In Monopoly™, you get to roll again if you roll doubles (the same number on two six-sided number cubes).

a) What is the theoretical probability of rolling doubles? (You may find it helpful to complete the tree diagram below.)

Cube A

1 2 3 4 5 6

Cube B

b) What is the theoretical probability of rolling two doubles in a row? (Think about what you would have to add to your tree diagram in part a) in order to determine the number of possible outcomes. Then deduce an easy way to get the desired probability as a simple product.)

c) If you get three doubles in a row, you go to the “Jail” space on the board. What are the chances of rolling three doubles in a row?