Miguel Antonio Logarta
SFSU ID: 923062683
4/4/23

Midterm Training Form 1

Date	What did you study?	How productive did you feel on a scale of 1 (not at all unproductive) to 10 (maximum productive!)
Example: 1/1/2022	Example: ● Went over mistakes on HW for probability properties ● Added formulas to draft formula sheet for summary statistics and probability.	Example: 10!!!
3/24/23	● Studied types of data ● Population vs sample and their uses ● Categorical vs numerical data ● Continuous vs discrete	5
3/24/23	● Studied different ways to compute the average ● Mean, median mode ● Interquartile range (IQR) along with Q1, Q2, lowest and maximum values ● I learned mild vs extreme outliers (1.5IQR vs 3IQR)	10
3/25/23	● Today, I reviewed Venn diagrams and set operations ● I tried to memorize the 3 probability axioms: non-negativity, unitarity, and sigma additivity. ● I practiced finding parts of a set using complements, intersections, and unions.	5
3/25/23	● I reviewed conditional probability. It was a little challenging to grasp the concept when learning about the law of total probability (the tree diagram), but in the end, I understood the concept. ● I also learned Bayes' Theorem and used it to solve some conditional probability problems. The equation is more convenient over using a tree.	7
3/25/23	● I quickly reviewed independent events. Events are independent iff $P(A \land B)=P(A)P(B)$ is true. ● Using that condition, I could find $P(A|B)$ and	7

	P(B|A) using the equations provided which are P(A) = P(A^B)/P(B) and P(B) = P(A^B)/P(A)	
3/29/23	- I tried to memorize combinations and permutations. I categorized them into sections depending on two questions: - Does the order matter? - Is replacement (repetition allowed)? - When order doesn't matter, it's a combination. If order does matter, it is a permutation. - I also learned the addition rule and the subtraction rule	10
3/29/23	- I practiced the process of finding the pmf and cdf. - I read the textbook for reference with finding $P(X \leq x)$ and other equations similar to that like $P(a \leq X \leq b)$ - This will be handy for solving binomial distribution problems	10
3/29/23	- I studied the expected value and variance of a random variable. I also remembered that standard deviation is just the square root of the variance. - I also reviewed the linearity properties of the expected value and variance of an rv.	10
3/31/23	Finally, I reviewed binomial rvs, negative binomial rvs, and Poisson rvs. Since this information was the freshest in my mind, I didn't study this much, but I still put it into my cheat sheet.	4