

Canguro Matemático



Ecolier Problems Third grade

Name: _____

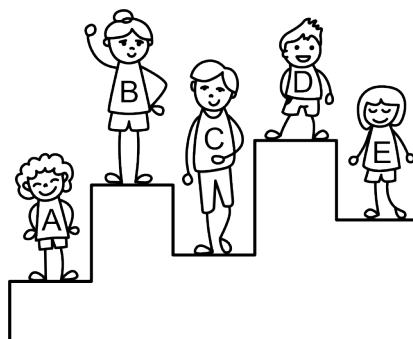
Institution: _____ Grade: _____

Kangourou Sans Frontières


Costa Rica 2019





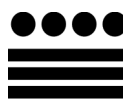
3 points

1. The higher the step on the podium, the higher the rank of the runner. Who finished third?



- (A) A (B) B (C) C (D) D (E) E

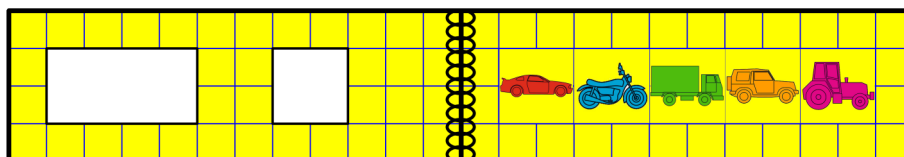
2. In the pictures, each dot stands for 1 and each bar stands for 5. For example,  stands for an 8. Which picture stands for 12?

- (A)  (B)  (C)  (D)  (E) 
















3. Yesterday was Sunday. What day is tomorrow?

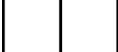
- (A) Tuesday (B) Thursday (C) Wednesday (D) Monday (E) Saturday

















4. There are two holes in the cover of a book. When the book is open, it looks like this:



Which pictures does Olaf see through the holes when he closes the book?

- (A) , ,  (B) , ,  (C) , , 
- (D) , ,  (E) , , 

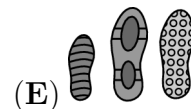
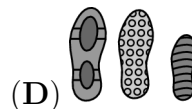
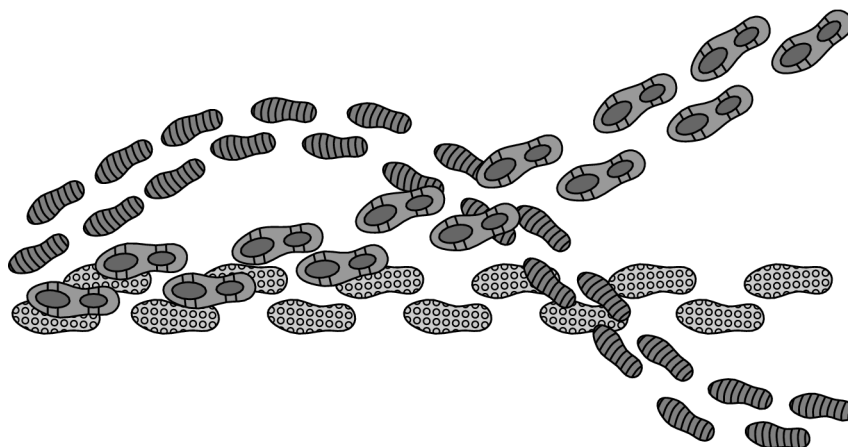
5. Karina cuts out one piece like this  from the sheet.

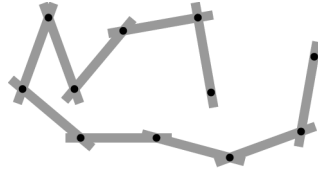
Which piece can she get?



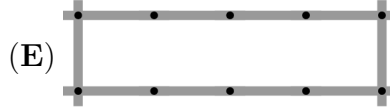
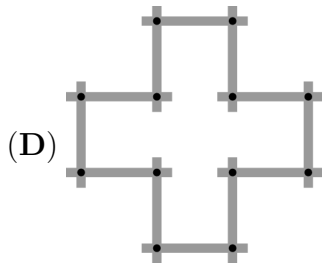
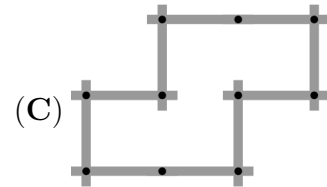
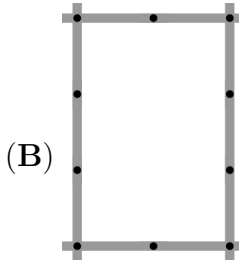
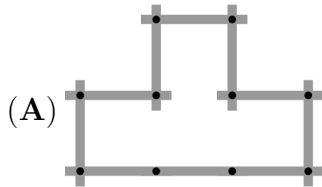
6. Three people walked across a field of snow wearing muddy shoes. In which order did they do this?



