Math Kangaroo 2010 Sample Questions - Levels 5 & 6

7. Seven identical candy bars were arranged on the bottom of a square box. It is possible to slide the candy bars so that there will be room for one more candy bar. What is the least number of candy bars that must be moved to make room for one more candy bar?

A)	1
B)	2

- C) 3
- D) 4
- E) 5



8. An old book was missing several consecutive pages. The last page number before the missing pages was 28 and the first page number after the missing pages was 75. How many pages were missing from the old book?

A) 51 B) 23 C) 22 D) 21 E) 50

11. Each pair of adjacent sides of the figure shown in the picture is perpendicular. What is the perimeter of this figure?



12. Adam divided a certain secret number by 7. Then, he added 7 to the result and multiplied the number he obtained in this way by 7. For the final result he got the number 777. What was Adam's secret number?

A) 770 B) 111 C) 722 D) 567 E) 728

23. Adam and Tom are walking in the same direction around a circular table and counting chairs. They begin their counts with different chairs. Tom's twentieth chair is Adam's fourth chair, while Tom's tenth chair is Adam's forty-sixth chair. How many chairs are there at the table?

A) 50 B) 52 C) 56 D) 60 E) 80

24. The rectangle shown in the picture was divided into squares with different side lengths. The areas of some of these squares are given. What is the area of the entire rectangle?

