

Unit 8: Probability and Sampling

PRACTICE

Name: _____ Date: _____

Solve each problem. Write each answer as a fraction in simplest form, a decimal, or a whole number as indicated.

1. A standard number cube (faces 1-6) is rolled once. What is the probability of rolling a 4? Give your answer as a fraction in simplest form.

Answer: _____

3. A spinner has 8 equal sections numbered 1 through 8. What is the probability of landing on an even number? Give your answer as a fraction in simplest form.

Answer: _____

5. A fair coin is flipped and a standard number cube is rolled. What is the probability of getting heads AND a 5? Give your answer as a fraction in simplest form.

Answer: _____

7. A bag has 4 white and 6 black chips. Two chips are drawn one at a time WITHOUT replacement. What is the probability both are white? Give your answer as a fraction in simplest form.

Answer: _____

9. A spinner is spun 50 times and lands on red 18 times. What is the experimental probability of landing on red? Give your answer as a decimal.

Answer: _____

2. A bag contains 5 red, 3 blue, and 2 green marbles. One marble is drawn at random. What is the probability it is blue? Give your answer as a fraction in simplest form.

Answer: _____

4. The probability that it rains tomorrow is $\frac{3}{5}$. What is the probability that it does NOT rain tomorrow? Give your answer as a fraction in simplest form.

Answer: _____

6. A number cube is rolled 60 times. Based on theoretical probability, how many times would you expect to roll a number greater than 4?

Answer: _____

8. In a survey of a random sample of 40 students, 14 said soccer is their favorite sport. Based on this sample, how many of the school's 500 students would you predict favor soccer?

Answer: _____

10. Two standard number cubes are rolled. What is the probability that the sum of the two cubes equals 7? Give your answer as a fraction in simplest form.

Answer: _____

11. A jar contains 12 red, 8 yellow, and 5 green candies. One candy is drawn at random. What is the probability it is red OR green? Give your answer as a fraction in simplest form.

Answer: _____

12. A cafeteria samples 25 lunches and finds 4 have a mistake. If 300 lunches are served, how many are predicted to have a mistake?

Answer: _____