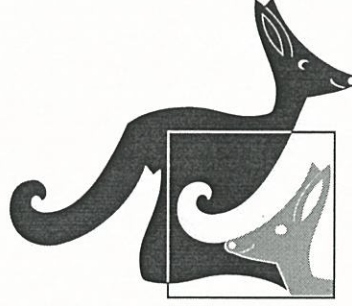In The Name of God

Enjoy Mathematics

International
Math Kangaroo 2016

Grades 1 & 2

3 Point Problems	1 to 8
4 Point Problems	9 to 16
5 Point Problems	17 to 24

3 Point Problems

1. Which letter on the board is not in the word "KOALA"?

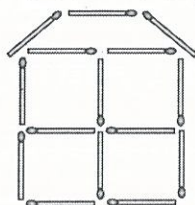(A) R   (B) L   (C) K   (D) N   (E) O

---

2. How many ropes are there in the picture?

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

---

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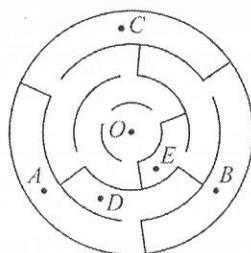

(A) 19   (B) 18   (C) 17   (D) 15   (E) 13

---

4. In a cave, there were only two seahorses, one starfish and three turtles. Later, five seahorses, three starfish and four turtles joined them. How many sea animals gathered in the cave?

(A) 6   (B) 9   (C) 12   (D) 15   (E) 18

---

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

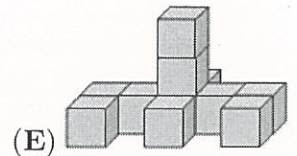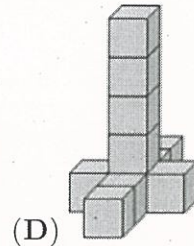(A) A (B) B (C) C (D) D (E) E
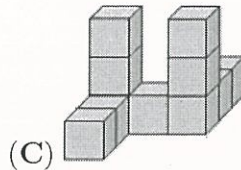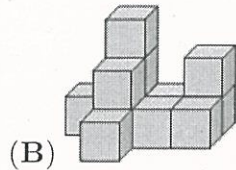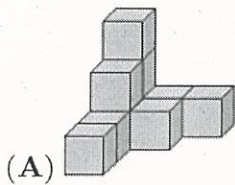
---

6. 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

---

7. In a street the houses are numbered 1, 2, 3, 4 and so on. Matt had to deliver flyers about recycling to all houses numbered from 25 to 57. How many houses got the flyers?
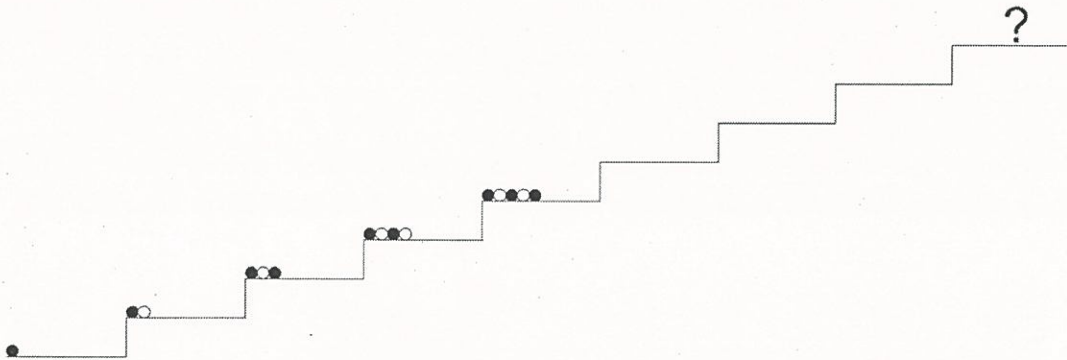
(A) 31   (B) 32   (C) 33   (D) 34   (E) 35
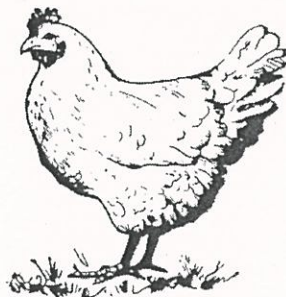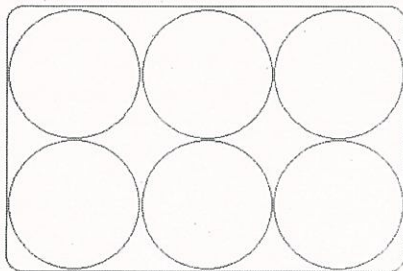
8. Which shape can we make with 10 cubes?

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

4 Point Problems

9. Sophie arranges balls on a stairway in a pattern as in the picture. How will the balls be arranged on the step with the question mark?

?

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

10. The hens of Lisa lay white or brown eggs. Lisa puts six eggs in the box below. Two brown eggs cannot touch each other. At most, how many brown eggs can Lisa put in the box?

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

11. One year has 12 months. Kanga is 1 year and 3 months old now. In how many months will Kanga be 2 years old?

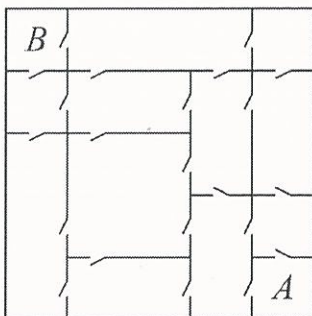(A) 3   (B) 5   (C) 7   (D) 8   (E) 9

12. Granny went out to the yard and called all the hens and her cat. All 20 legs ran to her. How many hens does granny have?

