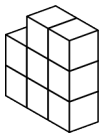
(**A**) 1 (**B**) 2 (**C**) 5 (**D**) 6

(**E**) They are all the same length.

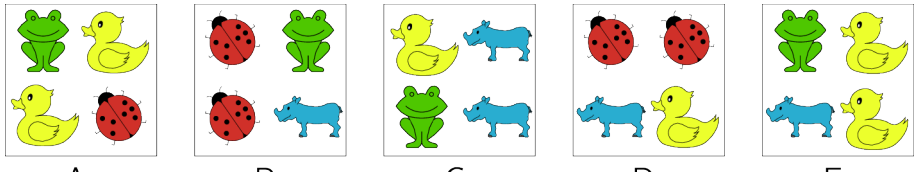
2. A student has 4 blocks, as shown.



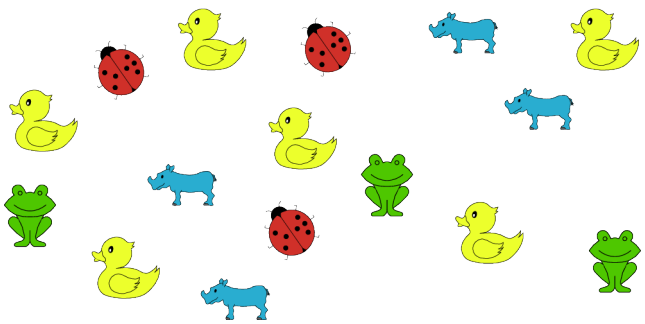
Which of the following shapes cannot be made using these 4 blocks?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

3. Chen has 5 baskets, each containing 4 toys.



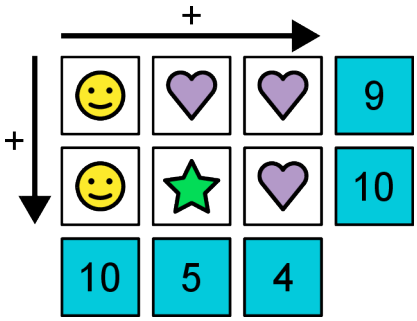
He dropped 4 of the baskets and the toys were mixed up.



Which basket did he not drop?

(**A**) A (**B**) B (**C**) C (**D**) D (**E**) E

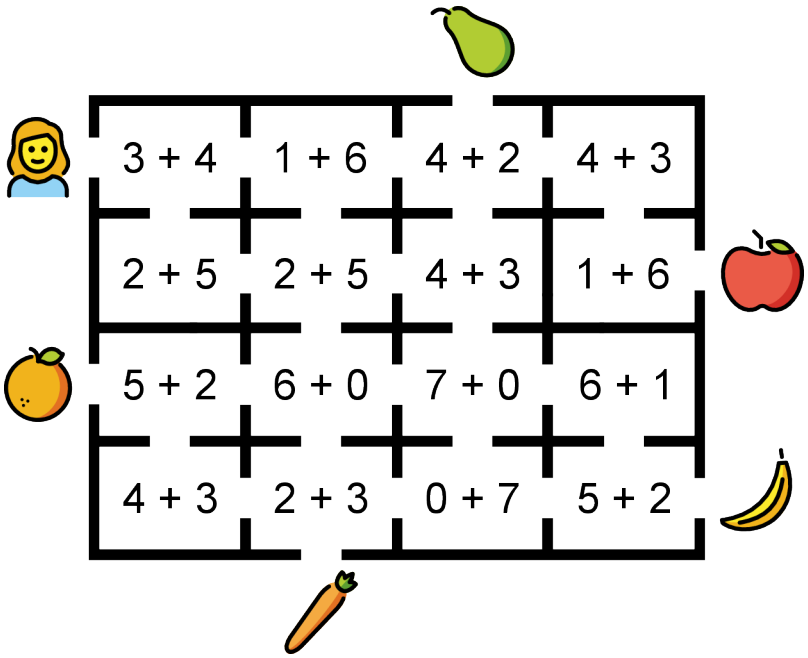
4. In the following diagram, each shape represents a different value, same shapes represents same value.



