alt

=

C

Q1 Probabilistic Inference

10 Points

Your box of cereal may be a contest winner! It's rattling, which 100% of winning boxes do. Of course 1% of all boxes rattle and only one box in a million is a winner. What is the probability that your box is a winner?

Note on answer formatting: Please specify your answer as a decimal probability (i.e. .05 rather than 5%). Do not include zeros before the decimal. To receive credit, your answer must match ours exactly.

0.0001

Q2 Events

14 Points

You are playing a solitaire game in which you are dealt three cards without replacement from a simplified deck of 10 cards (marked 1 through 10). You win if one of your cards is a 10 or if all of your cards are odd.

How many winning hands are there if different orders are different hands?

276

What is your chance of winning? (round your answer to 3 decimal places)

0.383

Q3 Expectations

18 Points

Someone rolls a fair six-sided die and you win points equal to the number shown.

What is the expected number of points after one roll?

3.5

After 2 rolls?

7

After 100 rolls?

350

Q4 Conditional Probabilities

13 Points

Select all of the following statements that are true for all joint distributions over X and Y.

P(x,y) = P(x)P(y)

 $\square P(x,y) = P(x|y)P(y)$

 $P(x,y) = P(x \mid y)P(y \mid x)$

 $P(x) = \sum u P(x \mid u)$

 \square $P(x) = \sum y P(x,y)$

none of the above

Q5 Linear Equations

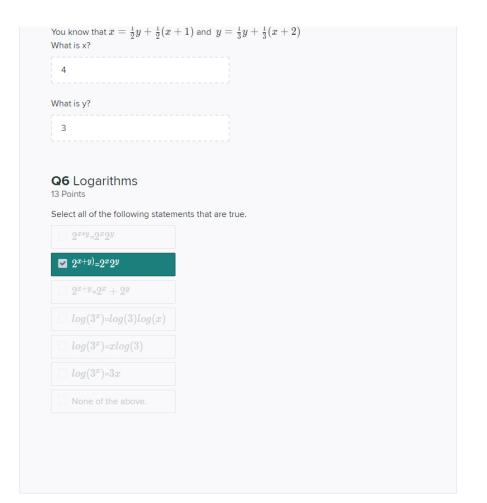
14 Points

Homework 0 GRADED STUDENT Rushikesh Machhindra Khamkar TOTAL POINTS 82 / 82 pts QUESTION 1 Probabilistic Inference 10 / 10 pts QUESTION 2 Events 14 / 14 pts QUESTION 3 18 / 18 pts Expectations QUESTION 4 Conditional Probabilities 13 / 13 pts

Linear Equations 14 / 14 pts

QUESTION 5

Logarithms 42 / 12 nts



(a)

Select a question.

Submission History

C Request Regrade

Next Question >