

Math Kangaroo 2012 Sample Questions - Levels 3 & 4

1. Basil wants to write the word MATHEMATICS on a sheet of paper. He wants to color different letters different colors, and the same letters the same color. How many colors will he need?

- A) 7 B) 8 C) 9 D) 10 E) 13

7. A regular rectangular pattern on a wall was created with 2 kinds of tiles: grey and striped. Some tiles have fallen off the wall (see the picture). How many grey tiles have fallen off?



- A) 9 B) 8 C) 7 D) 6 E) 5

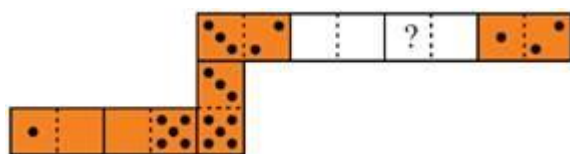
10. Three balloons cost 12 cents more than one balloon. How many cents does one balloon cost?

- A) 4 B) 6 C) 8 D) 10 E) 12

13. Among Nikolay's classmates there are twice as many girls as boys. Which of the following numbers can be equal to the number of all children in this class?

- A) 30 B) 20 C) 24 D) 25 E) 29

18. Frank made a domino snake out of seven tiles. He put the tiles next to each other so that the sides with the same number of dots were touching. Originally the snake had 33 dots on its back. However, his brother George took away two tiles from the snake (see the picture). How many dots were in the place with the question mark?



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

19. Gregory forms two numbers with the digits 1, 2, 3, 4, 5 and 6. Both numbers have three digits, and each digit is used only once. He adds these two numbers. What is the greatest sum Gregory can get?

- A) 975 B) 999 C) 1083 D) 1173 E) 1221