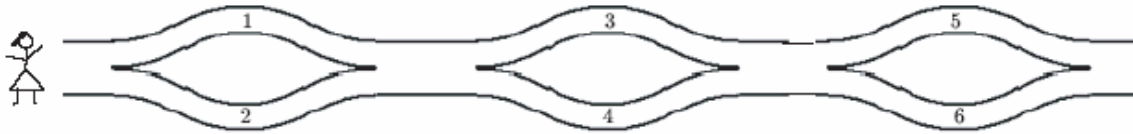# INTERNATIONAL KANGAROO MATHEMATICS CONTEST 2007

Level Ecolier: Class (3 & 4)   **Max Time: 1 Hour & 15 Minutes**

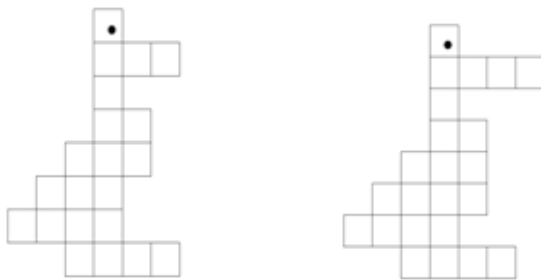## Each solved problem gives you 3 points

Q1. Amina walks from the left to the right and puts the numbers in her basket. Which of the following numbers can be in her basket?

A) 1, 2 and 4   B) 2, 3 and 5

Q2. In what figure do you find the biggest number of little squares?

A)   B)

Q3. How many common letters do the words *KANGAROO* and *PROBLEM* have?

A) 1   B) 2

Q4. What is the first number greater than 2007 such that the sum of the digits is the same?

A) 2016   B) 2115

Q5. There are 5 lampposts on one side of the path in the park. The distance between each pair of neighbouring lampposts is 3 metres. Kangaroo was jumping all the way from the first lamppost to the last one. How many metres has he jumped?

A) 12   B) 9

Q6. The combination for opening a safe is a three digit number made up of different digits. How many different combinations can you make using only digits 1, 3 and 5?

A) 6   B) 4

Q7. How much is 2007 ÷ (2+0+0+7) - 2×0×0×7 = ?
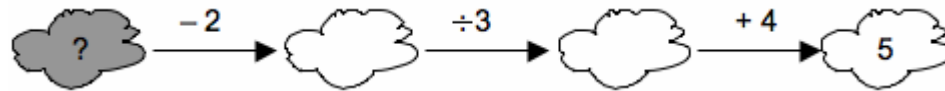
        A) 223   B) 9

Q8. Which of the following piece that fits together with the given one to form a rectangle?

        A)   B)

Q9. Which number needs to be put into the dark cloud, to have all the given calculations right?

?   −2   ÷3   +4   5

        A) 5   B) 3

Q10. $4 \times 4 + 4 + 4 + 4 + 4 + 4 \times 4 =?$

        A) 48   B) 44

Q11. In the given square the numbers 1, 2 and 3 must be written in the cells. In each row and in each column each of the numbers 1, 2 and 3 must appear. Ali started to fill in the square. Which number can be written in the cell with the question mark?

        A) only 3   B) only 2

Q12. Faiza has Rs. 25. She intends to buy 3 copies and some pencils. If a copy costs Rs. 5 and a pencil costs Rs. 2, then maximum number of pencils she could buy is

        A) 4   B) 5

Q13. Ali, who is older than Rehan by 1 year and 1 day, was born on January 1, 2002. What is the date of Rehan's birth?
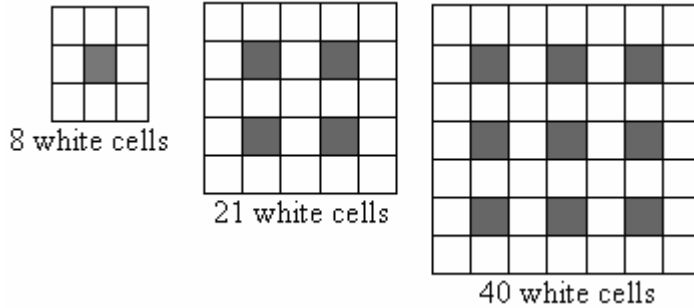
        A) January 2,   B) January 2,
            2003   2001

Q14. Hamid wrote a two-digit number. He added 19 to it and got 72. What number did he wrote first?

        A) 54   B) 53

Q15. In the pattern given below, how many black cells has the next square?

8 white cells

21 white cells
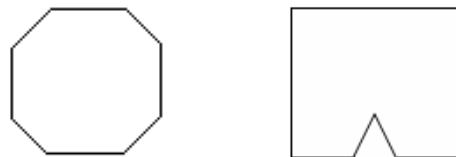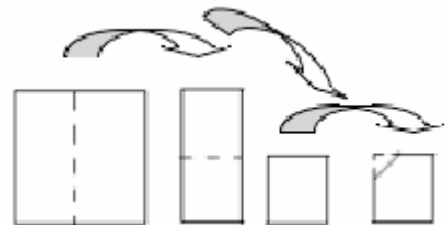
40 white cells

        A) 20   B) 16

Q16. The seats on a children merry-go-round are numbered in the sequence 1, 2, 3, ... On this merry-go-round, Asad was sitting on seat numbered 2, exactly opposite Sadia, who was sitting on seat number 6. How many seats are there on this merry-go-round?

        A) 6   B) 8

Q17. How many times digit 2 will appear in integers from 1 to 30?

        A) 13   B) 12

Q18. A square piece of paper will be folded twice in such a way that the result is square again. In this square one of the corners will be cut out, after which the paper will be folded out again. Which of the following pieces of paper we can get in this way?

        A)   B)

Q19. A digital clock shows the time 01: 27. What the minimal time should pass in order to the same four digits (in some order) appear on the clock?

     A) 50 min   B) 5 h 45 min

Q20. A cube with a side length of 3 cm is painted gray and cut into smaller cubes each with a side length of 1 cm. How many of the smaller cubes will have exactly 2 faces painted?

     A) 10   B) 12