Test document

Nickson Zhu
nicksonsone@gmail.com

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Contents

Chapter 1

Introduction to Probability

1.1 Interpretation of Probability

1.1.1 The Frequency Interpretation of Probability

The probablity that some specific outcome of a process can be intrepreted to mean the relative frequency with which the outcome can be obtained if the process is repeated for a large number of times under similar conditions.

Example

Toss coin for 1,000,000 times, number of heads is nearly 500,000, but may not exactly 500,000.

Shortcoming

- number of tests: how large is enough
- similar conditions: conditions cannot be completely the same, otherwise always same outcome
- frequency of outcomes: should approximate theoritical probablity, but no permissible variation
- repetition: many important problems have no repetition. For instance, probablity of a aquaintance

1.1.2 Classical Interpretation

1.1.3 Another subsection of the firs section

1.2 The second section

Bibliography

[1] Ronald L. Granham, Donald E. Knuth, and Oren Patashnik, *Concrete Mathematics*, Addison-Wesley, Reading, MA, 1995.