1) Your best friends drag you to Las Vegas even though you’re still 2 weeks from being twenty-one. Of course they’re all 21 so you’re forced to stand behind a sad line watching them play from afar. Fortunately you get a good view of the nearby craps table where people are rolling 2 dice. Using what you learned in your favorite class, calculate the following:

a. Your friend puts 100 dollars on the numbers 8 and 4. What’s the probability your friend wins the bet on the next roll?

b. If two dice are rolled in succession, what is the probability the first die is 4 OR the second die is 2.

c. You see that the first die comes up 6. What is the probability that the outcome of the two dice add to 9 or 11?

d. Define (or describe) mutual exclusivity and independence. Give an example of each of them.