What is the value of  ?

(**A**) 2 (**B**) 3 (**C**) 4 (**D**) 5 (**E**) 6

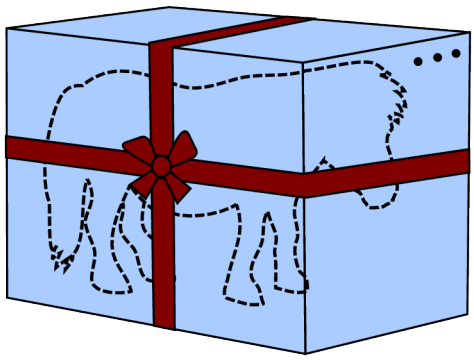
5. Catrina wants to walk through the maze so that she visits only rooms where the answer to the sum is 7.



Which object can Catrina reach?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

6. A toy pony is inside a box that is 1 metre tall, 1 metre wide and 2 metres long.



A ribbon goes around the box, as shown. The knot uses an extra 1 metre of ribbon. How long is the ribbon in total?

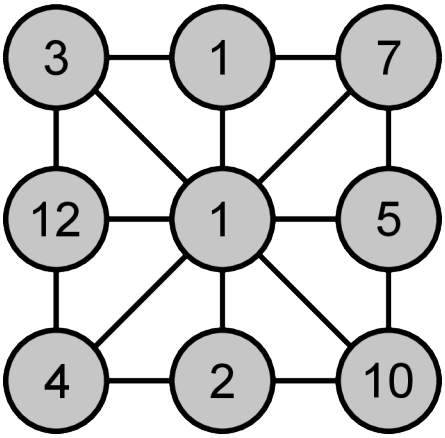
(**A**) 9 metres (**B**) 11 metres (**C**) 13 metres (**D**) 15 metres (**E**) 17 metres

7. A line of pictures is made by repeating this pattern of 5 pictures  always in the same order.

Which picture is in the 27th position in the line?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

8. One of the numbers in the picture is equal to the sum of the numbers connected directly to it.

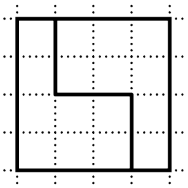
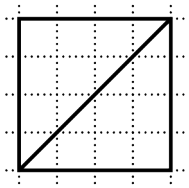
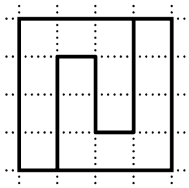
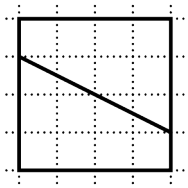
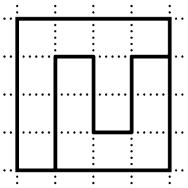


Which number is this?

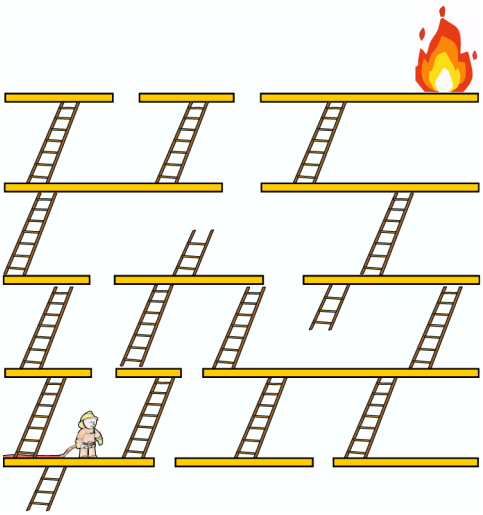
(**A**) 3 (**B**) 5 (**C**) 7 (**D**) 10 (**E**) 12

4 points

9. Which square is cut into 2 different shapes?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

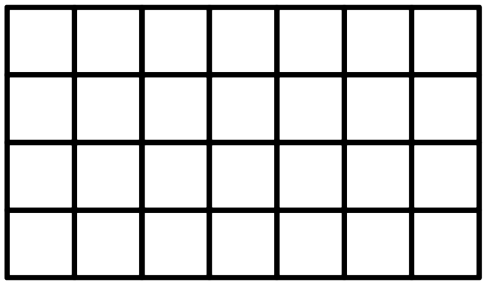
10.



