Canguro Matemático Costarricense

Costa Rica

Ecolier Test

Third grade

Name:_____

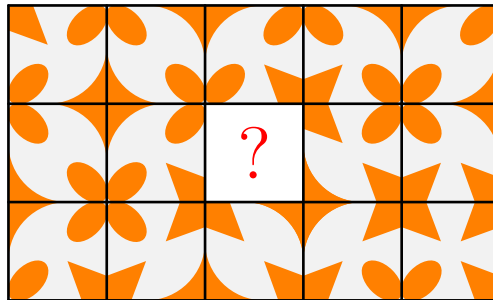Institution:_____

3 points

 # 1. A mushroom grows every day. Mary takes a picture of the mushroom each day from Monday to Friday. Which of these pictures was taken on Tuesday?
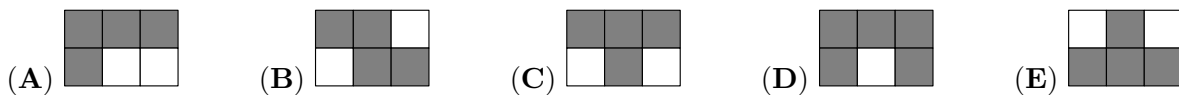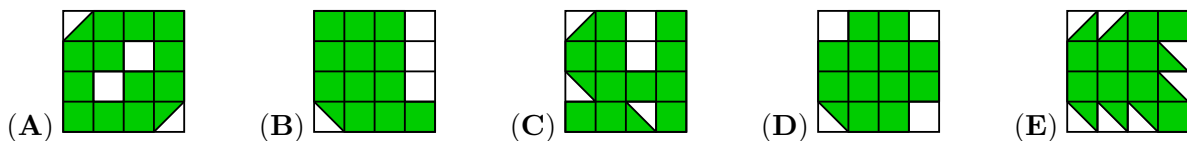
(**A**) (**B**) (**C**) (**D**) (**E**)
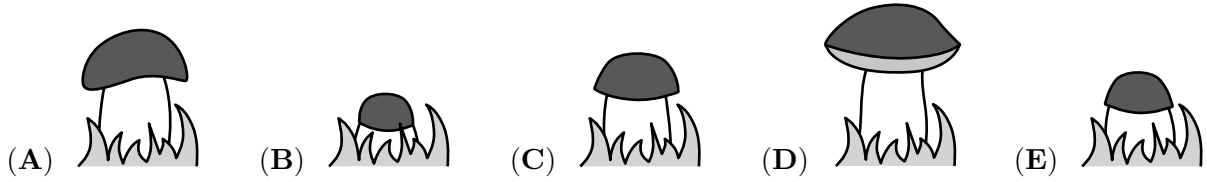
 # 2.

Which piece completes the pattern?

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

 # 3. Tysger shades all the squares in the grid where the result is 20.

$16 + 4$	$19 + 1$	$28 - 8$
2×10	$16 - 4$	7×3

Which shape does he get?

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

 # 4. Which of the following figures has the largest part shaded?

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

 # 5. You can make different figures by using these pieces:
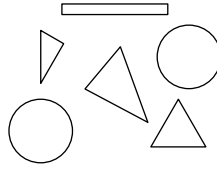
Which one of the figures below can you make with these pieces?

(**A**)

(**B**)

(**C**)

(**D**)

(**E**)
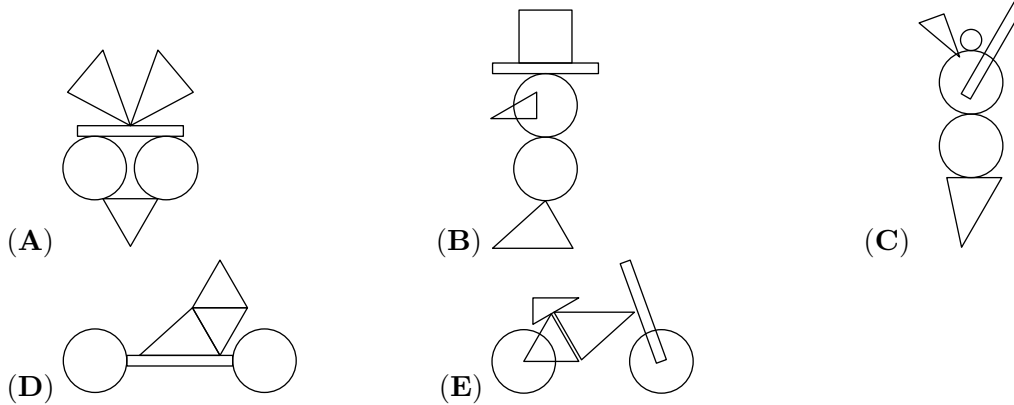
 # 6. Elli draws the big square with chalk on the pavement. She starts jumping from number 1. Each time she jumps, she always jumps to a number that is 3 more than the number she is standing on.

