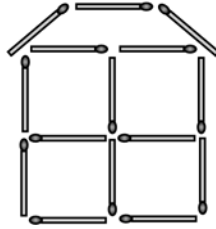




## Canadian Math Kangaroo Contest

### Part A: Each correct answer is worth 3 points

1. Michael built a house with matches as in the picture. How many matches did he use?



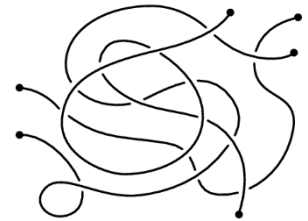
- (A) 19      (B) 18      (C) 17      (D) 15      (E) 13

2. Which of the following answers gives the largest number less than 15?

- (A)  $8+7$       (B)  $15-3$       (C)  $17-4$       (D)  $7+7$       (E)  $8+3$

3. How many ropes are there in the picture?

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

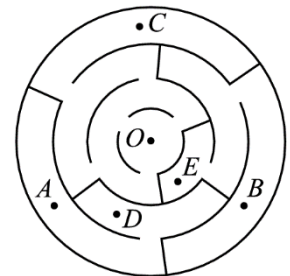


4. Ten friends came to John's birthday party. Six of them were girls. How many boys were there?

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

5. Which point of the maze can we reach starting from the point  $O$ ?

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



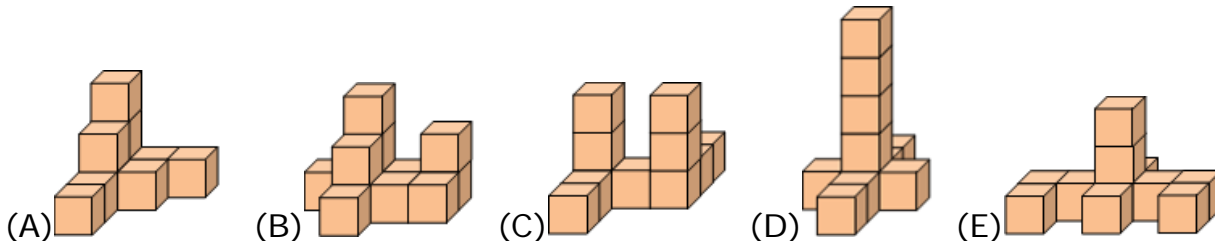
6. Which year is the next year after the current year, 2016, that is written with the same digits 0, 1, 2 and 6?

- (A) 2106      (B) 1206      (C) 2601      (D) 2061      (E) 2160



**Part B: Each correct answer is worth 4 points**

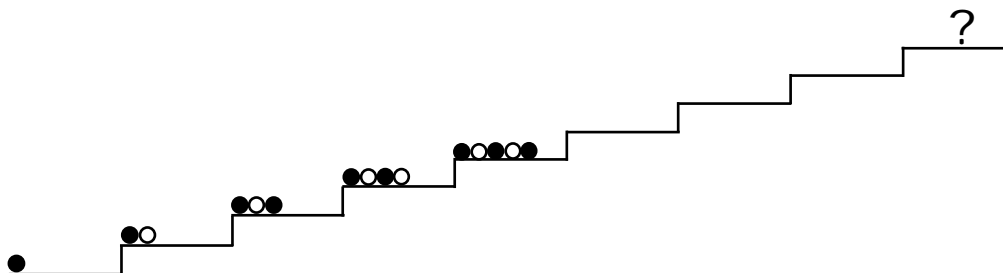
7. Which structure is built using 10 cubes?



8. Thirteen friends shared two pizzas. Each pizza was cut into eight slices. If everyone ate a slice, how many slices remained?

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

9. Sophie is arranging black and white marbles following the pattern shown in the picture.



How will the marbles appear on the top level where the question mark ? is located?

(A) ●○○●○○●○      (B) ○●○○○○●●      (C) ●○○●○○○○●  
 (D) ●○○●○○○○●      (E) ●○○●○○○○●

10. Lisa put six eggs of white or brown colour in the shown box. Two brown eggs cannot be next to each other. At most, how many brown eggs could Lisa put in the box?

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





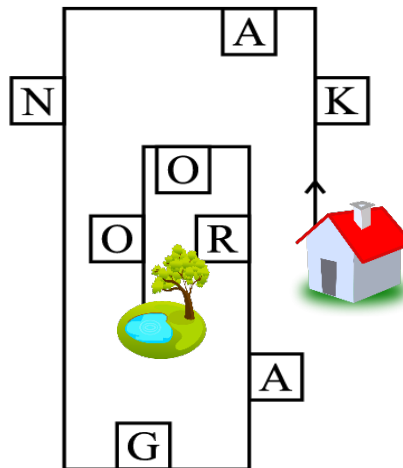
11. Today John and Paul added their ages and got 12. What number will they get in 4 years?

