

BONUS Week 9 Homework

⚠ This is a preview of the published version of the quiz

Started: Jul 2 at 7:54am

Quiz Instructions

Question 1

1 pts

(Lesson 7.5: Inverse Transform --- Empirical Distributions.) BONUS: Consider four observations from some unknown distribution,

$X_1 = 1.5$, $X_2 = -3.7$, $X_3 = 2.7$, and $X_4 = 0.6$. What is the fourth order statistic, which we denoted by $X_{(4)}$ in class?

☐ a. 1.5

We define the ordered points.

☐ b. -3.7

$X_{(1)} \leq X_{(2)} \leq X_{(3)} \leq X_{(4)}$

☒ c. 2.7

$X_{(4)} = 2.7$ being the largest.

☐ d. 0.6

Question 2

1 pts

(Lesson 7.8: Acceptance-Rejection --- Proof.) BONUS: Which of the following are true?

☐ a. The closer the majorizing function $t(x)$ is to the true p.d.f. $f(x)$, the more efficient the A-R algorithm is.

☒ b. $h(y) = t(y) / \int_{\mathbb{R}} t(x) dx$ is itself a p.d.f.

$h(y)$ is a pdf where $h(y)$ is $t(y)$ divided by c . Where c is the integral of $t(y)$ over the real line.

☐ c. Random Variates from $h(y)$ should be "easy" to generate.

☒ d. Dave is the best teacher ever!

☐ e. All of the above.

Not saved

Submit Quiz