

Problem Set 1
(Lecture 1 & Lecture 2)
Due: 9/4

*****Question numbers and pages based on 7th Edition, please make sure you check and do the proper questions if using a different version*****

1. Draw the Statistics Lifecycle, being sure to properly label the 4 steps, the population, and the sample.
2. Give an example of an appropriate multistage sample from the population of all Data Scientists in the U.S. Be sure to label the sampling methodology employed at each step.
3. Textbook Exercise 2.7
4. Textbook Exercise 2.5
5. Consider the case where we are rolling a die. Let set A be all the even possible outcomes. Let set B be all the odd possible outcomes. Let set C be any outcome of at most 3.
 - a. Draw a Venn Diagram to depict the 3 sets visually, placing all 6 possible outcomes within the diagram.
 - b. Which outcomes are in the set $\bar{A} \cup \bar{B}$?