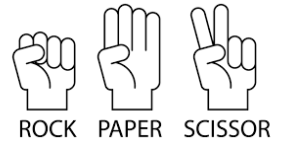




Mind Games: Coin Toss and Rock, Paper, Scissors (RPS)



Can you guess whether a coin toss is heads or tails? Can you win a game of Rock, Paper, Scissors (RPS)? Are these two abilities somehow related?

1. Collect class data to fill in the following two-way table.

	RPS Win	RPS Lose	RPS Tie	Total
Coin Toss Win				
Coin Toss Lose				
Total				

2. Suppose that we randomly choose a student from class. Find the following probabilities. Leave answers as fractions (not reduced).

$P(\text{Coin Toss Win}) =$

$P(\text{Coin Toss Lose}) =$

$P(\text{RPS Win}) =$

$P(\text{RPS Lose}) =$

$P(\text{RPS Tie}) =$

$P(\text{Coin Toss Win AND RPS Win}) =$

$P(\text{Coin Toss Lose AND RPS Win}) =$

$P(\text{Coin Toss Win AND RPS Lose}) =$

$P(\text{Coin Toss Lose AND RPS Lose}) =$

$P(\text{Coin Toss Win AND RPS Tie}) =$

$P(\text{Coin Toss Lose AND RPS Tie}) =$

3. Suppose that we randomly choose a student from class. Find the following probabilities.

$P(\text{RPS Win}) =$

$P(\text{RPS Tie}) =$

$P(\text{RPS Win OR RPS Tie}) =$

4. Suppose that we randomly choose a student from class. Find the following probabilities.

$P(\text{Coin Toss Win}) =$

$P(\text{RPS Win}) =$

$P(\text{Coin Toss Win OR RPS Win}) =$