Quiz 12 : Probability

written by Alvin Wan . alvinwan.com/cs70 . Monday, October 17, 2016

This quiz does not count towards your grade. It exists to simply gauge your understanding. Treat this as though it were a portion of your midterm or final exam.

1   Probability and Conditional Probability

Consider a 5-card hand from a standard deck of 52 cards.

1. What is the probability that we have exactly 1 ace?

2. What is the probability that we have exactly 3 clubs? (Hint: Use counting)

3. Given we have three clubs, what is the probability of an ace of clubs?

4. What is the probability that we have 3 clubs or 1 ace? (Not XOR, Hint: Think about inclusion-exclusion.)