Math Kangaroo 2007 Sample Questions - Levels 5 & 6

1. Evaluate: 2007 ÷ (2 + 0 + 0 + 7) – 2 × 0 × 0 × 7

A) 1   B) 9   C) 214   D) 223   E) 2007

2. Donald's grandfather sleeps through exactly a quarter of the day. Donald sleeps one and a half times as long as his grandfather. What fraction of the day does Donald spend sleeping?
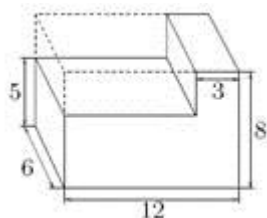
A) 1/6   B) 1/2   C) 1/8   D) 3/8   E) 3/4

13. Alex, Ben, Carl, and Daniel each participates in a different sport: karate, soccer, volleyball, and judo. Alex does not like sports played with a ball. Ben practices judo and often attends soccer games to watch his friend play. Which of the following statements is true?

A) Alex plays volleyball.   B) Ben plays soccer.   C) Carl plays volleyball.

D) Daniel does karate.   E) Alex does judo.

14. By what amount will the surface area of the rectangular block shown in the picture decrease if a rectangular section is removed as shown?

A) 27   B) 54   C) 72   D) 108   E) 126

21. Diagonals are drawn on three adjacent faces of a cube as shown in the picture. From which of the grids below could such a cube be constructed?

22. To the right of a certain two-digit number the same number has been written, creating a four-digit number. How many times greater is the new four-digit number than the original two-digit number?

A) 100   B) 101   C) 1000   D) 1001   E) 10