What is the smallest number of ladders the firefighter must use to reach the fire without jumping?

(**A**) 4 (**B**) 5 (**C**) 6 (**D**) 7 (**E**) 8

11. The table consists of 28 white cells:



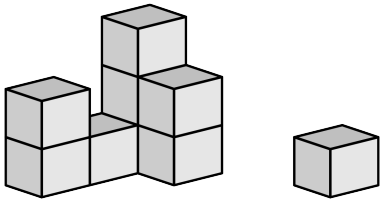
Ira paints 2 rows and 1 column. A row is from left to right. A column is from top to bottom. How many cells will remain white?

(**A**) 8 (**B**) 10 (**C**) 12 (**D**) 14 (**E**) 17

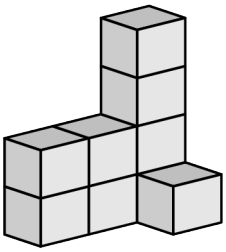
12. Lizzy pays 7 dollars for 3 items. The cost of each item is different and is a whole number. How much is the most expensive item?

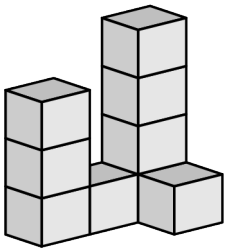
(**A**) 2 dollars (**B**) 3 dollars (**C**) 4 dollars (**D**) 5 dollars (**E**) 6 dollars

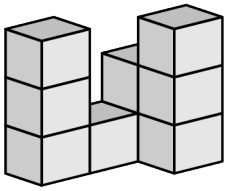
13. A cat knocks off 1 block from Felix's construction.

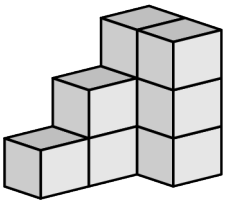


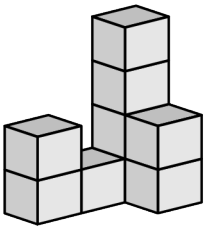
What could this construction have looked like **before** the block was knocked off?

(**A**) 

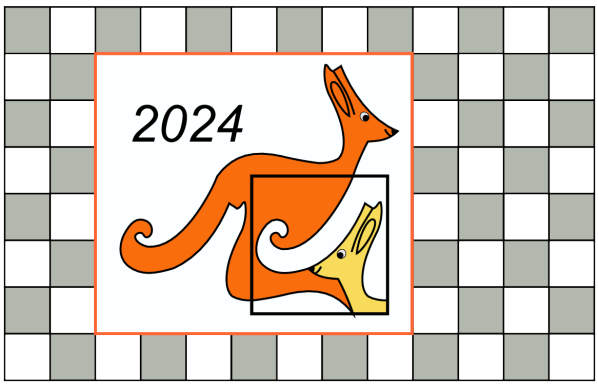
(**B**) 

(**C**) 

(**D**) 

(**E**) 

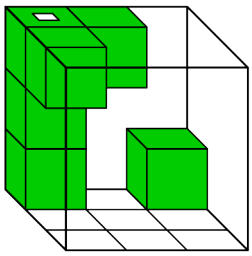
14. Alex has a Kangaroo poster on the kitchen wall.



