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Module 4: Joint, Marginal, and Conditional Distributions & Functions of Random Variable > Functions of Random Variables > Order Statistics - Quiz

Order Statistics - Quiz

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Question 1

1 point possible (graded)


In which of the following situations are you likely to be interested in the distribution of an order statistic? (Select all that apply)

- ☒ a. you want to know the chance of you winning the lottery, since you just bought 13 tickets.
- ☒ b. you are holding an auction to sell your car. ✓
- ☐ c. your boss decides to give everyone the day off if everyone in your team is able to finish their work. ✓
- ☐ d. you made a bet with your friend that it will rain 3 times in the next week. If it doesn't, you owe her \$20.




Explanation

**Joint, Marginal, and
Conditional Distributions**

Finger Exercises due Oct 24, 2016
at 05:00 IST 

**Functions of Random
Variables**

Finger Exercises due Oct 24, 2016
at 05:00 IST 

Module 4: Homework

Homework due Oct 17, 2016 at
05:00 IST 

- ▶ Module 5: Moments of a
Random Variable,
Applications to Auctions,
& Intro to Regression
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In statistics, the k^{th} order statistic of a given sample is the k^{th} smallest value. You would be interested in the distribution of an order statistic, if you are only interested in estimating the PDF of the k^{th} smallest value. In the situation described in B, you are interested in the maximum price at an auction. In the situation described in C, you are interested in the distribution of the 1st order statistic. On the other hand, in example A, you are interested in the probability of any of the tickets you bought being the winning number. And in example D, you are concerned with the probability of an event taking place k times in n trials.

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You have used 2 of 2 attempts

✘ Incorrect (0/1 point)

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