Canguro Matemático Costarricense



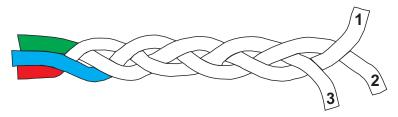
PreEcolier Test First grade

Name:			
Institution:			

Kangourou Sans Frontières Costa Rica 2020

3 points

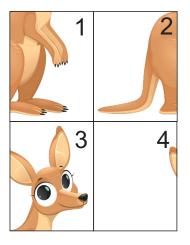
1. The braid in the figure is composed of three threads. One thread is green, one is blue and one is red.



What colours are the three threads?

- (A) 1 is blue, 2 is green and 3 is red.
- (B) 1 is green, 2 is red and 3 is blue.
- (\mathbf{C}) 1 is red, 2 is blue and 3 is green.
- (\mathbf{D}) 1 is green, 2 is blue and 3 is red.
- (E) 1 is blue, 2 is red and 3 is green.

2. Nelly arranged the 4 pieces to make a picture of a kangaroo.

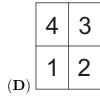


How are the pieces arranged?

	4	3
(A)	2	1









3. A magician is pulling toys out of his top hat. He always pulls out the toys in the same order as shown in the picture.



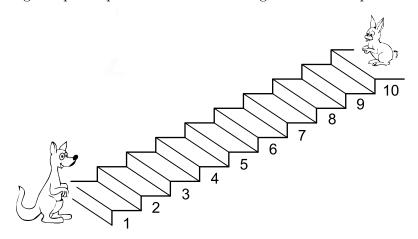
The pattern in the picture repeats every five toys. Which two toys does he pull out next?







4. The kangaroo goes up 3 steps each time the rabbit goes down 2 steps.

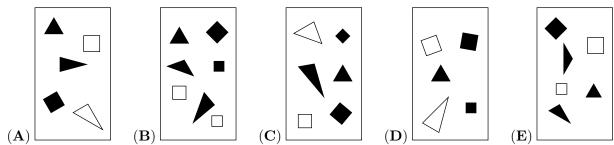


On which step do they meet?

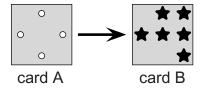
- (\mathbf{A}) 3
- $(\mathbf{B}) 4$
- (\mathbf{C}) 5
- (\mathbf{D}) 6
- $(\mathbf{E}) 7$

4 points

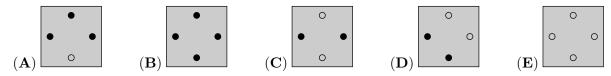
5. Anna draws a picture of some shapes. Her picture contains 3 black triangles and fewer than 4 squares. Which could be Anna's picture?



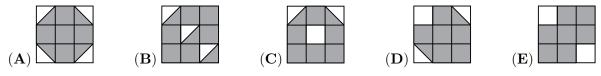
6. José has two cards of the same size. Card A has four holes cut in it.



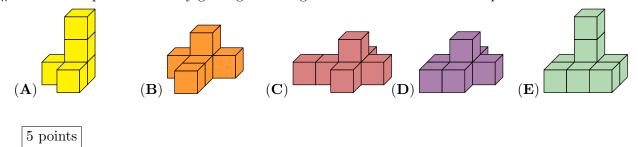
José places card A directly on top of card B. What can José see?



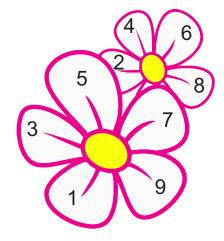
7. In which of the following pictures is more of the shape shaded than any of the others?



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



9. 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?

 $(\mathbf{A}) 0$

 (\mathbf{B}) 3

(C) 5

 $(\mathbf{D}) 7$

(E) 1

10. Grandmother has just baked 12 cookies. She wants to give all of the cookies to her 5 grand-children but also wants to give each of the grandchildren the same number of cookies.

How many more cookies should she bake?

 $(\mathbf{A}) 0$

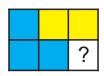
(**B**) 1

(C) 2

(D) 3

 $(\mathbf{E}) 4$

11. 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 blue squares and the sum of the numbers in the yellow squares to be 10.



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

(**A**) 1

(B) 2

 (\mathbf{C}) 3

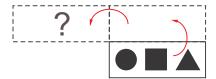
(**D**) 4

 (\mathbf{E}) 5

12. This card lies on the table.



It is flipped over its top edge then flipped over its left edge, as shown in the picture.



What does the card look like after the two flips?





