

## Puzzle 5: Luck Of The Draw (page 2)

1. Assuming 80% of the people in the world are right-handed, if you randomly choose two people, what is the chance that they are both right-handed?
2. Eight lucky lottery tickets all win different amounts of money; if you pick three of them at random, what is the chance that you picked the three highest winners?
3. For each day of the next week the weather forecast states that there is a 10% chance of rain. What is the chance of getting no rain at all over the next seven days?
4. If Snow White picks one of the Seven Dwarfs at random, what's the chance that she picks one with the letter "P" in his name?
5. What's the chance of rolling a "Yahtzee" (five of a kind) on a single roll of a set of five standard dice?
6. A computer program picks a letter of the alphabet at random. What is the chance that the chosen letter is one of the five vowels?
7. Ten horseshoes are in a barrel; four of them rusty, the others are not. Two horseshoes are removed; you don't see their conditions. You now reach into the barrel and pull out a horseshoe from the remaining eight. What is the probability that it is not rusted?
8. At a particular puzzle party 67% of the participants enjoy mazes, while 14% of the participants enjoy both mazes and cryptograms. What is the probability that a player enjoys cryptograms if you know that the person enjoys mazes?
9. What is the chance a random stranger celebrates his/her birthday in a month spelled with an "R"? Ignore leap years.
10. A man's wallet contains one of each denomination of bill (\$1, \$2, \$5, \$10, \$20, \$50, and \$100). If he withdraws two of the bills at random, what is the chance their total value will be a prime number?
11. Two standard dice are rolled, one red and one blue. What is the chance that the red die will have rolled higher than the blue one?
12. You flip a coin five times. What is the chance your get 5 Heads in row?
13. A computer program randomly generates a 5-digit number (its first digit is not a 0). What is the chance that the number is not palindromic?
14. If a letter is picked at random from this sentence, what is the chance it is a consonant?
15. There are thirteen people in a room, what is the chance some pair have the same birthday? Ignore leap years.
16. At some random time you glance at a digital clock. What is the chance that the "minutes" portion of the time will be a prime number?
17. What is the chance that a random stranger was born on the same day of the year as me?
18. There are 2 tricycles, each wheel of which has 13 spokes. One of the spokes (amongst them all) is painted green. If you pick at random, what is the chance you choose it?
19. You are dealt five cards from a standard, shuffled deck (no Jokers). What is the chance you have a "Four Of A Kind" poker hand?
20. What is the chance that a random stranger celebrates his/her birthday in May? Ignore leap years.
21. You have flipped a fair coin nine times and gotten 4 "Heads" in a row; what is the chance your next flip will be a Head?
22. On a windy day a strong breeze blows the hats off each of the heads of ten men. You quickly pick the hats up and randomly return one hat to each fellow. What is the chance that exactly nine of the men get their original hat back?
23. You are dealt two cards from a standard, shuffled deck; what is the probability they are a pair?
24. You're on a TV game show, and the host presents you with three doors, telling you that behind one is a new car, behind the other two are black cats. You want to pick the one with the car, and the host hopes you do not. You choose a door, but before it is opened, the host interrupts and reveals one of the other doors (which he knows to have a black cat). He offers you a chance to switch your choice to the other closed door. If you do switch your choice, what is your chance of revealing the automobile?