

I figured out the number of possibilities to win and lose. I did that by drawing seven marbles in a circle (one in the middle six surrounding it) and then I numbered the marbles. For example, for winning possibilities, the two marble that have a one next to them are a winning possibility same with the numbers two, three, four, and so on. Then I did the same thing, but with losing possibilities.

This is a picture of my work.

After that I made the results into a winning possibility fraction by adding the two numbers to make the denominator and using the winning possibilities as the numerator. Then I found the percentage by dividing the numerator by the

denominator and then multiplying by one hundred. The winning possibilities was 12 and the losing was 9 so $12+9=21$ $12/21$ $12/21=0.571428$ multiplied by 100 equals 57.1482 so 57.1482% is the winning possibility.

After that I made a google sheet. On the live problem I did the run 100 test. Then I added the results to another sheet. Then I copied and pasted the results into the other sheet. I did that about twenty times. After that I added the mean for one hundred tries. Then two hundred, three hundred, and so on. The answer kept getting closer. The closest I got was 0.5714547933.