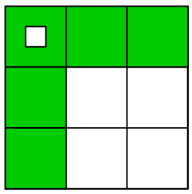
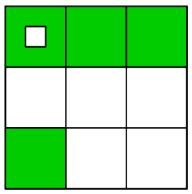
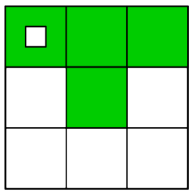
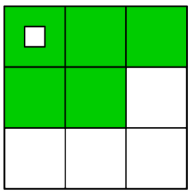
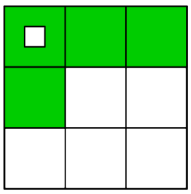
How many grey tiles are there behind the poster?

(**A**) 15 (**B**) 21 (**C**) 25 (**D**) 30 (**E**) 35

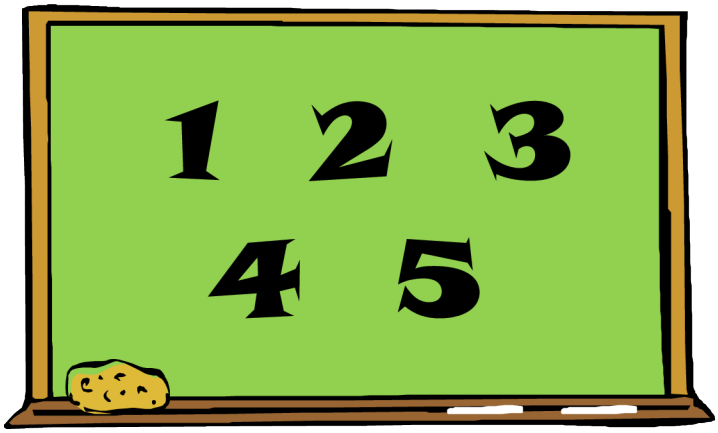
15. Chiara has a transparent box containing 6 small cubes, as shown.



What does Chiara see if she looks at the box from above?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

16. Esteban wants to pick two numbers from the board and add them together.

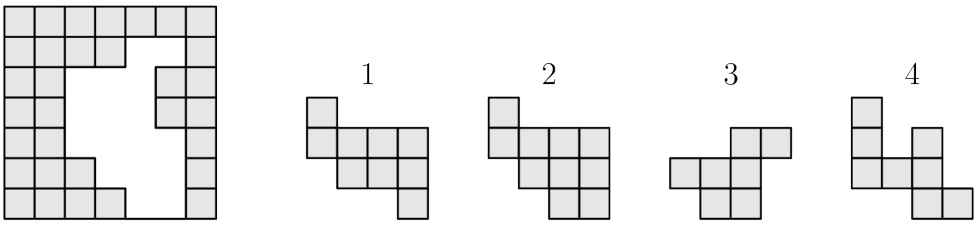


How many different results could Esteban get?

(**A**) 5 (**B**) 6 (**C**) 7 (**D**) 8 (**E**) 10

5 points

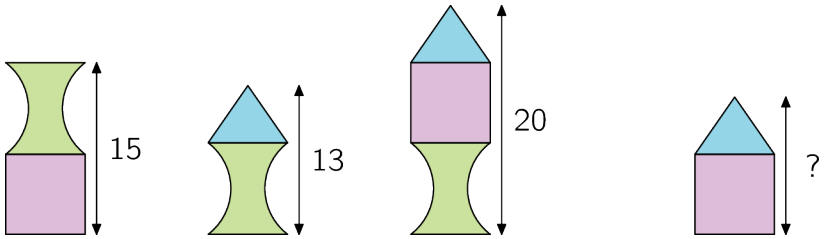
17.



Which two pieces can be used to complete the grid without overlapping?

(**A**) 1 and 2 (**B**) 1 and 3 (**C**) 3 and 4 (**D**) 2 and 4 (**E**) 2 and 3

18. Zoran builds towers from three types of blocks. The heights of three of them are shown in the picture.



What is the height of the fourth tower?

(**A**) 12 (**B**) 13 (**C**) 14 (**D**) 16 (**E**) 17

19. There are five different kinds of fruit in a bowl:  .

Ann likes  .

Ben likes  .

Cam likes  .

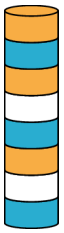
Dan likes  .