(A) 11   (B) 9   (C) 8   (D) 6   (E) 4

13. In Baby Roo's house, each room is connected to any neighboring 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 that he will need to go through?
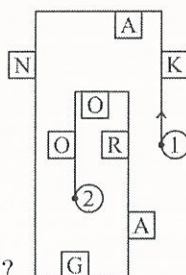
(A) 3   (B) 4   (C) 5   (D) 6   (E) 7

14. There are twelve rooms in a building and each room has two windows and one light. Last evening, eighteen windows were lit. In how many rooms was the light off?

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

15. Mary is walking along the road and she reads only the letters located on her right side. Moving from point 1 to point 2, what is the word she will read?

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

16. The sum of John's and Paul's ages is equal to 12. What will be sum of their ages in 4 years?

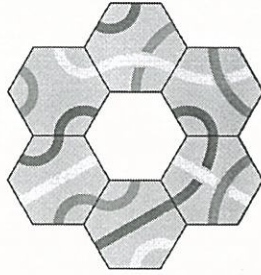(A) 16   (B) 17   (C) 18   (D) 19   (E) 20

5 Point Problems

17. Which of the following pictures cannot be made by using figures like ⌐ ?

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

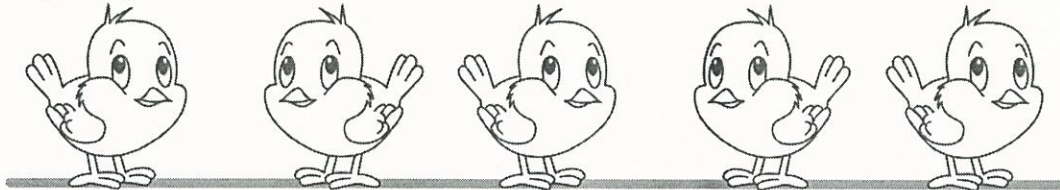**18.** Which tile matches the pattern in the picture?

(A)　　　　(B)　　　　(C)　　　　(D)　　　　(E)

19. The numbers 1, 5, 8, 9, 10, 12 and 15 are distributed into groups of one or more numbers. The sum of the numbers in each group is the same. What is the largest number of groups?
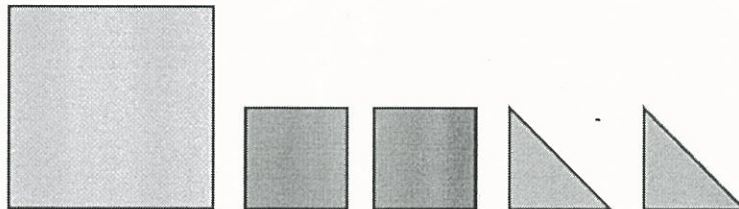
(A) 1　　　　(B) 2　　　　(C) 3　　　　(D) 4　　　　(E) 5

20. Five sparrows sat on a wire as shown in the picture. Each sparrow chirped only once to each bird it saw on its side. For example, the second sparrow chirped one time. In total, how many times did they chirp?
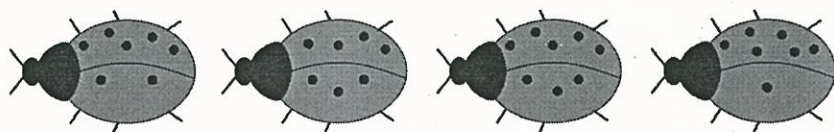
(A) 6　　　　(B) 8　　　　(C) 9　　　　(D) 10　　　　(E) 12

21. Which pattern can we make using all five cards given below?
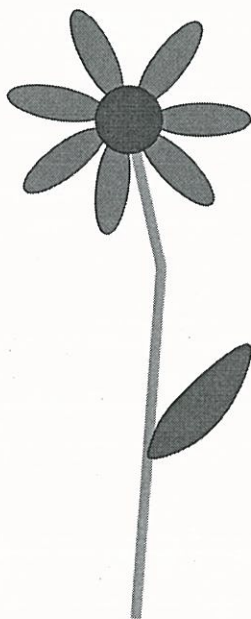
(A)　　　　(B)　　　　(C)

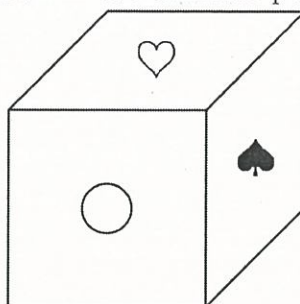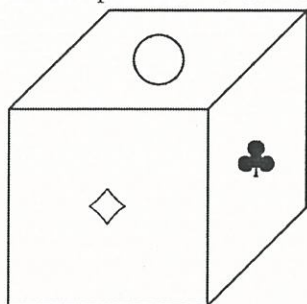(D)　　　　(E)

22. In the picture you see 4 ladybirds.

Each one sits on a flower. The flower that each sits on is defined as follows: the difference of the dots on each of their wings is the number of the leaves and the sum of the dots on each of their wings is the number of the petals. Which of the following flowers has no ladybird?
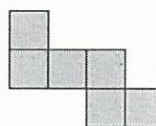

(A)

(B)

(C)

(D)

(E)

23. On each of six faces of a cube, there is one of the following six symbols: ♣, ◇, ♡, ♠, □ and ◯. On each face there is a different symbol.

In the picture we can see the cube shown in two different positions.

Which symbol is opposite the □?

(A) ◯   (B) ◇   (C) ♡   (D) ♠   (E) ♣

24. Amy used six equal small squares to build the figure [figure]. What is the least number of equal small squares she should add to the picture in order to obtain a larger square?

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

دبیرخانهٔ ریاضیات کانگورو