<https://www.mlstack.cafe/blog/probability-interview-questions>

1. Let’s say

The probability of dangerous fires are rare (1%)

But smoke is fairly common (10%) due to barbecues,

And 90% of dangerous fires make smoke

Can you find the probability of dangerous Fire when there is smoke

1. There is a fair coin (one side heads, one side tails) and an unfair coin (both sides tails). You pick one at random, flip it five times, and observe that it comes up as tails all five times. What is the chance that you are flipping the unfair coin?
2. 50% of all people who receive a first interview receive a second interview, 95% of your friends that got a second interview felt they had a good first interview, 75% of your friends that DID NOT get a second interview felt they had a good first interview. If you feel that you had a good first interview, what is the probability you will receive a second interview?
3. A test has a true positive rate of 100% and a false positive rate of 5%. There is a population with a 1/1000 rate of having the condition the test identifies. Considering a positive test, what is the probability of having that condition?
4. Three ants are sitting at the corners of an equilateral triangle. Each ant randomly picks a direction and starts moving along the edge of the triangle. What is the probability that none of the ants collide?