

SPRING 2019



CE 311S : PROBABILITY AND STATISTICS

Discussion session

M 1:00 – 2:00 PM

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Administrative Stuff

- Canvas Quiz 2 due Friday 11:59 PM
- Homework 2 due next Friday 11:59 PM
- Exam 1 is on March 8th, and will definitely cover everything till discrete distributions, so make sure you are comfortable with what's been covered already

Week 4: Question

We have a hand of four cards: $\{A, 2, 3, 4\}$. You pick two of these cards at random; what is the probability that you get the A or 2?

Your answer should be a number between 0 and 1, written up to two decimal places (An error of ± 0.01 shall be tolerated)

Week 4: Question

Please turn in your answer with your wager and name. Current standings: [Link](#)

Week 4: Answer

- The probability is $5/6$ or 0.83
- You need to see either A OR 2, so the possibilities are $\{(A,2), (A,3), (A,4), (2,3), (2,4)\}$ from a sample space of 6 outcomes.

Any questions so far?

- About this specific problem, course material covered so far, etc.

Homework 1 discussion

- Solutions will be posted by Dr. Boyles soon

Win a game

- Anna and Beth throw a die alternatively till one of them gets a '6' and wins the game. What is the probability that Anna wins, if Anna starts first?

Ans: $\frac{6}{11}$

Solve the following

Group 1

Let A= No. of ways Ann, Tom, Leslie, Jerry, and Ron can sit on chairs marked A, B and C in a classroom **such that Ann and Tom never sit together**
Find P(A)

$$n(A) = 48 \quad P(A) = 48/60 = 4/5$$

Group 3

Let A= No. of ways a 5 digit number can be framed using numbers 2, 4, 5 and 7 **such that the number is greater than 52,000. Find P(A)**

$$n(A) = 448; \quad P(A) = 448/1024 = 7/16$$

Group 2

A= No. of ways a team of 4 can be chosen from a group of 4 senior and 4 junior players **such that the team consists of at least one junior and senior. Find P(A)**

$$n(A) = 68; \quad P(A) = 68/70 = 34/35$$

Group 4

Your friends visit Austin for 7 days. Each evening you can take them to one of A, B, C, or D restaurant for dinner. No. of ways of picking restaurants **such that B is visited atleast twice.**

$$n(A) = 9094 (\text{Ordered}); \quad P(A) = 9094/4^7 = 4547/8192$$

Thank you

Any Questions?