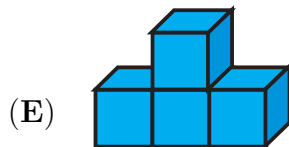
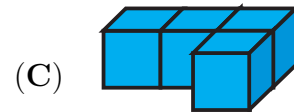
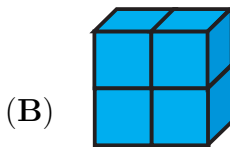
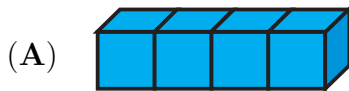
7. Pia makes shapes with the connected sticks shown in the picture.



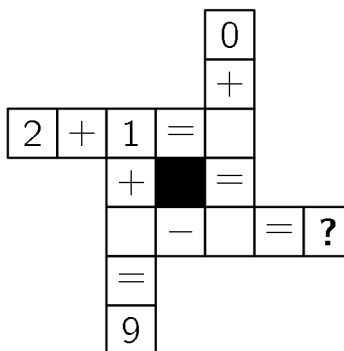
Which of the following shapes needs more sticks than Pia has?



8. Each of the shapes shown is made by glueing together four cubes of the same size. The shapes are to be painted. Which shape has the smallest area to be painted?



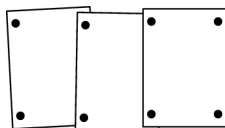
9. What number should replace the question mark when all the calculations are completed correctly?



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

4 points

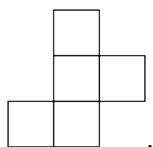
10. Linda pinned up 3 photos in a row on a cork board using 8 pins.



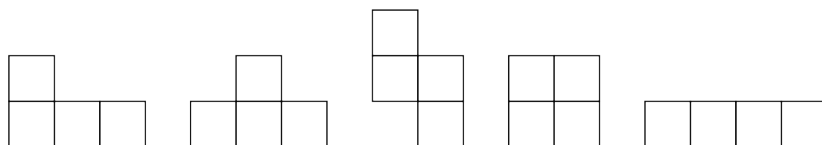
Peter wants to pin up 7 photos in the same way. How many pins does he need?

- (A) 14 (B) 16 (C) 18 (D) 22 (E) 26

11. Dennis wants to remove one cell from the shape:

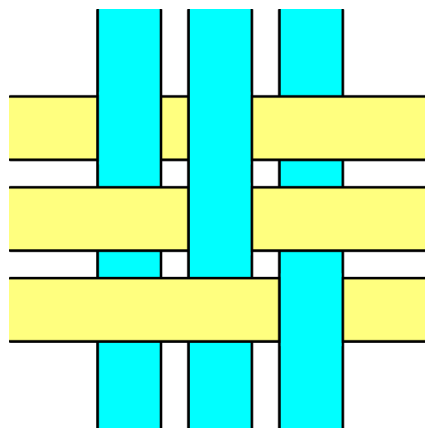


How many of the following shapes can he get?

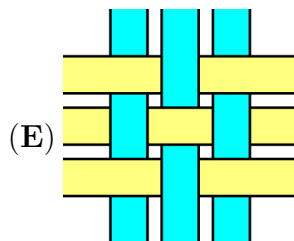
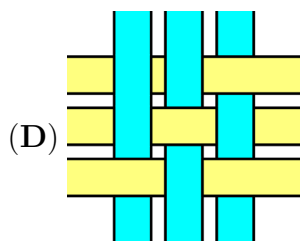
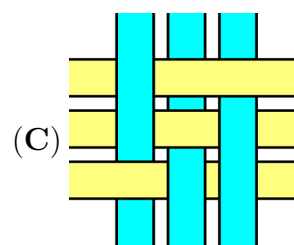
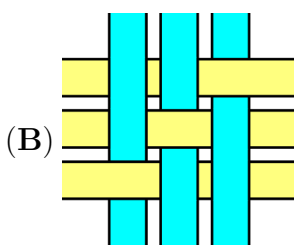
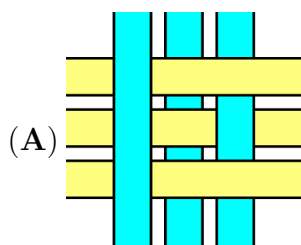


- (A) 1 (B) 2 (C) 3 (D) 4 (E) 5

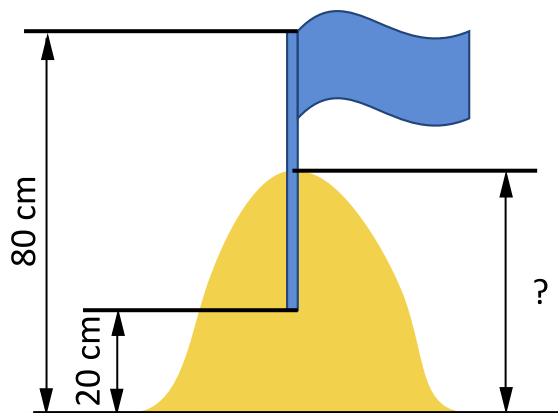
12. Six strips are woven into a pattern as shown.



