WHEN IT'S RAINING, 80% OF PEOPLE CARRY AN UMBRELLA. BUT, WHEN IT'S NOT RAINING, ONLY 25% OF PEOPLE CARRY AN UMBRELLA.

WE HAVE THE SAME BIRTHDAY! WHAT ARE THE CHANCES???

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! BECAUSE COIN FLIPS ARE INDEPENDENT OF ONE ANOTHER!

FOR THIS UNLUCKY FISHERMAN, THE PROBABILITY OF CATCHING A BOOT IS:

\[ \text{expected # of boots caught} = \frac{3}{4} = 0.75 \text{ or } 75% \]

\[ \text{total # of "fish" caught} \]

SO, WHEN THERE'S A 60% CHANCE OF RAIN...

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