

Binomial Distribution

$$\frac{n!}{k! (n-k)!}$$

$n \rightarrow$ number of flips

$k \rightarrow$ wanted result

☹️ I basically did apply the theorem in my code in prev. task without actually realizing it..

Total Formula $\rightarrow \frac{n!}{k! (n-k)!} * p^k (1-p)^{(n-k)}$

↑
number of possible ways to
reach a specific outcome

works on

Binomial outcomes

outcome with

2 possible result

Statistics Summary

- Data has different formats with different properties.

Quantitative - Categorical

- Measures of Center mean, median, mode
- Measures of Spread IQR, standard deviation, variance, max, min
- Binomial Distribution vs Normal Distribution
- Data represented in histograms can be: center, right-skewed, left-skewed
- Simpson's paradox never trust statistics; grouping data can affect outcomes
- Probability statistics opposite, ~~predicts data~~ predicts data