

## Skill: Experimental and Theoretical Probability

### Investigation 1

#### What Do You Expect?

Mirga and José played a game and made this table.

1. Find the experimental probability that Mirga wins.

Mirga wins						
José wins						
Times played						

2. Find the experimental probability that José wins.

3. Do you think the game is fair? Explain.

The table below shows the results of spinning a spinner 15 times. Find each experimental probability.

<b>Trial</b>	1	2	3	4	5	6	7	8
<b>Outcome</b>	blue	yellow	red	blue	green	red	yellow	blue

<b>Trial</b>	9	10	11	12	13	14	15
<b>Outcome</b>	blue	green	red	blue	blue	green	red

4.  $P(\text{red})$

5.  $P(\text{yellow})$

6.  $P(\text{green})$

**Skill: Experimental and Theoretical Probability** (cont.)**Investigation 1****What Do You Expect?**

You spin a spinner with 10 sections numbered 1 through 10. Each outcome (section) is equally likely. Find the probabilities below as a fraction, decimal, and percent.

7.  $P(9)$

8.  $P(\text{even})$

9.  $P(\text{number greater than } 0)$

10.  $P(\text{multiple of } 4)$

There are eight blue marbles, nine orange marbles, and six yellow marbles in a bag. You draw one marble. Find each probability.

11.  $P(\text{blue marble})$

12.  $P(\text{yellow marble})$

13. What marble could you add or remove so that the probability of drawing a blue marble is  $\frac{1}{3}$ ?