

# Montlake Math Challenge

October 2, 2008

## Logic Puzzles

**Puzzle 1:** Rabbit is having Winnie the Pooh over for tea, and decides that he should hide his honey pot. Rabbit has three boxes of different colors, and he puts the honey in one of the boxes. He labels the boxes as follows:

Red Box: There is no honey in here.

Blue Box: The honey is in here.

Green Box: The honey is in the blue box.

Unfortunately, Rabbit cheated, and only one of the labels on the boxes is true. Where can Winnie the Pooh find the honey?

**Puzzle 2:** A drawer contains 7 red socks, 8 blue socks, and 10 black socks. It is dark, and you can't tell what color any of the socks is. What is the smallest number of socks you can pull out of the drawer to *guarantee* that you get a pair of matching socks?

**Puzzle 3:** During a recent census, a man told the census taker that he had three children. The census taker asked the man how old his children were, and he replied “The product of their ages is 72, and the sum of their ages is the same as my house number.”

The census taker complained, “I still don't know how old they are!”

The man replied, “Oh, that's right, I forgot to tell you that the oldest one likes chocolate pudding.”

The census taker immediately knew how old his children were. How?