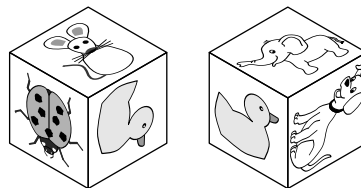| 1 | 5 | 8 | 11 |
4	7	10	14
24	23	13	18
21	19	16	20

What is the largest number Elli can jump onto?

(**A**) 11 (**B**) 14 (**C**) 18 (**D**) 19 (**E**) 24

 # 7. Jorge glues these 6 stickers to the faces of a cube:

The pictures shows the cube in two positions.

Which sticker is on the opposite face to the duck?

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

 # 8. Mary wants to write the numbers 1, 2, 3, 4, 5 and 6 inside the six squares of the figure. She wants a different number in each square. She wants both the sum of the numbers in the dark grey squares and the sum of the numbers in the light grey squares to be 10.
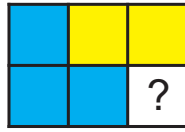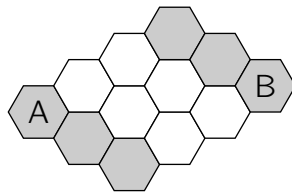

What number must she write in the square with the question mark?

(**A**) 1　　　　(**B**) 2　　　　(**C**) 3　　　　(**D**) 4　　　　(**E**) 5
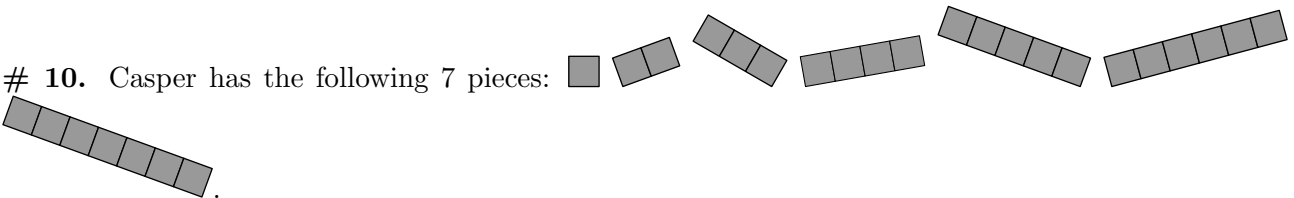
4 points

 # 9. Mark the bee can walk only on grey cells.
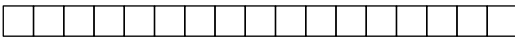

In how many ways could you colour exactly two white cells grey so that Mark can walk from A to B?

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

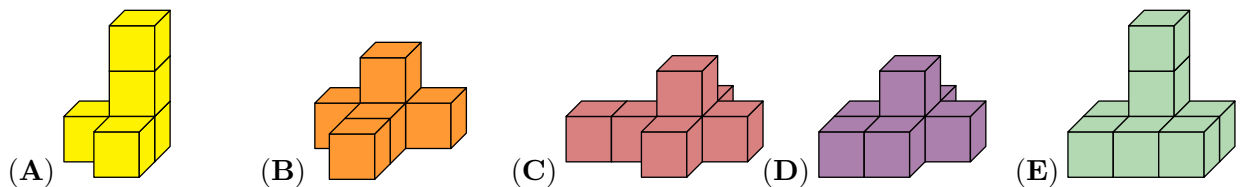**# 10.** Casper has the following 7 pieces:

.

He uses some of these pieces to fully cover this grid without overlap. He uses as many different pieces as possible.

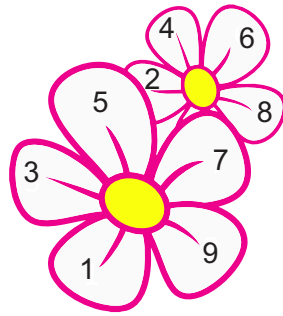How many pieces does Casper use?

