

*Kangourou Sans Frontières**Mathematics Promotion Society**Math Kangaroo in USA*

# Math Kangaroo 2012 in USA

## International Competition in Mathematics

### Thursday, March 15, 2012

#### Levels 1 and 2

*This test consists of 24 questions on 4 pages.*

*You have 75 minutes to complete it.*

*Calculators are not allowed!*

*Please enter your answers on the answer form provided.*

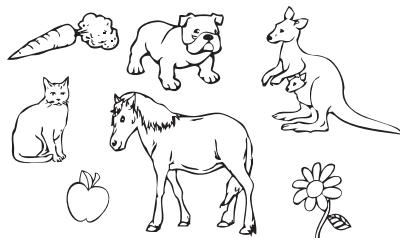
*Please put your name and ID number on the line below.*

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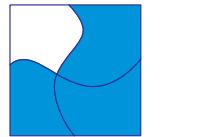
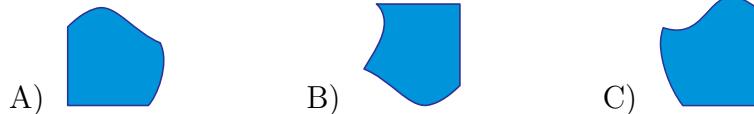
#### 3 Point Problems

1. How many animals are there in the picture to the right?

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

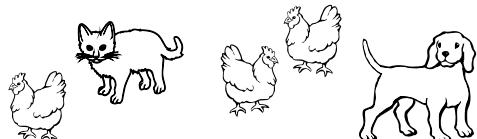


2. Which piece fits in the empty place in the puzzle on the right?



3. How many legs do these animals have altogether?

- A) 5      B) 10      C) 12      D) 14      E) 20



4. Helena wrote the word KANGAROO twice. How many times did she write the letter A?

- A) 1      B) 2      C) 3      D) 4      E) 6

5. Luke repeats the same four stickers on a strip.



Which is the tenth sticker put down by Luke?

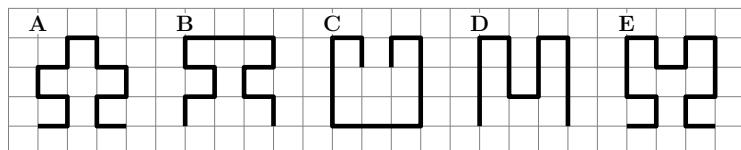
- A)      B)      C)      D)      E)

6. On Friday Dan starts to paint the word BANANA. Each day he paints one letter. On what day will he paint the last letter?

- A) Monday      B) Tuesday      C) Wednesday      D) Thursday      E) Friday

7. Which of the bolded paths is the longest?

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



8. Katja is in a boat on a lake. Which of the pictures does she see in the lake?

- A)      B)      C)      D)      E)



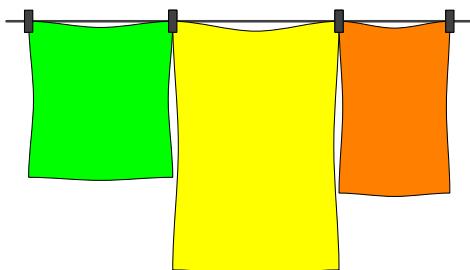
#### 4 Point Problems

9. 13 children are playing hide and seek. One of them is the “seeker.” After a while 9 children have been found. How many children are still hiding?

- A) 3      B) 4      C) 5      D) 9      E) 22

10. Father hangs the laundry outside on a clothesline. He wants to use as few pins as possible. For 3 towels he needs 4 pins, as shown. How many pins does he need for 9 towels?

- A) 9      B) 10      C) 12      D) 16      E) 18

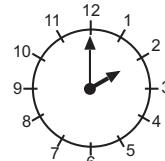


**11.** Today Betty added her age and her sister's age and obtained 10 as the sum. What will the sum of their ages be one year from today?

- A) 5      B) 10      C) 11      D) 12      E) 20

**12.** The clock shows the time when Stephen leaves school. Lunch at school starts 3 hours before school ends. At what time does lunch start?

- A) 1      B) 2      C) 5      D) 11      E) 12

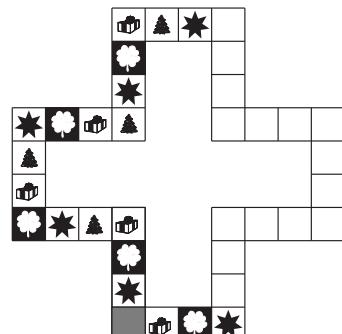


**13.** A dragon has 3 heads. Every time a hero cuts off 1 head, 3 new heads grow. The hero cuts 1 head off and then he cuts 1 head off again. How many heads does the dragon have now?

