

**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO**



**INTERNATIONAL  
OLYMPIAD  
ACADEMY**



**GRADE - 2**

**PRE ECOLIER - 2**

## **SAMPLE TEST PAPER**

# **MATH KANGAROO COMPETITION - 2019**

**Test Booklet Series**

**Set - 0**

**DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO**

Roll No.:

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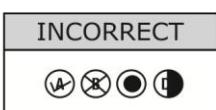
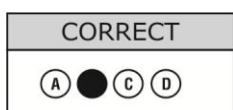
Student's Name:

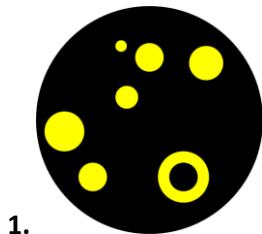
**Maximum Time: 90 Minutes**

**Maximum Marks: 96**

### **INSTRUCTIONS**

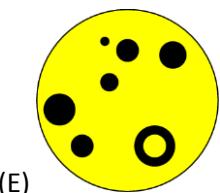
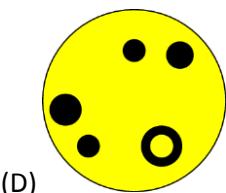
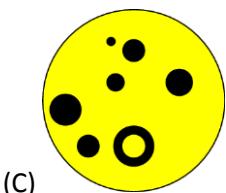
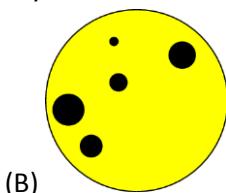
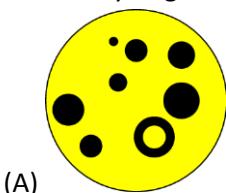
1. Please **DO NOT OPEN** the contest booklet until the proctor has given permission to start.
2. There are 24 questions in this paper. 3 points, 4 points and 5 points will be awarded for each correct question in Section A, Section B and Section C respectively. There is no penalty for any incorrect answer, and no penalty for skipping a question.
3. All questions are compulsory. There is only ONE correct answer of each question.
4. No electronic devices capable of storing and displaying visual information are allowed during the exam.
5. Use of **calculator** is strictly prohibited in the exam.
6. Fill your **Name, Roll No., Grade and School Name** in the answer sheet.
7. To mark your choice of answers by darkening the circles in the Answer Sheet, use a HB Pencil or a **Blue/Black Ball Point Pen** only.
8. Shade your answer clearly as per the example shown below:



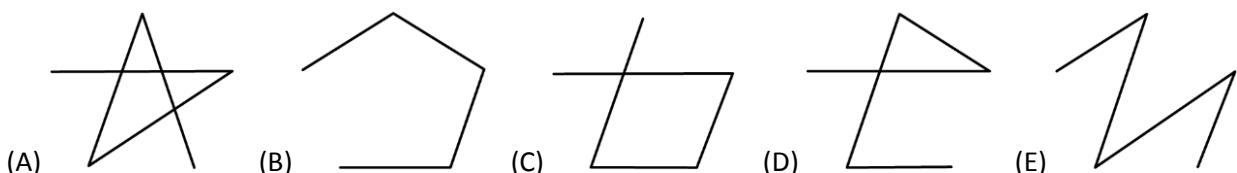
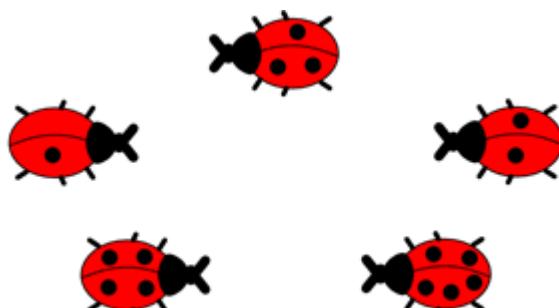
**SECTION – A (3 POINT PROBLEMS)**

1.

What do you get when you invert the colours?



2. Alice draws a figure connecting the ladybirds in the order of increasing number of their dots. She starts with the ladybird with one dot. Which figure will she get?



