

Exercise for Week 8

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

Started: 4 Oct at 15:46

Quiz instructions

Quiz time is from 9.15am to 10.30am of October 04.

Question 1

1 pts

Let X and Y be random variables. Which of the following is IMPOSSIBLE?

- ☐ $E(XY) = E(X)E(Y)$
- ☒ $\frac{1}{2}V(X) + \frac{1}{2}V(Y) < Cov(X, Y)$
- ☐ $\frac{1}{2}V(X) + \frac{1}{2}V(Y) > Cov(X, Y)$
- ☐ $E(XY) < E(X)E(Y)$

Question 2

1 pts

Ten students have registered for a talk. The number of students who actually turn up is a random variable that follows

- ☒ A Binomial distribution
- ☐ A Negative Binomial distribution
- ☐ A Bernoulli distribution
- ☐ A discrete uniform distribution

Question 3**1 pts**

Sample 3 balls one by one with replacement from a jar containing 4 red balls and 6 blue balls, what is the probability of getting 2 red balls and 1 blue ball?

☐ 0.426☒ 0.288☐ 0.368☐ 0.445

No new data to save. Last checked at 15:47

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