

## Probability of Simple, Independent, and Dependent Events

**Directions:** Circle the type of event for each question and then find the probability in the space provided.

<p>1. Kenya is trying to find matching socks. There are 4 red socks, 6 blue socks, and 2 white socks in her drawer. What is the probability that Kenya will pull out a blue sock, put it on, and then pull out another blue sock to put on?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>2. What is the probability of rolling a 4 on a number cube?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>3. What is the probability of pulling the letter "s" out of the word Mississippi?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>4. Your favorite flavor of gum is green apple. The gumball machine contains 10 grape gumballs, 12 strawberry gumballs, 3 lemon gumballs, and 10 green apple gumballs. What is the probability that you will <b>not</b> get your favorite gumball from the machine?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>5. What is the probability of rolling a 4 on a number cube and pulling a red marble out of a bag that contains 3 red, 2 black, and 5 yellow marbles?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>6. A deck of playing cards contains 52 cards. What is the probability of pulling out a King of Diamonds and without replacing it, then an Ace of Spades?</p>	<p>Simple    Independent    Dependent Solution:</p>
<p>7. Diamond is playing a game. In the game she has to spin a spinner that is divided into equal sections of orange, red, purple, and pink. What is the probability that on her first spin she will land on pink and then red on her second spin?</p>	<p>Simple    Independent    Dependent Solution:</p>

<p>8. Numbers 1 to 20 are placed in a bag. Without replacing the first number, what is the probability that the first number drawn will be odd and the second one will be even?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>9. On a shelf there are 60 novels and 20 poetry books. What is the probability that Person A chooses a novel and walks away with it and then Person B walks up shortly after and picks another novel?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>10. In a classroom there are 100 students, of whom 40 are boys, 30 of the 100 students wear glasses, and 15 are boys who wear glasses. If one student from the class is randomly selected what is the probability that the student will be a girl who does not wear glasses?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>11. Two cards are drawn from a single deck of 52 cards one after the other. If the first card is not replaced, find the probability of selecting a king on the first draw and a queen on the second draw?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>12. 10 cards are numbered from 1 through 10. The cards are drawn at random. If two cards are drawn with replacement, find the probability of choosing a prime number in both the first and the second draw.</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>13. What is the probability of getting a 7 after rolling a single number cube numbered 1 to 6?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>14. What is the probability of landing on heads when tossing a coin and then rolling a 6 when rolling a number cube?</p>	<p>Simple Solution:    Independent    Dependent</p>
<p>15. What is the probability of landing on heads when tossing a coin?</p>	<p>Simple Solution:    Independent    Dependent</p>