

True/False - No explanation needed. (2pts)

1. When $A \subseteq B$ and $P(B) > 0$, we have $P(A|B) = P(A)/P(B)$. True/False
2. To find $P(B|A)$, it suffices to know just $P(A|B)$ and how to apply Bayes' Theorem. True/-False

Problems - Need justification. No justification means **zero**!

1. Suppose that you roll three fair dices. What is the probability that at least one of the dices came up to 3, given that the sum of the dice is 5? (5pts)

2. Suppose that 10% of the population is taking a certain drug, and 40% of them suffer from migraines as a side effect. Supposing that the rate of migraines in the general population is 20%, what is the probability that a migraine sufferer is taking the drug? (5pts)