Statistical Reasoning
Mutually Exclusive Events

Name:

Determine whether or not the following represent mutually exclusive events.

1) Event A: toss a coin and get "heads". Event B: toss a coin and get "tails".

H T

mutually exclusive (disjoint)

2) Event A: roll a dice and get a "1". Event B: roll a dice and get a "6".

1 6

mutually exclusive

3) Event A: roll a dice and get a "2". Event B: roll a dice and get an even number.

2 2, 4, 6

not mutually exclusive

4) A bag contains 2 yellow balls and 3 green balls. A ball is drawn from it. Event A: You get a yellow ball. Event B: You get a green ball.

mutually exclusive

5) One student is selected as the class monitor. Event A: John is selected as the monitor. Event B: Peter is selected as the monitor.

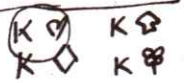
mutually exclusive

6) A card is drawn from a deck of standard playing cards. Event A: A spade is drawn. Event B: A heart is drawn.

mutually exclusive

7) A card is drawn from a deck of standard playing cards. Event A: A heart is drawn. Event B: A king is drawn.

2-10 J Q K A



not mutually exclusive

8) A spinner has an equal chance of landing on each of its eight numbered regions. After spinning, it lands in region three or six.

mutually exclusive

9) A bag contains six yellow jerseys numbered one to six. The bag also contains four purple jerseys numbered one to four. You randomly pick a jersey. It is purple or has a number greater than five.

6Y

mutually exclusive

1P
2P
3P
4P

10) A box of chocolates contains six milk chocolates and four dark chocolates. Two of the milk chocolates and three of the dark chocolates have peanuts inside. You randomly select and eat a chocolate. It is a milk chocolate or has no peanuts inside.

not mutually exclusive