Ex3 - Nadav Weisler - 316493758

Part C:

a

- Probability 1: Better odd numbers: [1 / 12, 3 / 12, 1 / 12, 3 / 12, 1 / 12, 3 / 12]
- Probability 2: Only odd numbers: [1 / 3, 0, 1 / 3, 0, 1 / 3, 0]

B

- I chose the dice [1 / 12, 3 / 12, 1 / 12, 3 / 12, 1 / 12, 3 / 12]

The number of turns [32, 43, 20, 25, 23, 13, 30, 26, 52, 36, 53, 44, 29, 28, 60, 89, 27, 25, 62, 30, 83, 34, 76, 26, 39, 22, 58, 19, 35, 20, 36, 17, 24, 42, 19, 41, 32, 21, 27, 48, 21, 58, 25, 33, 19, 46, 34, 60, 33, 28, 44, 27, 52, 51, 20, 31, 20, 28, 143, 29, 25, 51, 75, 30, 47, 16, 29, 39, 44, 49, 31, 30, 62, 44, 47, 26, 26, 38, 52, 31, 94, 75, 20, 24, 16, 33, 34, 46, 34, 94, 63, 51, 32, 40, 37, 80, 24, 111, 29, 22]
The average number of turns of this die is 40.19.
Shortest game: 13
Longest game: 143

- I chose the dice [1 / 3, 0, 1 / 3, 0, 1 / 3, 0]

The number of turns [23, 45, 17, 27, 74, 89, 61, 25, 32, 49, 42, 42, 24, 31, 27, 75, 62, 26, 38, 23, 28, 23, 32, 16, 26, 36, 40, 42, 25, 16, 53, 25, 37, 21, 53, 37, 28, 25, 65, 80, 27, 53, 41, 18, 74, 30, 30, 28, 23, 15, 25, 61, 30, 24, 25, 55, 59, 58, 13, 30, 27, 41, 24, 56, 31, 26, 22, 67, 45, 31, 24, 88, 29, 26, 38, 29, 26, 34, 55, 35, 14, 22, 59, 25, 32, 39, 29, 27, 21, 20, 28, 21, 40, 17, 16, 97, 19, 37, 15, 15]
The average number of turns of this die is 36.06.
Shortest game: 13
Longest game: 97

C

- For the given probability [1 / 12, 3 / 12, 1 / 12, 3 / 12, 1 / 12, 3 / 12]

  One game probability: [1/16, 7/32, 5/32, 3/16, 3/32, 9/32]

  The one game probability is similar to the given probability with the fact that the even numbers are with better probability, but the numbers are less accurate by far