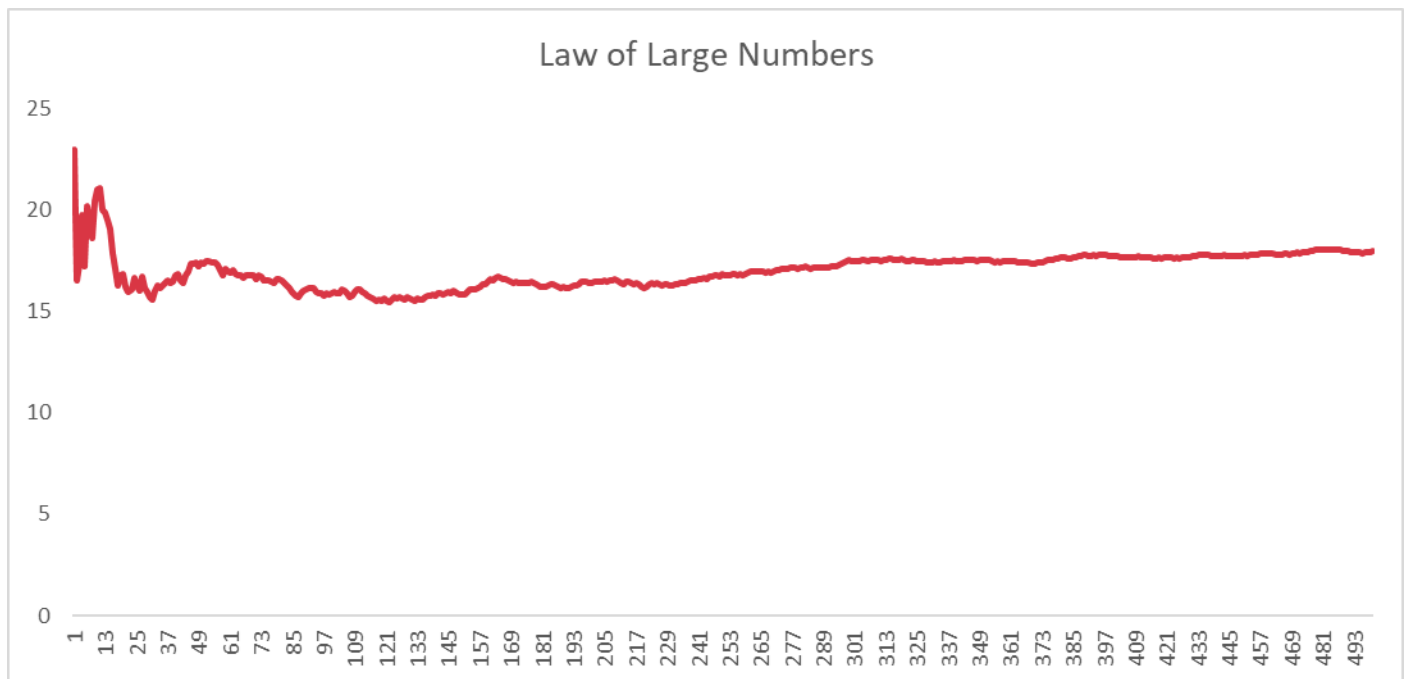


Law of large numbers in Excel: Demo notes

Demo file: large-numbers.xlsx

1. Simulate a roulette toss 500 times in Column B: `RANDBETWEEN(0,36)`
2. Take a running total in Column C: `SUM(B2:B2)`
3. Take a running total in Column D: `C2/A2`
4. Plot Column D as a line chart. Press F9 to recalculate.
 - a. The line converges to the expected mean due to the law of large numbers.



Explanation:

This is a visual depiction of the law of large numbers: the average of results obtained from trials become closer to the expected value as more trials are performed.

- a. We can often see empirically that the sample gets more reflective of the expected value at a sample size of 30, 60 and 100.