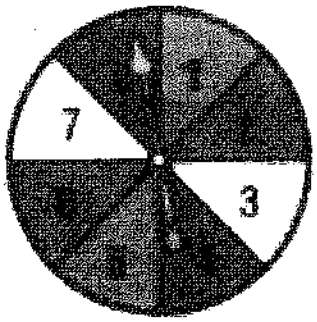
Chapter 9 Quiz
Study Guide

Name _____

Date _____ Core _____

Use the spinner to find each probability. Write your answer as a fraction, percent, and decimal.

1. P(4)
2. P(odd number)
3. P(1, 3, or 6)
4. P(negative number)

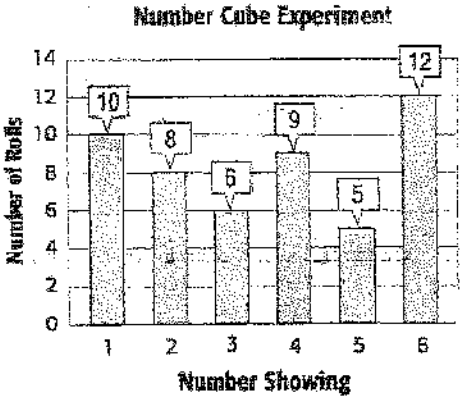


A package of balloons contains 1 red, 6 yellow, and 3 blue. Suppose you choose one balloon at random. Find the probability of each event. Write your answer as a fraction, percent, and decimal.

5. P(yellow)
6. P(not blue)
7. P(red or yellow)

A number cube is rolled 50 times. The results are shown in the graph below.

8. Find the experimental probability of rolling a 5.
9. What is the theoretical probability of rolling a 5?
10. Find the experimental probability of *not* rolling a 6.
11. What is the theoretical probability of *not* rolling a 6?



12. The daily special at the House of Pies offers a choice of apple pie, cherry pie, or blueberry pie and a choice of coffee, tea, milk or juice.

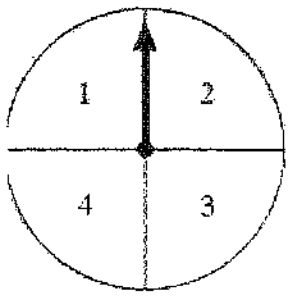
a. Use a **tree diagram** to find the sample space of each compound event.

b. Determine the total number of possible outcomes.

c. Find the probability of choosing a tray with apple pie and a glass of juice.

13. The spinner is spun and a coin is tossed.

a. Use a **tree diagram** to find the sample space of each compound event.



b. Determine the total number of possible outcomes.

c. Find the probability of landing on an even number and heads.

14. A sporting goods store sells ball caps in four sizes: S, M, L, and XL. Each hat is available in 5 colors and can be purchased with or without a logo.
    a. Determine the total number of possible outcomes.

    b. Find the probability of choosing a small, black hat, without a logo.

15. Four coins are tossed.
    a. How many total number of possible outcomes are there?

    b. Find the probability of landing on at least 2 tails.

16. A math quiz is made up of 5 multiple-choice questions, each with 4 possible answers. How many possible sets of answers are there?

17. Students at Midtown Middle School can choose their schedule from 3 math courses, 3 science courses, 2 social studies courses, and 2 art courses. Determine the number of possible schedules that include one course in each subject area.

18. A restaurant offers 6 appetizers, 4 salads, 8 entrees, and 5 desserts. Find the number of possible meals that include one item from each course.

19. Jeff is picking out an outfit. He has four choices of shirts, three choices of pants, and five choices for pairs of shoes. How many total possible outfit choices does Jeff have?