3. Mary glued 4-ray stars like this. At least, how many stars did she use ?



(A) 5

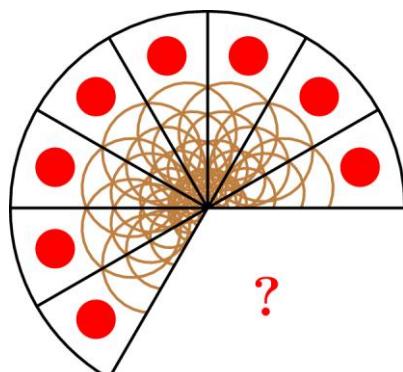
(B) 6

(C) 7

(D) 8

(E) 9

4. This pizza was cut into equal slices. How many slices have been taken?



(A) 1

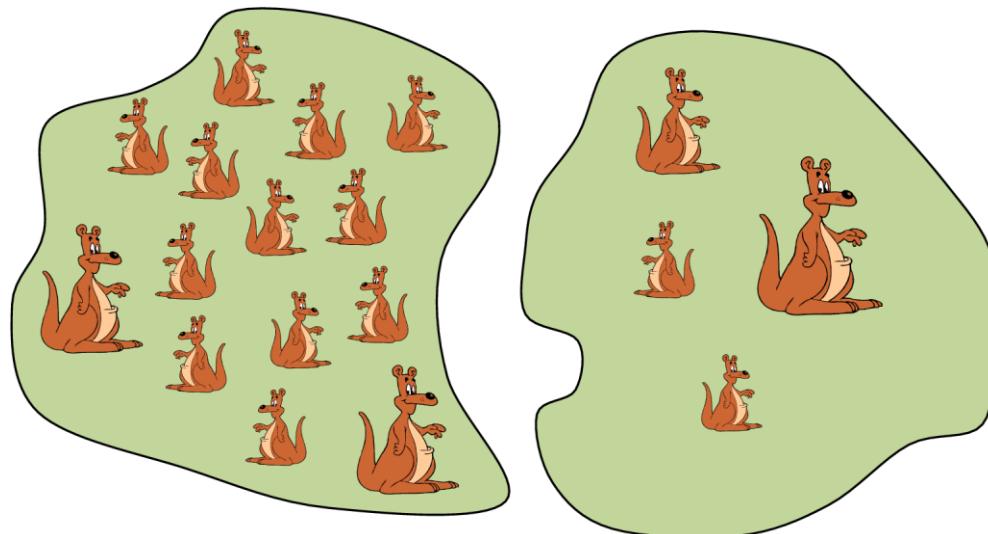
(B) 2

(C) 3

(D) 4

(E) 5

5. How many kangaroos must be moved from one park to the other to get the same number of kangaroos in both parks?



(A) 4

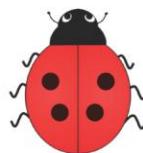
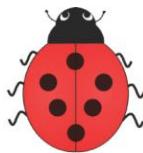
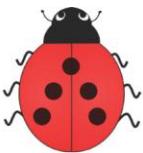
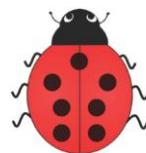
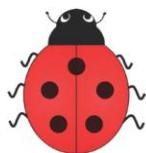
(B) 5

(C) 6

(D) 8

(E) 9

6. Which of these ladybirds has to fly away so that the rest of them have 20 dots in total?



(A) ladybird 5 dots

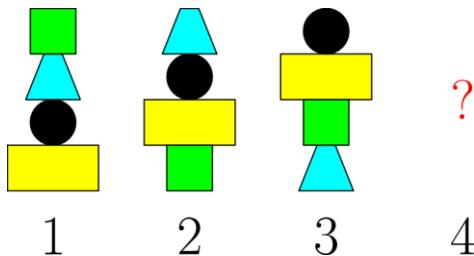
(B) 7 dots

(C) 5 dots

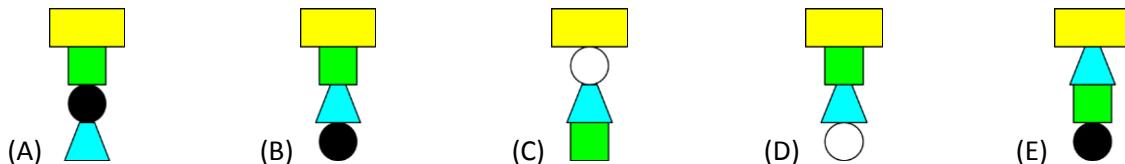
(D) 6 dots

(E) 4 dots

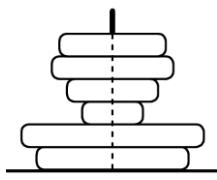
7. Emilie builds towers in the following pattern:



Which one will be the 16th?



