E105 Module 2 Pretest

Your name and section: _____

These questions are ungraded, but they will allow us to get an indication of the general level of understanding of probability in the class. Just answer them on the basis of your present understanding. Completing this pretest is one necessary element for full credit for class participation during this module of the course.

Turn in your answers to your AI at the beginning of class on 9/21.

1. What is the probability of a fair coin coming down heads twice in a row?

2. When a fair coin is tossed three times, is the probability of getting three heads in a row (HHH), more, less, or equal to the probability of getting HTH in that order?

3. If a fair coin tossed three times has just come down HHH, is the probability of getting a head on the next toss equal to .5, less than .5, or greater than .5?

4. Imagine that you are in a game show. There are three doors in front of you. Behind one of the doors is a new bicycle. Behind the other two doors is the combined debt of all of your friends.   (You want the bicycle.) You choose one door. The host opens another door to reveal the combined debt of all of your friends. Now you may either change to pick the other closed door or you can stick with your original choice. Should you:

    A. Change to pick the other closed door.

    B. Stick with your original choice.

    C. It doesn't matter, there's 50% chance.

    D. I don't understand why I would prefer a bicycle to debt.