Distribution	PDF/PMF	$\mathbb{E}[X]$	$\text{Var}[X]$
$X \sim \text{Bern}(\theta)$	$p_X(x;\theta) = \theta^x(1-\theta)^{1-x} I_{\{0,1\}}(x)$ where $\theta \in (0,1)$	θ	$\theta(1-\theta)$
$X \sim \text{Binom}(n,\theta)$	$p_X(x;n,\theta) = \binom{n}{x}\theta^x(1-\theta)^{n-x} I_{\{0,1,\ldots,n\}}(x)$ where $\theta \in (0,1), n \in \{1,2,\ldots\}$	$n\theta$	$n\theta(1-\theta)$
$X \sim \text{Poiss}(\lambda)$	$p_X(x;\lambda) = \frac{\lambda^x}{x!} e^{-\lambda} I_{\{0,1,2,\ldots\}}(x)$ where $\lambda > 0$	λ	λ
$X \sim \text{Geom}(\theta)$	$p_X(x;\theta) = (1-\theta)^x \theta I_{\{0,1,2,\ldots\}}(x)$ where $\theta \in (0,1)$	$\frac{1-\theta}{\theta}$	$\frac{1-\theta}{\theta^2}$
$X \sim \text{NegBinom}(r,\theta)$	$p_X(x;\theta,r) = \binom{r-1+x}{x}\theta^r(1-\theta)^x I_{\{0,1,2,\ldots\}}(x)$ where $\theta \in (0,1), r \in \{1,2,\ldots\}$	$\frac{r(1-\theta)}{\theta}$	$\frac{r(1-\theta)}{\theta^2}$
$X \sim \text{HypGeom}(N,K,n)$	$p_X(x;N,K,n) = \frac{\binom{K}{x}\binom{N-K}{n-x}}{\binom{N}{n}} I_{[\max(0,n+K-N),\min(n,K)]}(x)$ where $N \in \{0,1,2,\ldots\}, K,n \in \{0,1,\ldots,N\}$	$\frac{nK}{N}$	$\frac{nK}{N}\left(1-\frac{K}{N}\right)\left(\frac{N-n}{N-1}\right)$
$X \sim \text{Unif}(L,R)$	$f_X(x;L,R) = \frac{1}{R-L} I_{[L,R]}(x)$ where $L < R \in \mathbb{R}$	$\frac{L+R}{2}$	$\frac{(R-L)^2}{12}$
$X \sim \text{Exp}(\lambda)$	$f_X(x;\lambda) = \lambda e^{-\lambda x} I_{[0,\infty)}(x)$ where $\lambda > 0$	$\frac{1}{\lambda}$	$\frac{1}{\lambda^2}$
$X \sim \text{Gam}(\alpha,\lambda)$	$f_X(x;\alpha,\lambda) = \frac{\lambda^\alpha}{\Gamma(\alpha)} x^{\alpha-1} e^{-\lambda x} I_{[0,\infty)}(x)$ where $\alpha,\lambda > 0$	$\frac{\alpha}{\lambda}$	$\frac{\alpha}{\lambda^2}$

Distribution	PDF/PMF	$\mathbb{E}[X]$	$\mathrm{Var}[X]$
$X \sim \mathcal{N}(\mu, \sigma)$	$f_X(x; \mu, \sigma^2) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left\{-\frac{(x-\mu)^2}{2\sigma^2}\right\}$ where $\mu \in \mathbb{R}, \sigma > 0$	μ	σ^2