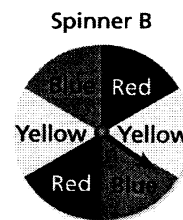
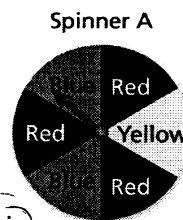


10.2 Practice: Probability

You are playing a game using the spinners shown.

1. You want to spin red. Which spinner should you spin? Explain.

Spinner A $\frac{1}{2} > \frac{1}{3}$



2. You want to spin yellow. Which spinner should you spin? Explain.

Spinner B $\frac{1}{3} > \frac{1}{6}$

3. You want to spin blue. Does it matter which spinner you spin? Explain.

No $\frac{1}{3} = \frac{1}{3}$

Describe the likelihood of the event given its probability.

4. The probability that it will snow today is zero.

Impossible

5. You make a free throw 70% of the time.

Likely

6. Your band marches in $\frac{1}{6}$ of the parades.

Unlikely

You randomly choose one song from a collection of 4 country songs, 2 jazz songs, 3 rock songs, and 1 pop song. Find the probability of the event.

7. P (Choosing a jazz song) = $\frac{1}{5} = 0.2 = 20\%$

8. P (Choosing a pop song) = $\frac{1}{10} = 0.1 = 10\%$

9. P (Not choosing a country song) = $\frac{3}{5} = 0.6 = 60\%$

10. P (Choosing a blues song) = 0

11. Your football team has a 75% chance of winning a game. Your team is scheduled to play 16 games. Estimate how many games your team will win.

$$75\% \text{ of } 16 = 12 \text{ games}$$

12. In a classroom, the probability that the teacher chooses a boy from 20 students is 0.45.

- a. How many students are *not* boys?

$$45\% \text{ of } 20 = 11 \text{ students}$$

- b. Describe the likelihood of *not* choosing a boy.

Likely

13. A box contains ten slips of paper numbered 1 through 10. Find the probability and describe the likelihood of each event.

- a. Choosing a number greater than 2

$$\frac{8}{10} = \frac{4}{5} > \text{Likely}$$

- b. Choosing a number that is a multiple of 2

$$\frac{5}{10} = \frac{1}{2} > \text{Even Chance}$$

- c. Choosing a number that is less than 10

$$\frac{9}{10} > \text{Likely}$$