Probability paradoxes

Ivan Murashko

Contents

Introduction

The goal for the article is to demonstrate several paradoxes that are related to probability theory and how can they can be solved.

1 Base definitions of probability theory

We will start with several definitions.

TBD [1]

2 Monty Hall problem

TBD

3 Waiting time on a bus stop

TBD

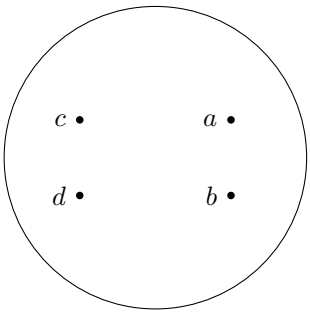

Figure 1: Probability space. It consists of elementary events: a, b, c and d, each of them has equal probability $p_{a,b,c,d} = \frac{1}{4}$

References

[1] А. Н. Колмогоров. Основные понятия теории вероятностей / А. Н. Колмогоров. — Москва: Наука, 1974.