



Find Someone Who

- ... has been to a show where a medium spoke to the dead. _____
- ... can explain who James Randi is. _____
- ... knows how to read palms. _____
- ... has read a book by Michael Shermer. _____
- ... thinks UFOs have probably made contact with humans. _____
- ... has debated an issue online in the last two weeks. _____
- ... already identifies as a skeptic. _____
- ... isn't sure about the whole skeptic thing, but is curious. _____

The Monty Hall problem

On a game show, you get to choose one of three doors. Behind one is a new car, and behind the other two are goats. (Goats are nice, but you don't really want one.)

You choose Door 1, but before you get to see if you won, the host Monty Hall (who knows what's behind all the doors) shows you that Door 3 had a goat. Door 3 is out of the picture.

He now says that you can switch to Door 2 if you want to. Should you switch to Door 2, or stick to Door 1?

- A. You should stick to your original answer. Go with your instincts!
- B. You should switch. It's more likely that you didn't get it right the first time.
- C. It doesn't matter whether you stick or switch. The probability is now 50/50 either way.

The Tuesday Birthday problem

You meet a man on the street and he says, "I have two children and one is a son born on a Tuesday."

- What is the probability that the other child is also a son?
- Which information is relevant?
 - A. The stuff about the other child being a boy *and* the bit about Tuesday are *both* irrelevant.
 - B. The information about having a boy is relevant, but not the Tuesday thing.
 - C. It's *all* relevant.

Spot the fallacy

Is a fallacy being committed here? Choose from among the following:

Weasel words · Straw man · Appeal to authority · Argument from ignorance · Slippery slope · Post hoc · False dichotomy

1. If you go out tonight, you risk getting drunk at the bar, and getting breathalysed, be over the limit for blood alcohol levels and losing your job for not having a car to get to work on time. You should stay indoors instead.
2. My opponent is trying to convince you that we're all in fact apes and cousins to monkeys when he tells you about evolution.
3. If the universe wasn't created by a loving designer, then life has no purpose and is meaningless.
4. President Xander is a big supporter of eating cheese, so it must be good for you.
5. No one's ever proved for sure that there weren't two shooters at JFK's assassination. So, there must have been two shooters there.
6. Everyone knows zinc is great for colds. Every time I think I'm getting starting to get a sore throat, I load up on zinc, and I haven't been sick for a while now.
7. Voting for Kodos will lead to the Kodos party getting into power, eating all the animals and taking over planet Mars to colonise it for the aliens and you'll be stuck on planet earth with the insects, so you shouldn't vote for Kodos.
8. The new department is the Office For Financial Benefit and Improvement, which will increase taxation and reduce budget-spending costs.
9. She's a teacher of biology, so she'll be great to have with us when we go camping and identifying flowers in the wilderness.
10. JoJo Mouthwash Combats Oral Bacteria
11. There's never been enough proof that Yeti's don't exist. So, they must exist!
12. If you're a believer in the health benefits of fruit, then you must be a believer in the benefits of drinking wine every day as it's made from grapes.

Application

Apply your skeptical toolkit to these cases. What method could they be using to make these claims seem plausible? How could you set up an experiment to disprove these claims?

1. A fighter says he can knock people over without touching them, by using energy.
2. Someone claims to be magnetic. Metal spoons stick to them.
3. Someone claims that they're able to sense someone's presence by feeling their energy.
4. A friend believes in *astrology* — that the position of the stars at the time of our birth influence our personality.
5. Someone claims to have the capacity for *telekinesis* — they can turn the pages of a book with only their mind.