



**Introduction to Probability**

**Determine whether each event is impossible, unlikely, as likely as not, likely, or certain.**

1. rolling an even number on a number cube labeled 1 through 6 \_\_\_\_\_
2. picking a card with a vowel on it from a box of cards in which each letter of the alphabet is written on a card \_\_\_\_\_
3. spinning a number greater than 2 on a spinner with 10 equal sections marked 1 through 10 \_\_\_\_\_
4. drawing a red marble from a bag of black, blue, and green marbles \_\_\_\_\_
5. flipping a coin and getting heads or tails \_\_\_\_\_
6. rolling a number that is less than three 5 times in a row on number on a number cube labeled 1 through 6 \_\_\_\_\_

**Solve.**

7. A bag contains 3 green marbles, 7 blue marbles, and 2 black marbles. The probability of randomly picking a green marble is  $\frac{1}{4}$ . What is the probability of not picking a green marble? \_\_\_\_\_
8. A spinner has 8 equal sections labeled 1 through 8. The probability of spinning a number that is greater than or equal to 6 is  $\frac{3}{8}$ . What is the probability of spinning a number that is not greater than or equal to 6? \_\_\_\_\_
9. The probability of randomly drawing a red card from a bag that contains red, blue, and green cards is  $\frac{3}{10}$ . What is the probability of not drawing a red card? \_\_\_\_\_
10. Myra almost always spends at least 45 minutes on the treadmill. If Myra got on the treadmill at 5:20 P.M., estimate the probability that she will still be on the treadmill at 6:00. \_\_\_\_\_
11. Morris rarely arrives home before 4:00 P.M. It is now 3:20 P.M. Estimate the probability that Morris will arrive home in the next 30 minutes. \_\_\_\_\_