NAME _____

Lesson 1.2 Calculating Probability

Probability can also be thought of as the ratio of desired outcome(s) to the sample space. It can be expressed as a ratio, fraction, decimal, or percent.

When tossing a coin, what is the probability that it will land on heads?

desired outcome: heads sample space: heads, tails probability: 1:2, $\frac{1}{2}$, 50%, 0.5

Find the probability. Write answers as fractions in simplest form.

A box contains 3 red pencils, 4 blue pencils, 2 green pencils, and 1 regular pencil. If you take 1 pencil without looking, what is the probability of picking each of the following?

1. a red pencil _____

2. a blue pencil _____

3. a green pencil _____

4. a regular pencil _____

If you spin the spinner shown at the right, what is the probability of the spinner stopping on each of the following?

5. a letter _____

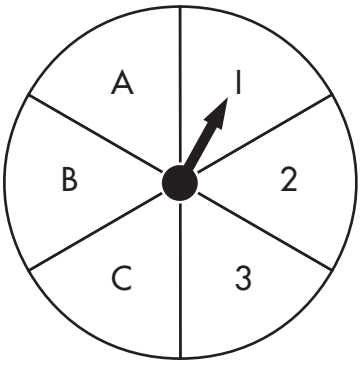
6. an odd number _____

7. an even number _____

8. a vowel _____

9. the number 3 _____

10. a consonant _____

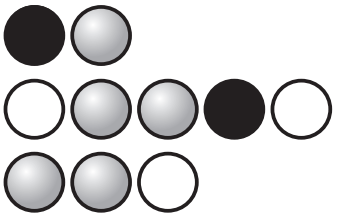


NAME _____

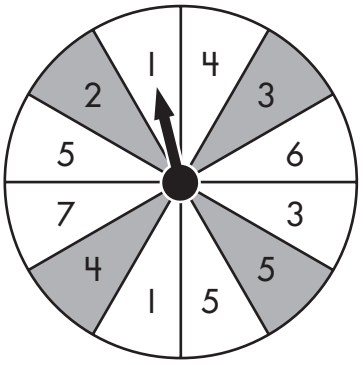
Lesson 1.2 Calculating Probability

Determine the probability for each of the following events. Write answers as fractions in simplest form.

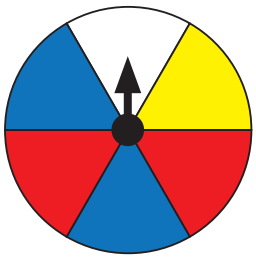
1. drawing a gray marble _____
2. drawing a white marble _____
3. drawing a black marble _____
4. drawing either a gray or a black marble _____



5. spinning a gray section _____
6. spinning a 4 _____
7. spinning a 1 _____
8. spinning *either* a 4 or 5 _____
9. spinning an even number _____



10. spinning a red section _____
11. spinning a blue section _____
12. spinning a yellow section _____



A jar contains 25 pennies, 20 nickels, and 15 dimes. If someone picks one coin without looking, what are the chances that they will pick the following:

13. penny _____
14. nickel _____
15. dime _____