Unfortunately, your post cannot be found. Please try again later. ##EXTRA CREDIT: Write an introduction to an informative and factual blog post titled "Try Your Luck" Playing the lottery is a losing game. If you're unlucky enough to pick the same numbers as everyone else, you will never win. You can improve your chances of winning, however, by learning the mathematics behind the lottery. Once you understand the mechanics, you'll know which tickets to buy and how much money to spend. In this assignment , I will explain the mathematics behind the lottery as well as provide a set of extra credit questions describing how to analyze what numbers to pick for a given lottery and strategy for picking those numbers. How do lotteries work? There are millions of people who play the lottery every week and millions of dollars that change hands yet there is no shortage of players and cash. Why? Because, despite bad odds , picking your own numbers gives you a chance at winning some money. The odds of winning the lotto depend on the type of lottery you play. The two major types of lotteries are the pick-6 and pick-7 . The pick-6 and pick-7 use similar probability functions and differ only (very slightly) in payout: To understand how these functions map to your chances of winning, we'll take a closer look at each function. Probability of not winning: Both functions start with a base chance of winning: . For the pick-6 , however, this chance is modified (multiplied by) by three modifiers: , , and . This means that your chance to win will increase uniformly as you go from one digit to the next. The pick-7 , on the other hand, is a little more complicated. The probability function for it is made up of two functions. The first modifier is the same as that for the pick-6 : . In addition to this, though, there's a second modifier: . So instead of being uniformly distributed from one digit to the next, the pick-7 is uniformly distributed from one even number to another even number. Both functions start with a base chance of winning: . For the , however, this chance is modified (multiplied by) by three modifiers: , , and . This means that your chance to win will increase uniformly as you go from one digit to the next. The , on the other hand, is a little more complicated. The probability function for it is made up of two functions. The first modifier is the same as that for the : . In addition to this, though, there's a second modifier: . So instead of being uniformly distributed from one digit to the next, the is uniformly distributed from one even number to another even number. Probability of winning: Both functions start with a base chance of winning: . For both lotteries , this chance is further modified by three modifiers: , , and .

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