COMMON MISTAKES

PROBABILITY IS JUST AN AVERAGE

THE UNLUCKY FISHERMAN COULD CATCH 4 REAL FISH IN A ROW, EVEN THOUGH HE HAS 3/4 PROBABILITY OF CATCHING A BOOT EACH TIME.

IF YOU FLIP A COIN AND GET HEADS 6 TIMES IN A ROW, WHAT IS THE PROBABILITY THAT THE NEXT ONE IS HEADS TOO?
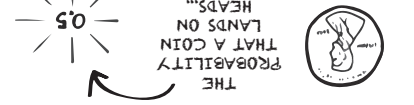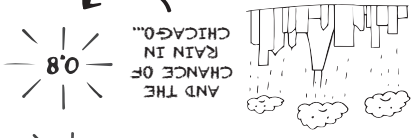
ANSWER: IT'S STILL 0.5!

0.5   0.5

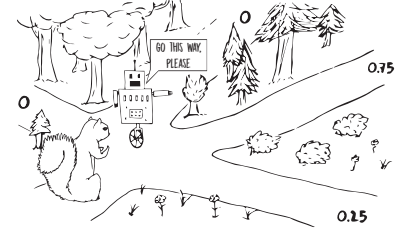BECAUSE COIN FLIPS ARE INDEPENDENT OF ONE ANOTHER!
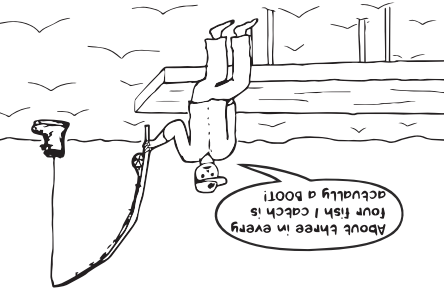
QUANTUM COMPUTATIONS

We use probabilities to express the likelihood of each outcome in a quantum computation

0.25   0.25   0.25   0.25
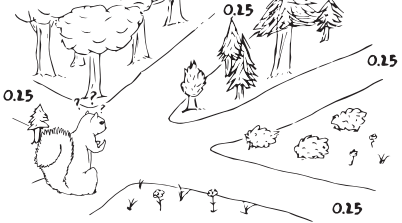
And quantum algorithms adjust and refine those probabilities to make the correct outcome the most likely!

GO THIS WAY, PLEASE

0   0.75   0   0.25

Find more Quantum Computing zines here:

https://www.epiqc.cs.uchicago.edu/resources/
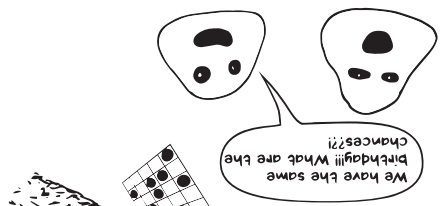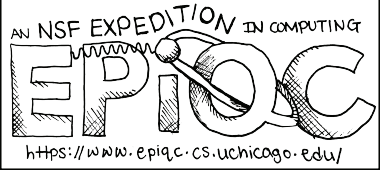
PROBABILITY

JUST THE BASICS