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

**14.** Stars, clovers, gifts and trees repeat regularly on a game board. Some juice was spilled on the board. As a result some of the pictures can't be seen (these are the white spaces in the picture). How many stars were on the board before the juice was spilled?

- A) 3      B) 6      C) 8      D) 9      E) 20



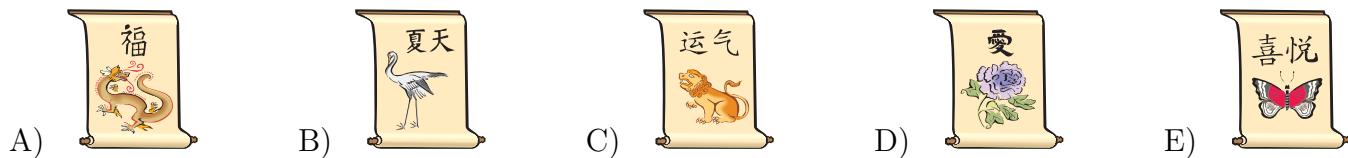
**15.** Eve brings 12 pieces of candy, Alice brings 9 pieces of candy and Irene doesn't bring any candy. They put all the pieces of candy together on a table and divide them equally among themselves. How many pieces of candy does each of the girls get?

- A) 3      B) 7      C) 8      D) 9      E) 12

**16.** Tim is looking at seven silk paintings on a wall. On the left he sees the dragon and on the right the butterfly.



Which animal is to the left of the tiger and the lion, and to the right of the apricot?



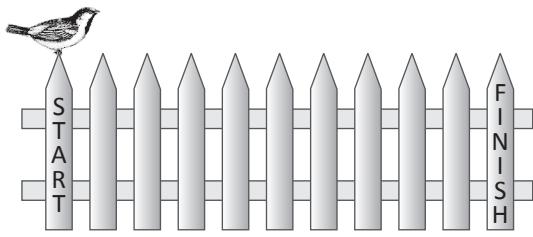
### 5 Point Problems

**17.** Winnie the Pooh bought 4 apple pies and Eeyore bought 6 cheesecakes. They each paid the same amount of money and together they paid 24 euros. How many euros does 1 cheesecake cost?

- A) 2      B) 4      C) 6      D) 10      E) 12

**18.** Sparrow Jack jumps on a fence from one post to another. Each jump takes him 1 second. He makes 4 jumps ahead, then 1 jump back and again 4 jumps ahead and 1 back, and so on. In how many seconds does Jack get from START to FINISH?

- A) 10      B) 11      C) 12      D) 13      E) 14



**19.** Grandmother made 11 cookies. She decorated 5 cookies with raisins and then 7 cookies with nuts. At least how many cookies were decorated with both raisins and nuts?

- A) 1      B) 2      C) 5      D) 7      E) 12

**20.** At a school party Dan, Jack and Ben each received a bag with 10 pieces of candy. Each of the boys ate just 1 piece of candy and gave 1 piece of candy to the teacher. How many pieces of candy do they have left altogether?

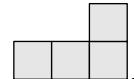
- A) 8      B) 10      C) 24      D) 27      E) 30

**21.** What number is covered by the flower?

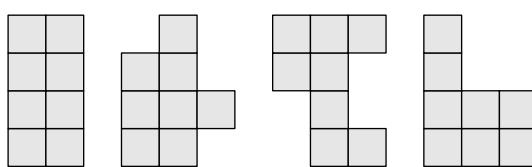
- A) 1      B) 2      C) 3      D) 4      E) 5

$$\begin{array}{l} \textcircled{O} + \triangle = 3 \\ \triangle + \triangle = 4 \\ \triangle + \square = 5 \\ \textcircled{O} + \square = \text{flower} \end{array}$$

**22.** Ann has a lot of these tiles:



How many of the following shapes can Ann make by gluing together two of these tiles?



- A) 0      B) 1      C) 2      D) 3      E) 4

**23.** In a box there are three boxes, and each one of these boxes contains three smaller boxes. How many boxes are there in total?

- A) 9      B) 10      C) 12      D) 13      E) 15

**24.** There are coins on the board. We want to have 2 coins in each column and 2 coins in each row. How many coins need to be removed?

- A) 0      B) 1      C) 2      D) 3      E) 4

