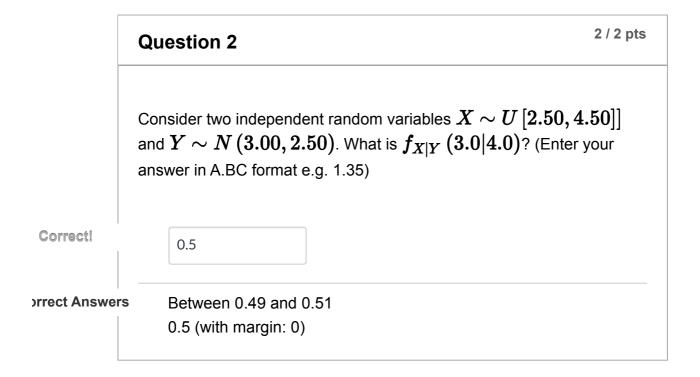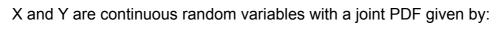# Quiz 6 Results for Ali Asad

Score for this quiz: **8** out of 10
Submitted Apr 28 at 11:44am
This attempt took 11 minutes.

Question 1   0 / 2 pts

Consider two independent continuous random variables $X \sim U[0, 2]$ and $Y \sim U[0, 2]$. What is $F_{X,Y}(0.5, 0.5)$? (Enter your answer in A.BCDE format e.g. 1.3245)

ou Answered

| 0.25 |

orrect Answers

Between 0.0624 and 0.0626

0.0625 (with margin: 0)

Question 2   2 / 2 pts

Consider two independent random variables $X \sim U[2.50, 4.50]]$ and $Y \sim N(3.00, 2.50)$. What is $f_{X|Y}(3.0|4.0)$? (Enter your answer in A.BC format e.g. 1.35)

Correct!

| 0.5 |

orrect Answers

Between 0.49 and 0.51

0.5 (with margin: 0)

Question 3   2 / 2 pts

X and Y are continuous random variables with a joint PDF given by:

$$f_{X,Y}(x, y) = \tfrac{1}{2}$$

for $0 \leq x \leq 2$ and $0 \leq y \leq 1$. The joint PDF is zero for all the other values of x and y. Find the value of $E[X]$. (Enter your answer in A.BC format e.g. 1.35)

Correct!

> 1

orrect Answers

0.99 (with margin: 1.01)
1 (with margin: 0)

Question 4

2 / 2 pts

For a continuous uniform random variable $X \sim U[3, 8]$, what is $F_X(5)$? (Enter your answer in A.BC format e.g. 1.32)

Correct!

> 0.5

orrect Answers

0.39 (with margin: 0.41)
0.4 (with margin: 0)

Question 5

2 / 2 pts

For an exponential random variable X, what is $F_X(\infty)$? (Enter your answer in A.BC format e.g. 1.32)

Correct!

> 1

orrect Answers

1 (with margin: 0)

Between 0.99 and 1