8. Little Theodor assembled a stacking toy as in the picture. How many rings will he see looking at it from above?



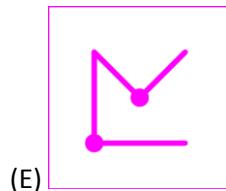
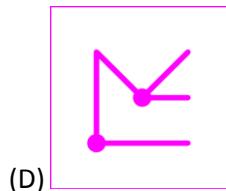
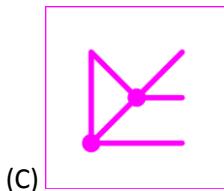
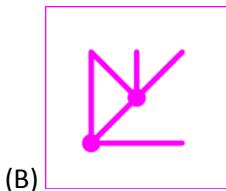
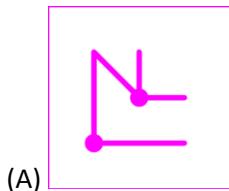
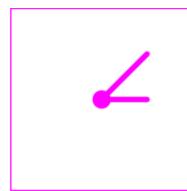
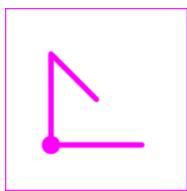



**SECTION – B (4 POINT PROBLEMS)**

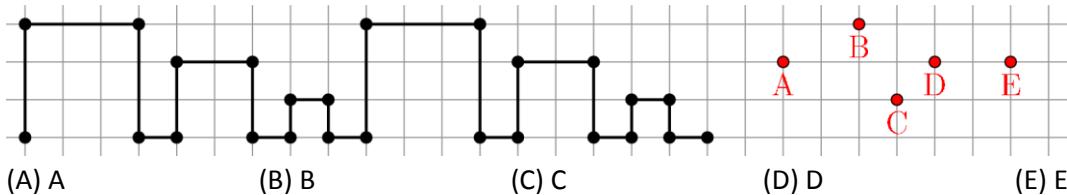
9. Juana, the friendly witch, has 5 broomsticks in her garage. She removes the broomsticks one by one without moving the others. Which broomstick will Juana take at last?



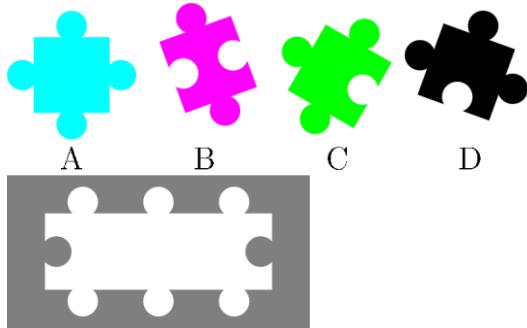
**10.** The two transparent squares are put on top of each other. What can you see?



**11.** Peter drew a pattern twice, as in the picture. Which point will he reach when he draws the third pattern?



**12.** Lisa has 4 pieces, but she only needs 3 for her puzzle frame.



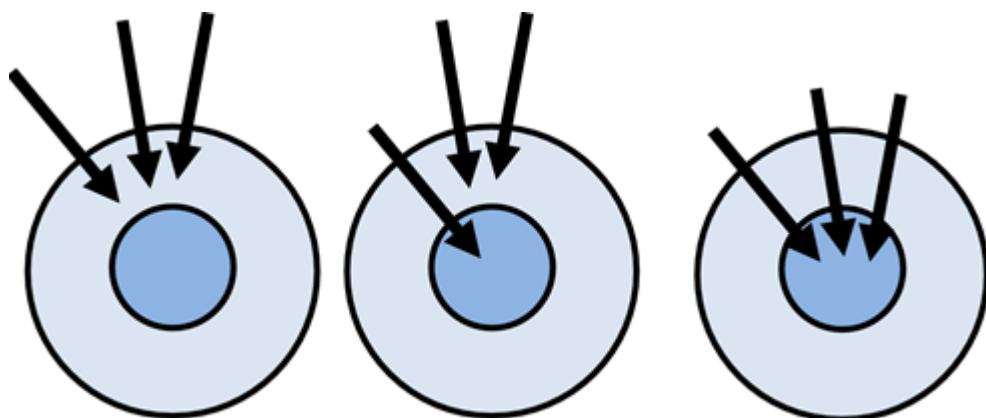
Which one will be left over?

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

**13.** Diana first got 6 points with three arrows on the target, as on the left picture.

The second time she got 8 points, as in the middle picture.

How many points did she get the third time?

