

Probability

Directions: Calculate the probability for each situation. Show your work in the space provided.

- 1.) A bag contains 5 red marbles, 3 blue marbles, and 2 green marbles. What is the probability of randomly selecting a blue marble?
- 2.) If you roll a fair six-sided die, what is the probability of rolling an even number?
- 3.) Sarah spins a spinner with 8 equal sections, numbered 1 through 8. What is the probability of spinning a multiple of 3?
- 4.) In a class of 30 students, 18 students play basketball, 12 students play soccer, and 8 students play both sports. What is the probability that a randomly chosen student plays soccer or basketball?
- 5.) A standard deck of playing cards contains 52 cards. If you draw one card at random, what is the probability of drawing a face card (jack, queen, or king)?
- 6.) A box contains 4 red socks, 3 blue socks, and 5 white socks. If you randomly select one sock without looking, what is the probability that it is either red or blue?
- 7.) A spinner is divided into 6 equal sections numbered 1 through 6. If the spinner is spun twice, what is the probability of spinning a 3 on the first spin and an even number on the second spin?
- 8.) Alex has a bag containing 10 chocolate candies, 5 caramel candies, and 3 mint candies. If Alex randomly selects one candy from the bag, what is the probability that it is not mint?
- 9.) A fair coin is flipped 3 times. What is the probability of getting exactly 2 heads?
- 10.) A jar contains 40 marbles, of which 10 are red, 20 are blue, and 10 are green. If you randomly select a marble and don't replace it, and then randomly select another marble, what is the probability of selecting two blue marbles in a row?

