! This class has been made inactive. No posts will be allowed until an instructor reactivates the class.

question @57 stop following 13 views

Actions

Problems 6-7

For problems 6-7, when it says to find the "simulated value of the" mean/median, is it referring to the mean/median of the distribution of the range (from problem 4) or does it want us to basically repeat problem 4 with the mean and median on the interval $2 \leq m \leq 100$?

3. (20 points) Use the rejection method to sample from a beta distribution with parameters $\alpha = 5$ and $\beta = 3$.
4. (10 points) Perform a simulation study to estimate the distribution of the range (i.e. maximum - minimum value) of m observations from the target beta distribution (i.e. $\alpha = 3$ and $\beta = 5$). Display a histogram for the distribution of the range for $m = 5$, $m = 10$, and $m = 25$?
5. (10 points) What is the expected value of the range when $m = 5$? $m = 10$? $m = 25$?
6. (10 points) Create a plot that has the value of m on the x-axis and your simulated value of the MEAN on the y-axis for values of m from 2 through 100.
7. (10 points) Create a plot that has the value of m on the x-axis and your simulated value of the MEDIAN on the y-axis for values of m from 2 through 100.

exam

Edit good question | 0 Updated 4 years ago by Charles Hwang

the students' answer, *where students collectively construct a single answer*

Actions

Thanks!

Edit thanks! | 0 Updated 4 years ago by Charles Hwang

followup discussions *for lingering questions and comments*

Resolved Unresolved @57_f1

Gregory J. Matthews 4 years ago

Mean/median of the distribution of the range.

good comment | 0

Reply to this followup discussion

Start a new followup discussion

Compose a new followup discussion