Eli likes  .

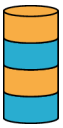
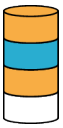
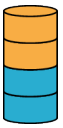
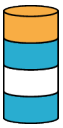
Everyone gets a fruit they like.
Everyone gets a different kind of fruit.
What does Ben get?

(**A**)  (**B**)  (**C**)  (**D**)  (**E**) 

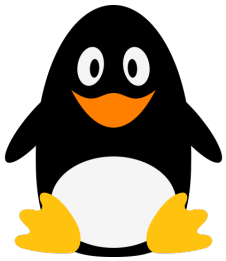
20. Ada has built a tower of 8 discs, as in the picture.



Ada removes the second disc from the bottom of this tower.
Then she removes the third disc from the bottom of the new tower.
Then she removes the fourth disc from the bottom of the new tower. Then she removes the fifth disc from the bottom of the new tower.
Which tower does Ada end up with?

(**A**) 
(**B**) 
(**C**) 
(**D**) 
(**E**) 

21. Peter the penguin goes fishing every day and brings back 9 fish for his 2 chicks.
Each day, he gives 5 fish to the first chick he sees and 4 fish to the second chick, which they eat. Over the last few days, 1 chick has eaten 26 fish.



How many fish has the other chick eaten?

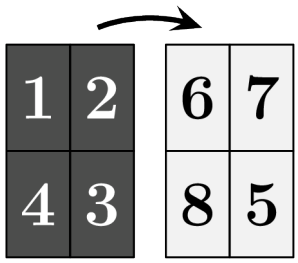
(**A**) 19 (**B**) 22 (**C**) 25 (**D**) 28 (**E**) 31

22. Lucas wants to make a caterpillar that has a head, a tail and either 1, 2 or 3 puzzle pieces in between.

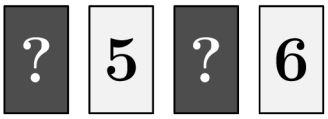
How many different caterpillars can Lucas make without flipping pieces?

(**A**) 3 (**B**) 4 (**C**) 5 (**D**) 6 (**E**) 7

23. John writes the numbers 1 to 4 on a sheet. Then he flips the sheet and writes the numbers 5 to 8, as shown.



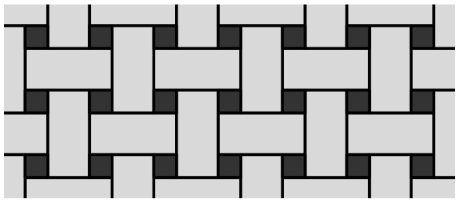
After that, he cuts the sheet into 4 rectangular cards and puts them in a row:



What is the sum of the numbers represented by the question marks?

(**A**) 3 (**B**) 4 (**C**) 5 (**D**) 6 (**E**) 7

24. A floor is covered with 2 kinds of tile  and  . The rectangles have size 23 cm × 11 cm. The picture shows a part of the floor.



What is the side-length of the square tiles?

(**A**) 3 cm (**B**) 4 cm (**C**) 5 cm (**D**) 6 cm (**E**) 7 cm

Name:_____

Institution:_____

01.	A	B	C	D	E
02.	A	B	C	D	E
03.	A	B	C	D	E
04.	A	B	C	D	E
05.	A	B	C	D	E
06.	A	B	C	D	E
07.	A	B	C	D	E
08.	A	B	C	D	E
09.	A	B	C	D	E
10.	A	B	C	D	E
11.	A	B	C	D	E
12.	A	B	C	D	E

13.	A	B	C	D	E
14.	A	B	C	D	E
15.	A	B	C	D	E
16.	A	B	C	D	E
17.	A	B	C	D	E
18.	A	B	C	D	E
19.	A	B	C	D	E
20.	A	B	C	D	E
21.	A	B	C	D	E
22.	A	B	C	D	E
23.	A	B	C	D	E
24.	A	B	C	D	E

Costa Rica