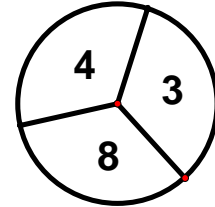
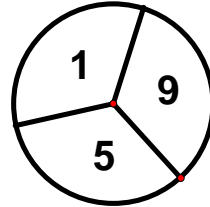


## Pre Prob 3.3 Spinner Games

### The Spinner Game

Suppose each player spins the spinner once. Player A using spinner A, and Player B using spinner B. The one with the larger number wins.

1) Predict whether or not this is a fair game?



Spinner A

Spinner B

2) How many possible outcomes are there?

3) What is the probability that Player A will win?

4) What is the probability that Player B will win?

5) What is the probability of a draw (tie)?

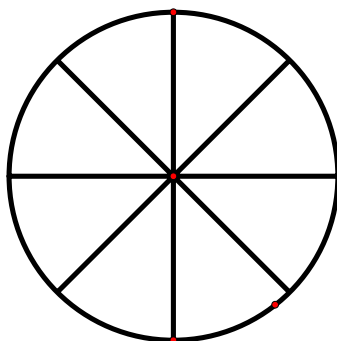
6) If you were to play the game, your outcome would not necessarily match the probabilities above. Explain why this is true.

### Creating Fair and Unfair Spinner Games

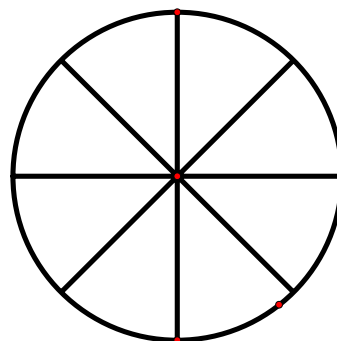
- Create a probability game for each spinner.
- Design the spinners to make one game fair and the other unfair.
- Write the rules to tell how to play each game.

Game 1 Rules

Game 2 Rules



Game 1



Game 2

- Explain the probability of winning each game and why the game is fair or unfair.

## Two Spins

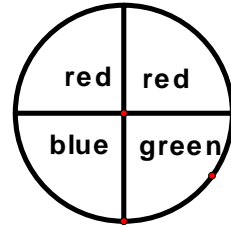
1) List all possible outcome from two spins of the following spinner.

2) What is the probability of spinning the following:

P (red, red)

P (one red and one green, in any order)

P (blue, red) Note: blue must come first



3) Extra for experts: How might you figure out the probabilities by adding or multiplying?