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

 # 11. Five shapes are made by glueing cubes together face to face. Which shape uses the most cubes?

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

 # 12. A number is written on each petal of two flowers. One petal is hidden.

The sums of the numbers on the two flowers are equal. What number is written on the hidden petal?
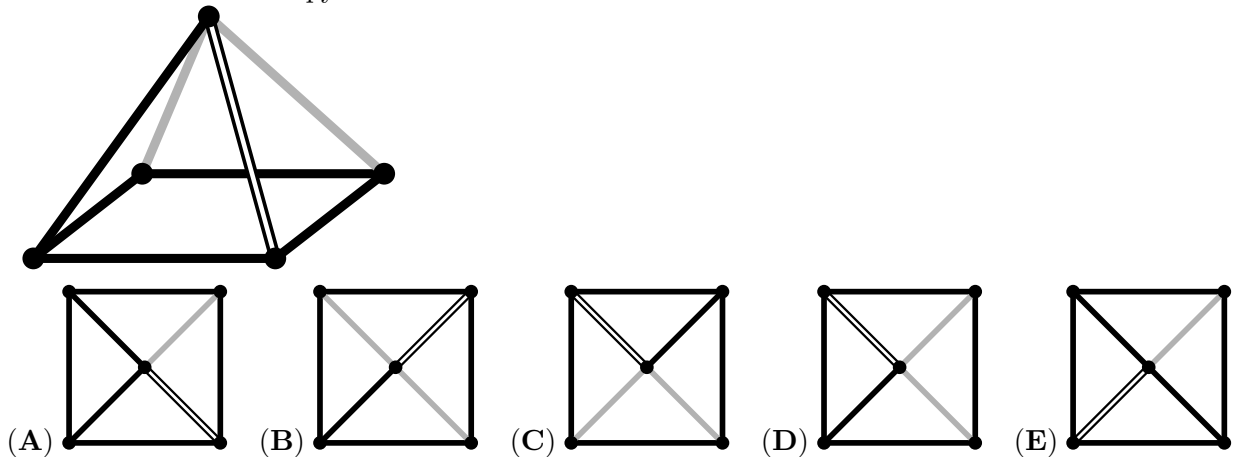
(**A**) 0 (**B**) 3 (**C**) 5 (**D**) 7 (**E**) 1

 # 13. Grandmother has just baked 12 cookies. She wants to give all of the cookies to her 5 grandchildren but also wants to give each of the grandchildren the same number of cookies.
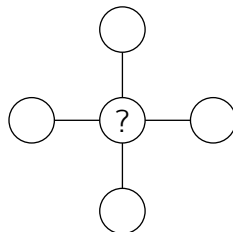How many more cookies should she bake?

(**A**) 0 (**B**) 1 (**C**) 2 (**D**) 3 (**E**) 4

 # 14. Loes looks at the pyramid from above. What does Loes see?


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

 # 15. Roo wrote each of the numbers 1, 2, 3, 4 and 5 in one of the circles so that the sum of the numbers in the row is equal to the sum of the numbers in the column.

What number could be written in the circle with the question mark?

(**A**) Only 5 (**B**) 2, 3 or 4 (**C**) Only 3 (**D**) Only 1 or 3 (**E**) 1, 3 or 5

16. Six different numbers chosen from 1 to 9 are written on the faces of a cube, one number on each face. The sums of numbers on each pair of opposite faces are equal.
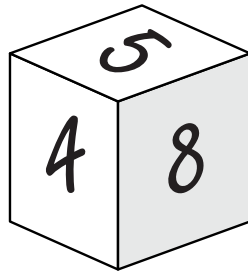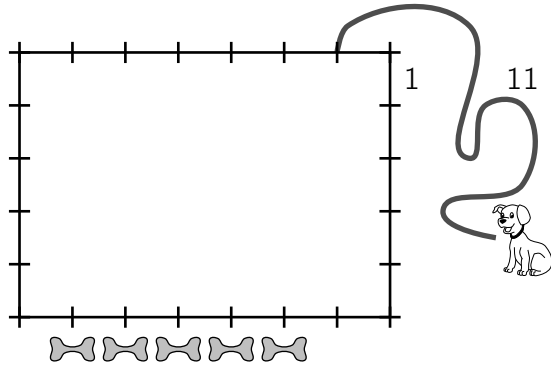
Which number could be on the face opposite to the face with the number 5?

(**A**) 3 (**B**) 5 (**C**) 6 (**D**) 7 (**E**) 9

5 points

17. Dennis ties a dog 1 metre from a corner of a 7 metres by 5 metres hut as shown in the picture using an 11 metres long leash. Dennis places 5 treats as shown.

How many of the treats could the dog reach?

(**A**) 1 (**B**) 2 (**C**) 3 (**D**) 4 (**E**) 5

18. Lonneke builds a fence using 1 metre long poles. The picture shows a 4 metres long fence.
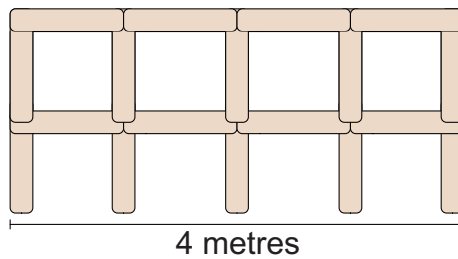
How many poles does Lonneke need to build a 10 metres long fence?

