Quiz for Week 3

This is a preview of the published version of the quiz

Started: 2 Oct at 23:50

Quiz instructions

Quiz time is from 17.15 to 18.00 of August 30, 2023.

Question 1 — 1 pts

Let A and B be independent events. If $P(A) = 0.3$ and $P(B) = 0.5$, then $P(A \cup B) =$

- ○ 0.8
- ◉ 0.65
- ○ 0.15
- ○ None of the given options

Question 2 — 1 pts

Suppose 10% of the population are infested with a certain virus. The probability for a truly infested person to be tested positive is 0.8; while the probability for a non-infested person to be tested positive is 1/90. If Mike is tested positive, what is the probability that he is truly infested by the virus?

- ○ 4/5
- ◉ 8/9
- ○ 9/10

- ○ None of the given options

Question 3

1 pts

Please refer to the "MONTY HALL PROBLEM" in our lecture notes. Suppose you decide whether to switch your choice of the door by rolling a fair die. If you roll a number less than or equal to 4, you will switch; otherwise, you will stick to the original door. Which of the following options is correct?

- ◉ With probability greater than 1/2, you will get the car.
- ○ With probability smaller than 1/2, you will get the car.
- ○ With probability equal to 1/2, you will get the car.
- ○ Uncertain about your probability of getting the car.

Saved at 23:50 Submit quiz