**6 Points****8 Points****???**

(A) 8

(B) 10

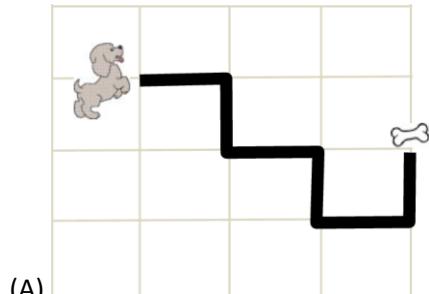
(C) 12

(D) 14

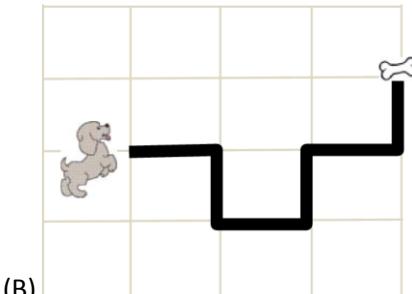
(E) 16

14. The dog went to its food following a path, as shown. At the crossroads it had to turn totally 3 times to the right and 2 times to the left.

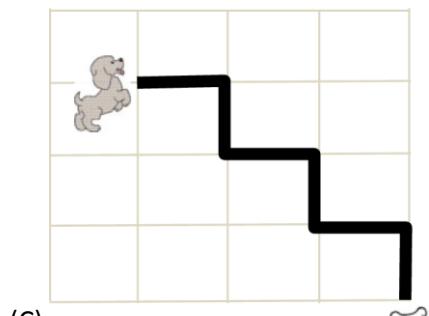
Which path did the dog follow?



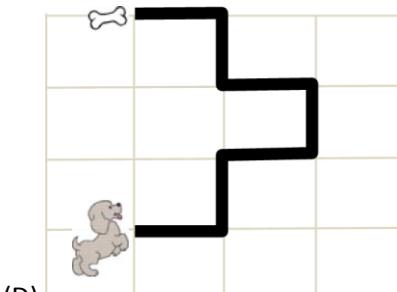
(A)



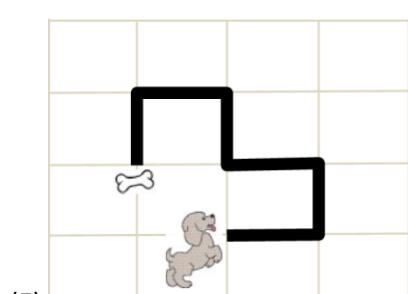
(B)



(C)

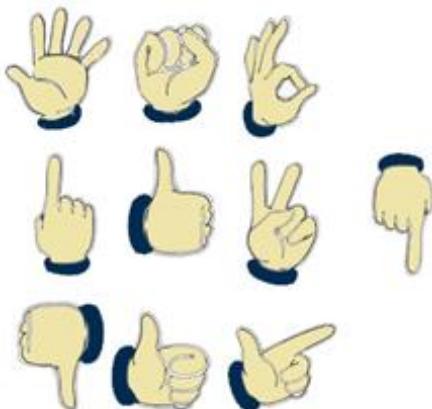


(D)



(E)

**15.** How many times your own right hand appears in the picture?



(A) 3

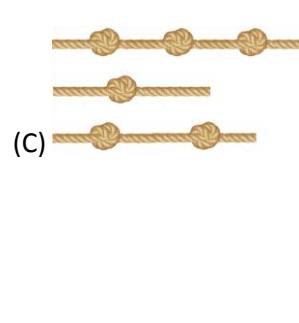
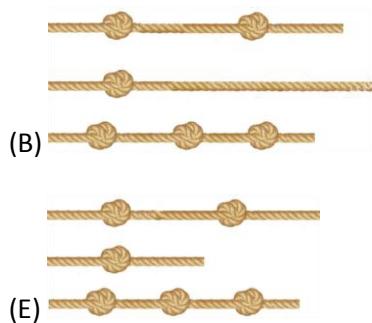
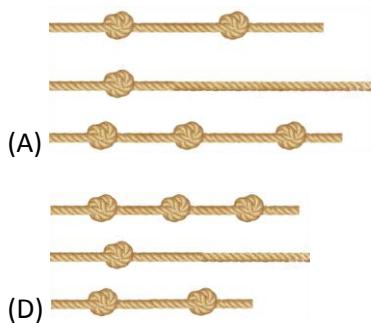
(B) 4

(C) 5

(D) 6

(E) 7

**16.** Charles cut a rope in three equal pieces and then made some equal knots with them. Which figure shows correctly the three pieces with the knots?



