Math Kangaroo USA 2008

# **Sample Questions**

# **LEVELS 1 AND 2**

# SAMPLE QUESTION FOR 3 POINTS

In which picture are there 2 more cats than dogs?



# SAMPLE QUESTION FOR 4 POINTS

Elma took 2 candy bars to school. First, she traded each of them for 4 apples, and then she traded each of the apples for 3 mandarin oranges. How many mandarin oranges did she have after all the trading?

A) 2+4+3 B)  $2 \times 4+3$  C)  $2+4 \times 3$  D)  $2 \times 4 \times 3$ 

#### **SAMPLE QUESTION FOR 5 POINTS**

There are equal numbers of cats, dogs, and chickens in the yard. Together, they have 50 legs. How many cats are there in the yard?

A) 4 B) 6 C) 5 D) 7

# **LEVELS 3 AND 4**

## **SAMPLE QUESTION FOR 3 POINTS**

An adult ticket to the zoo costs \$4, and a ticket for a child is \$1 cheaper. On a certain Sunday, a father went to the zoo with his two children. How much did they have to pay for the tickets?

A) \$5 B) \$6 C) \$7 D) \$10 E) \$12

### **SAMPLE QUESTION FOR 4 POINTS**

Each of the figures A to E shown below is made up of 5 blocks. Which of the figures can you not get from the figure on the right if you move exactly one cube?





#### SAMPLE QUESTION FOR 5 POINTS

Right now, Mary is five times as old as her sister Li. In 6 years, she will be twice as old as Li. How old will Mary be in 10 years?

A) 15 B) 20 C) 25 D) 30 E) 35

# **LEVELS 5 AND 6**

### **SAMPLE QUESTION FOR 3 POINTS**

Which number is the smallest?

A) 2 + 0 + 0 + 8 B)  $200 \div 8$  C)  $2 \times 0 \times 0 \times 8$  D) 200 - 8 E) 8 + 0 + 0 - 2

### **SAMPLE QUESTION FOR 4 POINTS**

There are five boxes as shown in the picture, and each one contains cards with different letters. Paul wants to remove cards from the boxes in such a way that there is only one card left in each box, and that every box has a card with a different letter in it. Which card will be left in box 5?



# SAMPLE QUESTION FOR 5 POINTS

A train traveling at a steady speed crossed a bridge which was 200 m long in 1 minute. The whole train passed a person standing on the bridge in 12 seconds. How long was the train?

A) 100 m B) 60 m C) 50 m D) 40 m E) 75 m

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# **LEVELS 7 AND 8**

## **SAMPLE QUESTION FOR 3 POINTS**

The numbers 2, 3, 4, and one more number are written in the cells of a $2 \times 2$ table. It is known that the sum of the numbers in the first row is equal to 9, and the sum of the numbers in the second row is equal to 6. The unknown number is:							
A) 4	B) 5	5 C) 6	D) 7	E) 8			
SAMPLE QUESTION FOR 4 POINTS							
How many squares can be drawn by joining the dots with line segments? $\bullet$ $\bullet$							
A) 2	B) 3	C) 4	D) 5	E) 6			

# SAMPLE QUESTION FOR 5 POINTS

In the equation KAN - GAR = OO each letter represents a certain digit (different letters represent different digits, the same letters represents the digits). Find the largest possible value of the number KAN.

A) 987 B) 876 C) 865 D) 864 E) 785