



Bookmarks

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

Bookmark

Question 1

(1/1 point)


When transforming a random variable X by a function of a random variable $Y=f(X)$, which of the following is true?

- ☐ a. The PDF of X must integrate to 1
- ☐ b. The PDF of Y must integrate to 1
- ☒ c. The PDFs of both X and Y must integrate to 1 ✓
- ☐ d. The PDFs of both X and Y must integrate to 1, and X and Y both follow the same distribution


EXPLANATION

C is correct. When transforming a random variable X by a function of a random variable $Y=f(X)$, the PDFs of both X and Y must integrate to 1, since both are random variables. D is incorrect since it is not the case that both variables need to follow the same distribution.

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 

► Exit Survey

You have used 1 of 2 submissions

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