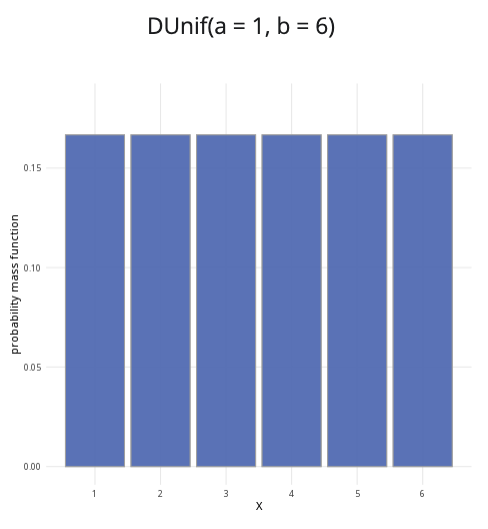
Factsheet: Discrete uniform distribution

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Summary

A factsheet for the discrete uniform distribution.



An example of the discrete uniform distribution with and .

**Where to use:** The discrete uniform distribution is used when all integer outcomes in the interval to are equally likely. is a random variable for integer outcomes where for , and the probability of each outcome , where .

**Notation:** or

**Parameters:** The numbers are integers where

* is the minimum value of an outcome
* is the maximum value of an outcome

There are outcomes in total, with .

| Quantity | Value | Notes |
| --- | --- | --- |
| **Mean** |  |  |
| **Variance** |  |  |
| **PMF** |  |  |
| **CDF** |  | is the **floor function** |

**Example:** You roll a fair six-sided die, where all outcomes ( and ) are equally likely. This can be expressed as . It means is the minimum value and is the maximum value, where all discrete values of for are equally likely.

# Further reading

This interactive element appears in [Overview: Probability distributions.](../overviews/o-distributions.qmd)

## Version history

v1.0: initial version created 08/25 by tdhc.

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