



Probability Events - Scenario and Two Events to Is Mutually Exclusive and Independent

1

How are events A and B related?

Three fair six-sided dice are rolled. Event A: The total is exactly 6. Event B: The second die shows a 1.

- A They are independent but not mutually exclusive.
- B They are both mutually exclusive and independent.
- C They are mutually exclusive but not independent.
- D They are neither mutually exclusive nor independent.

2

How are events A and B related?

Two fair coins are flipped. Event A: Every coin shows heads. Event B: There is exactly one head.

- A They are independent but not mutually exclusive.
- B They are mutually exclusive but not independent.
- C They are neither mutually exclusive nor independent.
- D They are both mutually exclusive and independent.

3

How are events A and B related?

Three fair six-sided dice are rolled. Event A: The second die shows a 6. Event B: The total is less than 8.

- A They are both mutually exclusive and independent.
- B They are neither mutually exclusive nor independent.
- C They are mutually exclusive but not independent.
- D They are independent but not mutually exclusive.

4

How are events A and B related?

Three fair six-sided dice are rolled. Event A: The total is greater than 10. Event B: The total is less than 5.

- A They are neither mutually exclusive nor independent.
- B They are independent but not mutually exclusive.
- C They are both mutually exclusive and independent.
- D They are mutually exclusive but not independent.

5

How are events A and B related?

A spinner with three equal-sized sections coloured red, green, and blue is spun twice. Event A: There is no blue. Event B: The first spin lands on blue.

- A They are both mutually exclusive and independent.
- B They are neither mutually exclusive nor independent.
- C They are independent but not mutually exclusive.
- D They are mutually exclusive but not independent.

6

How are events A and B related?

A spinner with three equal-sized sections coloured red, green, and blue is spun three times. Event A: There is exactly one red. Event B: The third spin lands on green.

- A They are mutually exclusive but not independent.
- B They are independent but not mutually exclusive.
- C They are both mutually exclusive and independent.
- D They are neither mutually exclusive nor independent.

7

How are events A and B related?

Two fair coins are flipped. Event A: The first coin shows tails. Event B: The second coin shows heads.

- A They are mutually exclusive but not independent.
- B They are independent but not mutually exclusive.
- C They are both mutually exclusive and independent.
- D They are neither mutually exclusive nor independent.

8

How are events A and B related?

A fair coin is flipped and a spinner with red, green, and blue sections is spun. Event A: The spinner lands on green. Event B: The coin shows tails.

- A They are mutually exclusive but not independent.
- B They are independent but not mutually exclusive.
- C They are neither mutually exclusive nor independent.
- D They are both mutually exclusive and independent.