

Theme 1. Empirical and logical bases of probability theory.
Basic theorems of probability theory, their economic meaning

1. The subject of this discipline.
2. A probabilistic model of an experiment.
3. Sure (certain) events.
4. Random events.
5. Impossible events.
6. Rules of operations with random events.
7. A space of elementary events.
8. A classical definition of a probability and its calculation.
9. Basic formulas of combinatorics.
10. A statistical definition of a probability.
11. Axiomatics of Kolmogorov.
12. A geometrical definition of a probability.
13. Venn-Euler diagram.
14. Probabilistic space.
15. Addition theorems of probabilities.
16. Dependent and independent events.
17. A conditional probability.
18. Joint (compatible) and disjoint (incompatible) events.
19. Multiplication theorems of probabilities.
20. A complete group of events.
21. Complementary events.
22. The probability of at least one event.
23. The probability that an event will occur at least one.
24. Formula of a total probability.
25. Bayes formula (the theorem of hypothesis).