Name(s)	Project Number
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Project Title

Let's Make a Deal: A Ratio Problem

Abstract

Objectives/Goals

The objective of my project is to test the Let#s Make A Deal Game Show Paradox. Let#s Make A Deal was a 1970's game show problem where a person picked a door and then was given the choice to switch doors to another door or keep the same original door that they picked. Behind these doors was a Grand Prize. The object of this game is to find the Grand Prize.

Methods/Materials

The materials that I needed to complete my experiment were: 3 plastic cups, one ball, a person to test on, paper, and a pencil. My experimental procedure was exactly this: 1)Put the three plastic cups you have into one row by setting them side-by-side. 2)Since you are the host you have the privilege of hiding the Grand Prize, which is the ball. While hiding the ball, tell the person you are experimenting on to turn around or close their eyes so that they don#t see where you#re hiding the ball. 3)After hiding the ball, tell the person you are experimenting on to pick a cup that they think the ball is hiding under. Do not give hints or else the answer will not be accurate. 4)After the person picks the cup under which they think that ball is hiding, pick up a cup to show them that the ball isn#t hiding under there. Do not pick up the cup that they thought it was in and do not pick up the cup that the ball is really in. 5)After this, ask them if they want to switch their choice to which cup the ball is under. 6)If they switch or don#t switch pick up the cup, which was their final answer, and show them if they won. If they didn#t win show them the cup where the ball was the whole time. 7)Record this answer on your paper. 8)Make more and more results to use by repeating this procedure about 50 times for each person that you experiment.

Results

My results came out like this after all my tests and trials:
1)3 out of the 5 people I tested showed in their results that they would most likely win by not switching.
2)2 out of the 5 people I tested showed in their results that they would most likely win by switching.

Conclusions/Discussion

The data supported my hypothesis, people win more often by not switching.
My evidence is a 3/5 ratio is bigger than a 2/5 ratio. The 3/5 ratio stands for how many people won by not switching over how many overall people were tested. The 2/5 ratio stands for how many people won by switching over how many people were tested.

Summary Statement

My project is about a game show that has a winner pick one out of three doors and after they pick their original door will they win more by switching or not switching because after their original pick they are given these options.

Help Received

My Mom helped take pictures.