

Basic distributions - Uniform

Uniform Distribution

Suppose we roll a die. The outcomes of this event can be 1,2,3,4,5,6



↓
All of the outcomes have an **equal probability of occurrence** and are **mutually exclusive**

↓
We can say that the probabilities of occurrence is **uniformly distributed**.

↓
This is referred to as **Uniform Distribution**

↓
Useful when we are interested in unbiased selection

Uniform Distribution

There are two types of Uniform Distribution



Discrete Uniform Distribution: Can take a finite number (m) of values and each value has equal probability of selection.

For example: Number of books sold by a bookseller per day can be uniformly distributed between 100 to 300.



Continuous Uniform Distribution: Can take any value between a specified range.

For example: Tomorrow's temperature in United states can be uniformly Distributed between 12 degree Celsius to 17 degree celsius