

Example - Expectation

In a certain part of downtown Toronto parking lots charge \$10 per day. A car that is illegally parked on the street will be fined 20\$ if caught and the chance of being caught is 70%. If money is the only concern, should one park illegally or not?

Example - Expectation

In a lottery, a player pays \$1 and selects four distinct numbers from 0 to 9. Then, from an urn containing 10 identical balls numbered 0 to 9, four balls are drawn at random and without replacement. If the numbers of three or all four of these balls matches the player's numbers, he wins \$ 5 and \$ 10, respectively. Otherwise he loses. On average, how much money does the player gain per game (*gain=win-loss*).