

Quiz 4 Results for Ali Asad

Score for this quiz: **8** out of 10

Submitted Mar 27 at 1:15pm

This attempt took 9 minutes.

Question 1

1.5 / 1.5 pts

Let the random variable X be the outcome of rolling a fair 4-sided die. What is the mean of $Y = 2X$? (Enter your answer in A.BC format e.g. 3.51)

Correct!

5

Correct Answers

5 (with margin: 0)
Between 4.9 and 5.1

Question 2

1.5 / 1.5 pts

Let the random variable X be the outcome of rolling a fair 4-sided die. What is the mean of $Y = X^2$? (Enter your answer in A.BC format e.g. 3.51)

Correct!

7.5

Correct Answers

Between 7.4 and 7.6
7.5 (with margin: 0)

Question 3

0 / 2 pts

Given the following Joint PMF of random variables X and Y, what is the value of c. (Enter your answer in A.BC format e.g. 0.55)

Y	X			
	1	2	3	4
1	c	0.2	0.3	0.05
2	0.05	0.05	0.15	c

you Answered

0.2

Incorrect Answers

Between 0.09 and 0.11
0.1 (with margin: 0)

Question 4

2 / 2 pts

Consider a random variable Z that is related to random variables X and Y as follows:

$$Z = X + Y$$

Given the following Joint PMF of random variables X and Y, what is $p_Z(4)$? (Enter your answer in A.BC format e.g. 0.55)

Y	X			
	1	2	3	4
1	c	0.2	0.3	0.05
2	0.05	0.05	0.15	c

Correct!

0.35

Incorrect Answers

Between 0.34 and 0.36
0.35 (with margin: 0)

Question 5

2 / 2 pts

Given the following Joint PMF of random variables X and Y, what is mean of $Z = 2Y$.

Joint PMF $p_{X,Y}(x,y)$
in tabular form

4	0	$1/20$	$1/20$	$1/20$
3	$1/20$	$2/20$	$3/20$	$1/20$
2	$1/20$	$2/20$	$3/20$	$1/20$
1	$1/20$	$1/20$	$1/20$	0
	1	2	3	4

Correct!

☒ 5.0

☐ 6/20

☐ 2.5

☐ 3.5

Question 6

1 / 1 pts

Let the random variable X be the number of days in a year that the campus ATM is out-of-order (not working) at 10 AM. Let the random variable Y be the number of days in a year that the campus ATM is operational (working) at 10 AM. What is $p_{X,Y}(200, 200)$? (Enter your answer in A.BC format e.g. 0.50)

Correct!

0

Incorrect Answers

0 (with margin: 0)

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