

Card Sums

Trial 1



To the Student

Your task is to find the probability of a given sum occurring when you turn two cards over that are valued between 1 and 10.

Materials

Set of 10 red cards numbered or shaped from 1 to 10.

Set of 10 blue or black cards numbered or shaped from 1 to 10.

Procedure

- ♠ Shuffle the two decks of cards and place them face down.
- ♠ Turn over one card from each deck and record the sum of the two cards drawn in the table below.
- ♠ Repeat this operation several times for one trial.
- ♠ Perform approximately ten trials.
- ♠ Compare your findings from Trial #1 with the expected probability.
- ♠ Combine the data drawn from up to ten trials and compare these findings with the expected probability.
- ♠ Record your conclusions.

Expected Probability (# of ways)	Sum	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10	Combined Trials	Experimental Probability
	2												
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
	14												
	15												
	16												
	17												
	18												
	19												
	20												

Using a spreadsheet, combine all data for the class and compare the findings to the expected probability.