Name	Notation	pdf/pmf	Range	Mean μ	Variance σ^2
Beta	$\mathsf{Be}(\alpha, \beta)$	$f(x) = \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)}x^{\alpha-1}(1-x)^{\beta-1}$	$x \in (0,1)$	$\frac{\alpha}{\alpha+\beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$
Binomial	$\mathsf{Bi}(n, p)$	$f(x) = \binom{n}{x}p^x q^{(n-x)}$	$x \in 0, \cdots, n$	$n\,p$	$n\,p\,q$ $\quad (q = 1 - p)$
Exponential	$\mathsf{Ex}(\lambda)$	$f(x) = \lambda\,e^{-\lambda x}$	$x \in \mathbb{R}_+$	$1/\lambda$	$1/\lambda^2$
Gamma	$\mathsf{Ga}(\alpha, \lambda)$	$f(x) = \frac{\lambda^\alpha}{\Gamma(\alpha)}x^{\alpha-1}\,e^{-\lambda x}$	$x \in \mathbb{R}_+$	α/λ	α/λ^2
Geometric	$\mathsf{Ge}(p)$	$f(x) = p\,q^x$	$x \in \mathbb{Z}_+$	q/p	q/p^2 $\quad (q = 1 - p)$
HyperGeometric	$\mathsf{HG}(n, A, B)$	$f(x) = \frac{\binom{A}{x}\binom{B}{n-x}}{\binom{A+B}{n}}$	$x \in 0, \cdots, n$	$n\,P$	$n\,P\,Q\frac{N-n}{N-1}$ $\quad (P = \frac{A}{A+B}, Q = \frac{B}{A+B})$
Logistic	$\mathsf{Lo}(\mu, \beta)$	$f(x) = \frac{e^{-(x-\mu)/\beta}}{\beta[1+e^{-(x-\mu)/\beta}]^2}$	$x \in \mathbb{R}$	μ	$\pi^2\beta^2/3$
Log Normal	$\mathsf{LN}(\mu, \sigma^2)$	$f(x) = \frac{1}{x\sqrt{2\pi\sigma^2}}e^{-(\log x - \mu)^2/2\sigma^2}$	$x \in \mathbb{R}_+$	$e^{\mu+\sigma^2/2}$	$e^{2\mu+\sigma^2}\left(1 - e^{\sigma^2}\right)$
Negative Binomial	$\mathsf{NB}(\alpha, p)$	$f(x) = \binom{-\alpha}{x}p^\alpha\,(-q)^x$	$x \in \mathbb{Z}_+$	$\alpha q/p$	$\alpha q/p^2$ $\quad (q = 1 - p)$
Normal	$\mathsf{No}(\mu, \sigma^2)$	$f(x) = \frac{1}{\sqrt{2\pi\sigma^2}}e^{-(x-\mu)^2/2\sigma^2}$	$x \in \mathbb{R}$	μ	σ^2
Pareto	$\mathsf{Pa}(\alpha, \beta)$	$f(x) = \beta\,\alpha^\beta/x^{\beta+1}$	$x \in (\alpha, \infty)$	$\frac{\alpha\beta}{\beta-1}$	$\frac{\alpha^2\beta}{(\beta-1)^2(\beta-2)}$
Poisson	$\mathsf{Po}(\mu)$	$f(x) = \frac{\mu^x}{x!}e^{-\mu}$	$x \in \mathbb{Z}_+$	μ	μ
Snedecor F	$F(\nu_1, \nu_2)$	$f(x) = \frac{\Gamma(\frac{\nu_1+\nu_2}{2})(\nu_1/\nu_2)^{\nu_1/2}}{\Gamma(\frac{\nu_1}{2})\Gamma(\frac{\nu_2}{2})} \times$ $x^{\frac{\nu_1-2}{2}}\left[1 + \frac{\nu_1}{\nu_2}x\right]^{-\frac{\nu_1+\nu_2}{2}}$	$x \in \mathbb{R}_+$	$\frac{\nu_2}{\nu_2-2}$	$\left(\frac{\nu_2}{\nu_2-2}\right)^2 \frac{2(\nu_1+\nu_2-2)}{\nu_1(\nu_2-4)}$
Student t	$t(\nu)$	$f(x) = \frac{\Gamma(\frac{\nu+1}{2})}{\Gamma(\frac{\nu}{2})\sqrt{\pi\nu}}[1 + x^2/\nu]^{-(\nu+1)/2}$	$x \in \mathbb{R}$	0	$\nu/(\nu-2)$
Uniform	$\mathsf{Un}(\alpha, \beta)$	$f(x) = \frac{1}{\beta-\alpha}$	$x \in (\alpha, \beta)$	$\frac{\alpha+\beta}{2}$	$\frac{(\beta-\alpha)^2}{12}$