What does the pattern look like from the back?



13. Tim and Tom built a sandcastle and decorated it with a flag. They stuck half of the flagpole into the highest point of the castle. The upper tip of the flagpole was 80 cm above the ground, the lower tip was 20 cm above the ground. How tall was the sandcastle?



(A) 40 cm

(B) 45 cm

(C) 50 cm

(D) 55 cm

(E) 60 cm

14. A train from Kang station to Aroo station leaves at 6:00 in the morning and passes by other three stations on the way, without stopping.




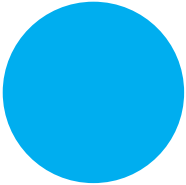



The numbers show the journey times between two stations, in hours. The train arrives at Aroo station at 11:00 at night on the same day. What is the journey time between Aroo station and the previous one?

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

15. A figure has been cut into these 3 pieces:



Which figure could have been cut?

- (A)  (B)  (C) 
- (D)  (E) 

16. Peter chose a square of four cells in the table so that the sum of the four numbers inside the square is greater than 63:

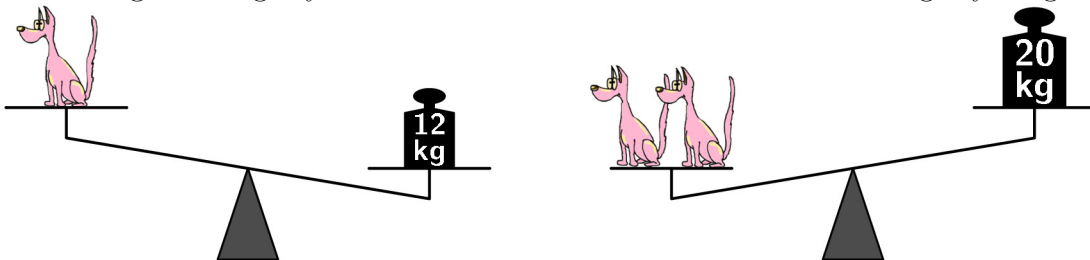
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Which of the following numbers must be in the chosen square?

- (A) 14 (B) 15 (C) 17 (D) 18 (E) 20

5 points

17. The weight of dog toy is a whole number. How much does one dog toy weigh?



- (A) 7 kg (B) 8 kg (C) 9 kg (D) 10 kg (E) 11 kg

18. Sara has 16 blue marbles. She can trade marbles in two ways:
 3 blue marbles for 1 red marble or 2 red marbles for 5 green marbles.
 What is the maximum number of green marbles she can get?

- (A) 5 (B) 10 (C) 13 (D) 15 (E) 20

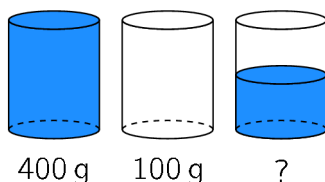
19. Steven wants to write each of the digits 2, 0, 1 and 9 in one of the boxes of the sum.

$$\square \square \square + \square$$

He wants to get the largest possible answer. Which digit could he write instead of the question mark?

- (A) Either 0 or 1 (B) Either 0 or 2 (C) Only 0 (D) Only 1 (E) Only 2

20. A full glass of water weighs 400 grams. An empty glass weighs 100 grams.












How many grams does a half-full glass of water weigh?

- (A) 150 (B) 200 (C) 225 (D) 250 (E) 300

21. Together we cost 5 cents. Together we cost 7 cents. Together we cost 10 cents. How much do we cost together?

- (A) 8 cents (B) 9 cents (C) 10 cents (D) 11 cents (E) 12 cents

22. Each shape stands for a different number. The sum of the three numbers in each row is shown to the right of the row.

			15
			12
			16

Which number does the



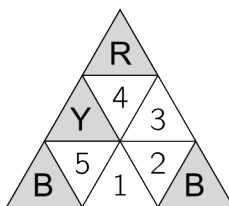
stand for?

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

23. The pages of a book are numbered 1, 2, 3, 4, 5 and so on. The digit 5 appears exactly 16 times. What is the maximum number of pages this book could have?

- (A) 49 (B) 64 (C) 66 (D) 74 (E) 80

24. Mary has 9 small triangles: 3 of them are red (R), 3 are yellow (Y) and 3 are blue (B). She wants to form a big triangle by putting together these 9 small triangles so that any two triangles with an edge in common are different colours. Mary places some small triangles as shown in the picture.



Which of the following statements is true after she has finished?

- (A) 1 is yellow and 3 is red (B) 1 is blue and 2 is red (C) 1 and 3 are red
 (D) 5 is red and 2 is yellow (E) 1 and 3 are yellow



Answers

Name: _____

Institution: _____

Grade: _____

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