(**A**) 22 (**B**) 30 (**C**) 33 (**D**) 40 (**E**) 42

 # 19. Farid has two types of sticks: short ones, measuring 1 cm and long ones, measuring 3 cm.

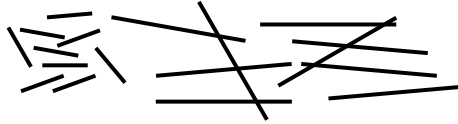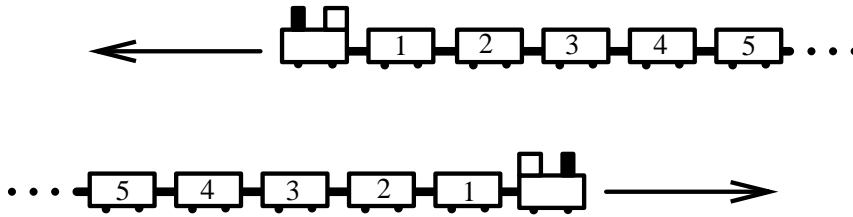   With which of the combinations below can he make a square, without breaking or overlapping the sticks?

   (**A**) 5 short and 2 long   (**B**) 3 short and 3 long   (**C**) 6 short

   (**D**) 4 short and 2 long   (**E**) 6 long

 # 20. Two identical trains, each with 31 cars, are traveling in opposite directions.
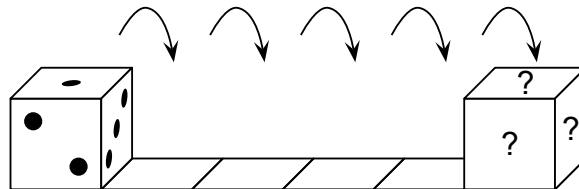

   When car No. 19 of one train is opposite car No. 19 of the other, which car is opposite car No. 12?

   (**A**) 7   (**B**) 12   (**C**) 21   (**D**) 26   (**E**) 31

**# 21.** A standard dice has 7 as the sum of the dots on opposite faces.
   The dice is put on the first square as shown and then rolls towards the right.

   When the dice gets to the last square, what is the total number of dots on the three faces marked with the question marks?

   (**A**) 6   (**B**) 7   (**C**) 9   (**D**) 11   (**E**) 12

 # 22. 6 people each order one scoop of ice cream. They order 3 scoops of vanilla, 2 scoops of chocolate and 1 scoop of lemon. They top the ice creams with 3 cherries, 2 wafers and 1 chocolate chip. They use one topping on each scoop, such that no two ice creams are alike.
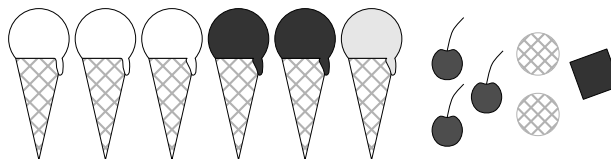
   Which of the following combinations is **not** possible?

   (**A**) chocolate with a cherry   (**B**) vanilla with cherry   (**C**) lemon with a wafer

   (**D**) chocolate with a wafer   (**E**) vanilla with a chocolate chip

 # 23. Every time the kangaroo goes up 7 steps, the rabbit goes down 3 steps.
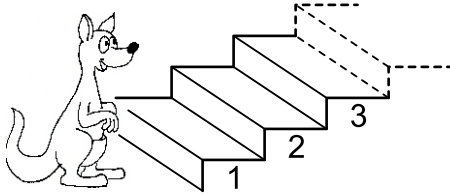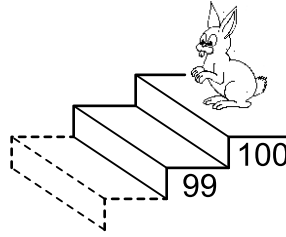
On which step do they meet?

(**A**) 53 (**B**) 60 (**C**) 63 (**D**) 70 (**E**) 73

 # 24. Jane has some pictures of parrots.

She wants to colour only the head, tail and wings of each parrot either red, blue or green so that all three colours are used on each picture. She colours one parrot's head red, its wings green and its tail blue. How many more parrots can she colour so that all the parrots are coloured differently?

(**A**) 1 (**B**) 2 (**C**) 4 (**D**) 5 (**E**) 9

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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

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