

Time Meeting Safety Topic

A Little Diversion

Ray Karol

2/26/2013

Let's Make a Deal



Monte Hall Problem

- *Suppose you're on a game show, and you're given a choice of three doors: Behind one door is a car; behind the others, goats.*
- *You pick a door, say number 1, and the host, who knows what's behind the doors, opens another door, say number 3, which has a goat.*
- *He says to you, 'Do you want to switch doors?'*
- *Is it to your advantage to switch your choice of doors?"*



✓ What is the probability of winning the car if you stay with your first choice?

✓ What if you decide to switch?

Methods to Solve

- Common sense
 - Monte Carlo
 - Bayes Theorem
 - Conditional Probability
 - etc.
-
- There is only one correct answer and it is counterintuitive