1. Rabbit is on stone 1, there are seven stones in a line left to right 1-7. The rabbit hops to a random unvisited stone on each jump until all the stones are visited. What’s the probability the rabbit made exactly one leftwards jump?
2. someone has a 10 sided dice and someone else has a 15 sided dice.
   1. Probability that the 15-sided dice rolls higher or equal to the 10 sided dice?
   2. the higher roll wins with the 10 and 15 sided dice. If they are allowed to reroll exactly once without seeing the other persons roll, what is a general strat for optimizing win percentage?
3. If I have $2 and you have $1, but you have 2/3 chance of winning and each time ante is $1, what is your probability of winning versus mine?
4. find EV of product of 2 dice rolls then find EV of die roll squared
5. Expected number of throws for 6 6 to show up in die throws compared to 6 5.
6. Describe Call and Put, and then give a PCP arb for them to find. Or maybe this one: a stock either goes up 100% or goes down 50%. A casino offers 1:1 bets on if the stock goes up or down. How do you arb so you always make the same amount? Alternatively, what is max EV move?
7. Single bid sealed auction for $100: 2 people betting for a box worth $100 and bet size can differ by 1, how should each person bet? Can one person improve his EV by telling the other person his strategy? What is a reasonable strategy the first person can come up with?
8. There are 100 sharks in a row, each of which swim left at different speed. If a shark collides with a shark in front of it, it will eat that shark. After a long time, how many sharks do you expect will be alive?
9. There are 100 boxes each with a number 1-100 in it and 100 people. One at a time, each person opens a box, if it contains a number, takes that number and then closes the box. They get $ equal to the number in the box and no money if the box is empty. How much money do you expect the group to make? How much would you pay to be the first person vs the last person?