

Advanced Monty Hall Exploration Questions

Game 1 (computing particular probabilities): Try to predict what is better: to switch doors or to stay with the original choice, if there are three doors. What are the chances of winning in either case? Play the game many times and see if the experiment confirms your prediction.

Game 2 (computing particular probabilities): What happens to the probability of winning (when switching doors or staying with the original choice) when the number of doors is changing? Suppose Player 1 decides to always stay with the same door. Is it better for Player 1 to play with 5 doors or with 20 doors? Player 2 decides to always switch. Is it better for Player 2 to play with 5 doors or with 20 doors? Why? Set different numbers of doors and run the simulation to check your prediction.