

## Independent & Dependent Probability 8/27

Name: \_\_\_\_\_

Date: \_\_\_\_\_

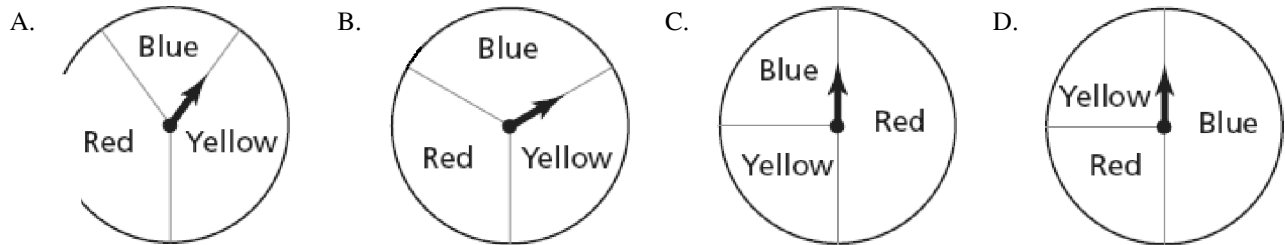
1. Which pair of events is dependent?
  - A. flipping a coin, then flip it again
  - B. rolling a fair cube, then rolling it again
  - C. spinning the arrow of a spinner, then rolling a fair cube
  - D. removing a card from a deck, then removing another one
  
2. Each event described below is performed randomly. Which is a dependent event?
  - A. From a bag of 10 marbles (4 red, 6 blue), Sam pulls a blue marble, puts it back, and then pulls a red marble.
  - B. On a spinner with 6 congruent sectors numbered 1 through 6, Greg first spins a 4 and then a 2 on the second spin.
  - C. From a pack of 20 cards, Jose picks 1 card, sets it aside, and then picks a matching card on his second try.
  - D. Monica tosses a fair coin two consecutive times, and it lands on heads both times.
  
3. Which of the following is an example of independent events?
  - A. flipping a fair coin and rolling a six-sided number cube
  - B. selecting the order in which one picture will be taken of each of four friends by drawing their names out of a hat
  - C. selecting the order in which each member of a history class will present a speech to the rest of the class
  - D. selecting two different-flavored pieces of candy one piece at a time, from a bag containing four different flavors of candy

4. Six students in Mr. Salazar's math class conducted a probability experiment. Each student was asked to flip a quarter and spin the arrow on a colored spinner.

The results of the experiment are shown below.

John: Heads/Blue                      Sally: Heads/Blue  
 Mary: Heads/Red                      Zeke: Tails/Yellow  
 Paul: Tails/Blue                        Jill: Tails/Blue

If the experimental results closely match the theoretical probability of the colored spinner, which of these is most likely the spinner that was used?



5. Which of the following is an example of dependent events?
- A. flipping a fair coin twice and getting tails both times
  - B. choosing the starting player line-up for a basketball game
  - C. choosing two cards from a stack of colored cards, with replacement, and both cards are blue
  - D. rolling a 6-sided die 2 times and getting a 5 both times

6. Which pair of events is independent?
- A. select a card from a deck and keep it; select another card
  - B. select a marble from a bag and keep it; select another marble
  - C. select a marble from a bag and put it back; select another marble
  - D. select a card from a deck and put it on a table; select another card

1.  
Answer: D
2.  
Answer: C
3.  
Answer: A
4.  
Answer: D
5.  
Answer: B
6.  
Answer: C