

The is due at the start of class on **September 28**. Type your name in the first page of the spreadsheet. Be sure to work each problem on a separate spreadsheet. Don't forget to e-mail me your spreadsheet.

The **help button**, a question mark, can help look up commands and see the syntax of the commands.

The **vlookup** command will look up a number from a table. For example: =VLOOKUP(A1,D1:E10,2) will look up the value in cell A1 in column D of the table(D1:E10) and will return the number in the adjacent cell (in column E).

Problem 1: Create a probability distribution for the sum when rolling **two fair 6 sided die**. Give all probabilities to 4 decimal places. You should be able to quickly change the probabilities for the die to get other probability distributions.

Sample Space	Probability
2	
3	
4	
5	

Sample Space	Probability
6	
7	
8	
9	

Sample Space	Probability
10	
11	
12	

Problem 2: Use the work in part 1 to quickly find the probability distribution when rolling two 6 sided die that are unfair. Give all probabilities to 4 decimal places. Note: if you did problem 1 correctly, then you can easily get these answers.

Die 1:	1	2	3	4	5	6
prob.	0.15	0.2	0.1	0.1	0.35	0.1

Die 2:	1	2	3	4	5	6
prob.	0.2	0.3	0.15	0.1	0.15	0.1

Sample Space	Probability
2	
3	
4	
5	

Sample Space	Probability
6	
7	
8	
9	

Sample Space	Probability
10	
11	
12	

Problem 3: Now create a probability distribution that shows the sum of the dice when rolling rolling **three 4 sided dice**. The distribution should give all probabilities to 4 decimal places. Be sure that the chart is clearly labeled in the spreadsheet. It should be at the top of the page. I will grade your results by changing the probabilities and seeing if everything is correct.