

1 Monty Hall Add Ins

If you know the answer - keep quiet! The Monty Hall problem is a counter-intuitive statistics puzzle:

- There are 3 doors, behind which are two goats and a car.
- You pick a door (call it door A). You're hoping for the car of course.
- Monty Hall, the game show host, examines the other doors (B and C) and always opens one of them with a goat (Both doors might have goats; he'll randomly pick one to open)

Here's the game: Do you stick with door A (original guess) or switch to the other unopened door? Does it matter?

Surprisingly, the odds aren't 50-50. If you switch doors you'll win $2/3$ of the time!

Today let's get an intuition for why a simple game could be so baffling. The game is really about re-evaluating your decisions as new information emerges.