|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Distribution** | **R[[1]](#footnote-1)** | **Matlab[[2]](#footnote-2)**  (random(pd) where pd = makedist(distname, parameters) and distname is specified below) | **Python[[3]](#footnote-3) (scipy.stats)** | **Julia[[4]](#footnote-4)**  **(Distributions.jl)** |
| Discrete Uniform | sample | random | randint | rand |
| Binomial | rbinom | ‘Binomial’ | binom.rvs | Binomial |
| Geometric | rgeom | ‘Geometric’ | geom.rvs | Geometric |
| Poisson | rpois | ‘Poisson’ | poisson.rvs | Poisson |
| Uniform | runif | ‘Uniform’ | uniform.rvs | Uniform |
| Triangle | rtriangle[[5]](#footnote-5) | ‘Triangular’ | triang.rvs | - |
| Normal | rnorm | ‘Normal’ | norm.rvs | Normal |
| Exponential | rexp | ‘Exponential’ | expon.rvs | Exponential |

**Commands for generating random variables from common distributions in the R, Matlab, Python and Julia programming environments.**

1. <https://en.wikibooks.org/wiki/R_Programming/Probability_Distributions> [↑](#footnote-ref-1)
2. <https://www.mathworks.com/help/stats/probability-distributions-1.html?s_tid=CRUX_lftnav> [↑](#footnote-ref-2)
3. <https://docs.scipy.org/doc/scipy/reference/stats.html> [↑](#footnote-ref-3)
4. <https://github.com/JuliaStats/Distributions.jl> [↑](#footnote-ref-4)
5. <https://cran.r-project.org/web/packages/triangle/triangle.pdf> [↑](#footnote-ref-5)