(A) 16      (B) 17      (C) 18      (D) 19      (E) 20

12. Mary is walking along the road from the house



to the pond

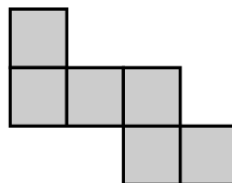


She is writing down on a piece of paper only the letters that appear on her right-hand side. What will she write down?

(A) KNAO    (B) KNGO    (C) KNR    (D) AGRO    (E) KAO

**Part B: Each correct answer is worth 5 points**

13. Amy wants to build a larger square from small square tiles. She already glued six tiles as shown.

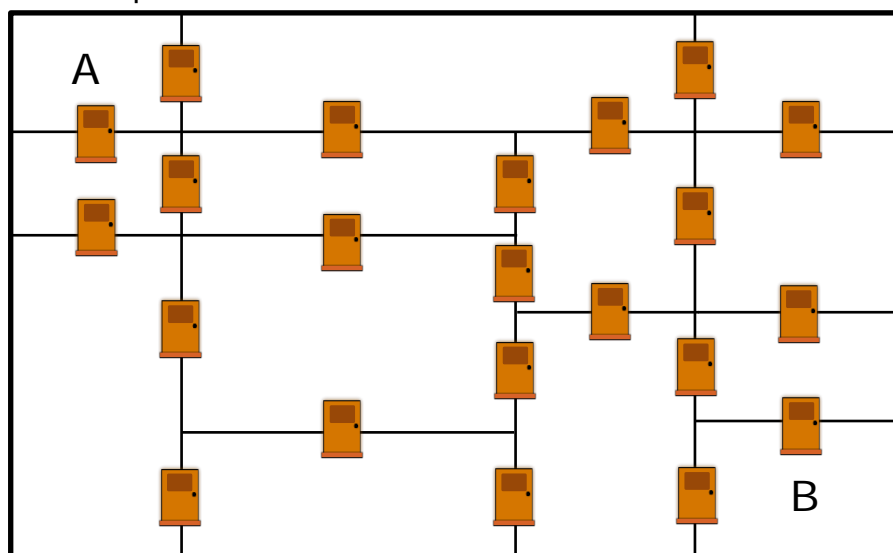


At least how many more tiles does she need?

(A) 6      (B) 8      (C) 9      (D) 10      (E) 12

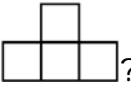


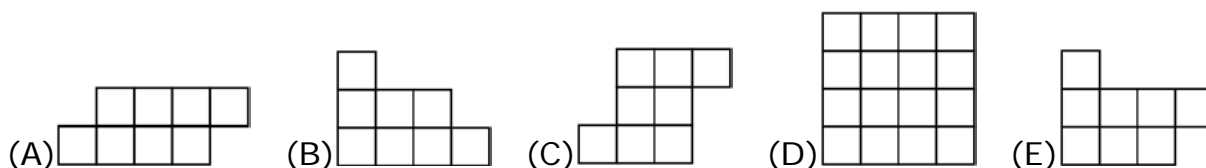
14. In Baby Roo's house, each room is connected to any neighbouring room by a door, see the picture.



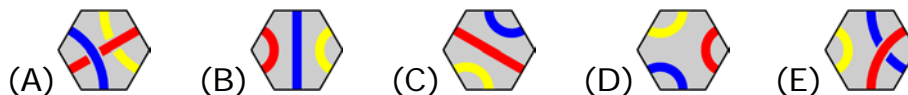
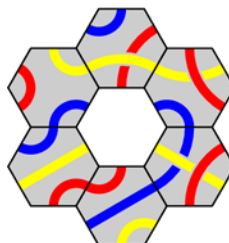
Baby Roo wants to get from the room A to the room B. What is the least number of doors he will need to go through?

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

15. Which picture **cannot** be made by using only shapes like .

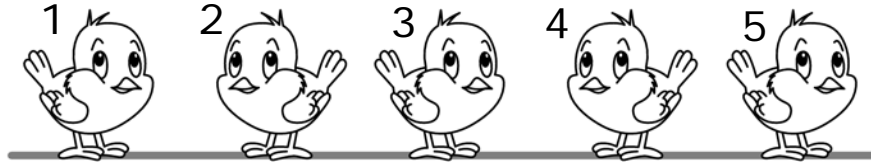


16. Which tile fits in the middle such that lines of the same colour are joined together? (Turning the middle tile is allowed.)





17. Paul saw five birds sitting on a wire. Some of them were looking to their left, others – to their right, as shown in the picture.



Each bird chirped once to each bird it saw. For example, the middle bird chirped twice because it saw birds 4 and 5. In total, how many chirps did Paul hear?

- (A) 6      (B) 8      (C) 9      (D) 10      (E) 12
18. Five dragons named Dodo, Pepe, Ritchi, Buro and Fifi lived each in his own cave.



Dodo and Pepe had only one neighbour. Ritchi lived in the cave with a triangle. Buro did not have a tree in front of his cave. Pepe lived next to Buro. Which cave did Fifi live in?