### SECTION – C (5 POINT PROBLEMS)

**17.** The number of dwarfs that can fit under a mushroom is equal to the number of dots on the mushroom cap. The picture below shows one side of each mushroom, the number of dots on the other side is the same. If 30 dwarfs are seeking shelter from the rain, how many dwarfs will get wet?



(A) 2



(B) 3



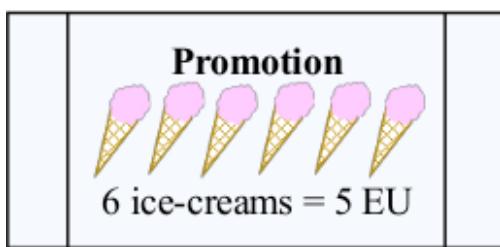
(C) 4



(D) 5

(E) 6

**18.** 1 ice-cream costs 1 euro. There is a promotion so you can buy 6 ice-creams for 5 euros. How many ice-creams at most could you buy with 36 euros?



- (A) 36      (B) 30      (C) 42      (D) 43      (E) 45

**19.** How many numbers greater than 10 and smaller than 25 with distinct digits can we make by using two of the digits 2, 0, 1, and 8 ?

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

**20.** A pirate has two chests. There are 10 coins in the left chest and the other is empty. Starting tomorrow, the pirate will put 1 coin in the left chest and 2 coins in the other one every day. In how many days will the two chests have the same number of coins?

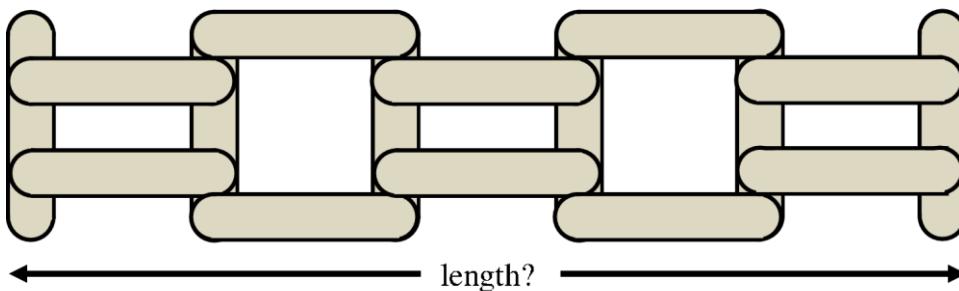
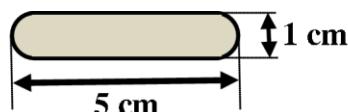


- (A) 5      (B) 8      (C) 10      (D) 12      (E) never

**21.** Alice has 3 white, 2 black and 2 grey sheets of paper. She cuts every non-black sheet of paper in half. Then she cuts every non-white sheet of paper in half. How many pieces of paper will she have?

- (A) 14      (B) 16      (C) 17      (D) 18      (E) 20

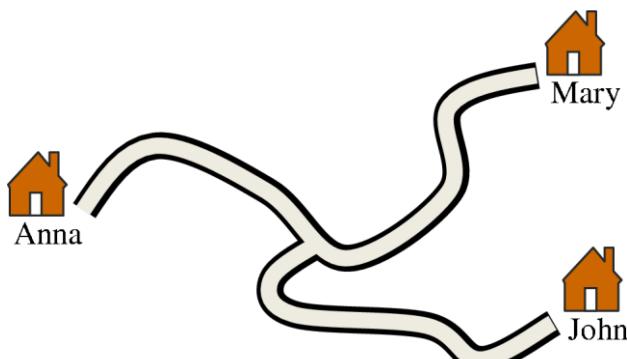
**22.** A student had some sticks of length 5 cm and width 1 cm. With the sticks he constructed the fence below. What is the length of the fence?



- (A) 20 cm      (B) 21 cm      (C) 22 cm      (D) 23 cm      (E) 25 cm

**23.** The road from Anna's to Mary's house is 16 km long.

The road from Mary's to John's house is 20 km long and the road from the crossroad to Mary's house is 9 km long. How long is the road from Anna's to John's house?



- (A) 7 km      (B) 9 km      (C) 11 km      (D) 16 km      (E) 18 km

**24.** Nelly bought 4 toys in the store. Their costs satisfy the equalities:

$$\text{Pyramid} + \text{Pyramid} + \text{Pyramid} = \text{Rabbit},$$

$$\text{Pyramid} + \text{Rabbit} = \text{Doll} \quad \text{and}$$

$$\text{Bear} + \text{Rabbit} = \text{Pyramid} + \text{Doll}.$$

What are the cheapest and the most expensive toys?

