

Math 79, Probability Class Exercise 1

Instructor: Dr. Fred Park

1. Experiment #1: Coin Toss. Pick a partner.

- Make a chart
- Keep track of each coin and flip them one at a time in order. i.e. flip coin #1 first then coin #2.
- Fill out the table by flipping the coins 100 times. Flip them as ordered pairs. One flip consists of flipping coin #1 first and then #2. i.e. they are paired:

Outcome	Frequency	Experimental Probability	Theoretical Probability
HH			
HT			
TH			
TT			

- How close does your experimental probability agree with the theoretical probability? Do you think that if you did more coin tosses, it will be more accurate?
 - If you flipped coin #2 first and then #1, will the outcome be different?
 - What if you flipped them both at the same time and didn't keep track of which is which. How would the experiment and probabilities change?
2. An experiment consists of drawing a slip of paper from a bowl at random. There are 10 slips of paper labeled A,B,C,D,E,F,G,H,I, and J. List each of the following:
- The sample space
 - The event that a vowel is drawn
 - The event that a consonant is drawn
 - The event that a letter between B and G (excluding B and G) is drawn
 - The event that a letter in the word "ZOOLOGY" is drawn