Distribuições discretas:

Distribuição	$P(X = x)$	$P(X \leq x)$	Suporte	$E(X)$	$Var(X)$	$M_X(t)$
Bernoulli	$p^x(1-p)^{1-x}$	$\begin{cases} 0 & x < 0 \\ 1-p & 0 \leq x < 1 \\ 1 & 1 \leq x \end{cases}$	$x \in \{0,1\}$ $p \in [0,1]$	p	$p(1-p)$	$pe^t - p + 1$
Binomial	$\binom{n}{x}p^x(1-p)^{n-x}$		$x, n \in \mathbb{N}$ $x \leq n$ $p \in [0,1]$	np	$np(1-p)$	$(pe^t - p + 1)^n$
Geométrica	$p(1-p)^{x-1}$	$\begin{cases} 0 & x < 0 \\ 1 - (1-p)^{\lfloor x \rfloor} & x \geq 0 \end{cases}$	$x \in \mathbb{N}$ $p \in [0,1]$	$\dfrac{1}{p}$	$\dfrac{1-p}{p^2}$	$\dfrac{pe^t}{pe^t - p + 1}$
Poisson	$\dfrac{e^{-\lambda}\lambda^x}{x!}$		$x \in \mathbb{N}$ $\lambda > 0$	λ	λ	$e^{\lambda(e^t - 1)}$

Distribuições contínuas:

Distribuição	$f(x)$	$F(x)$	Suporte	$E(X)$	$Var(X)$	$M_X(t)$
Uniforme	$\dfrac{1}{b-a}$	$\begin{cases} 0 & x < a \\ \dfrac{x-a}{b-a} & a \leq x < b \\ 1 & b \leq x \end{cases}$	$x \in [a,b]$ $a, b \in \mathbb{R}$ $a \leq b$	$\dfrac{a+b}{2}$	$\dfrac{(a-b)^2}{12}$	$\dfrac{e^{bt} - e^{at}}{t(b-a)}$
Normal	$\dfrac{1}{\sqrt{2\pi\sigma^2}}\, e^{-\frac{(x-\mu)^2}{2\sigma^2}}$		$x, \mu \in \mathbb{R}$ $\sigma > 0$	μ	σ^2	$e^{\mu t + \frac{1}{2}\sigma^2 t^2}$
Exponencial	$\lambda e^{-\lambda x}$	$1 - e^{-\lambda x}$	$x > 0$ $\lambda > 0$	$\dfrac{1}{\lambda}$	$\dfrac{1}{\lambda^2}$	$\dfrac{\lambda}{\lambda - t}$
Gama	$\dfrac{\beta^\alpha}{\Gamma(\alpha)}x^{\alpha-1}e^{-\beta x}$		$x > 0$ $\alpha, \beta > 0$	$\dfrac{\alpha}{\beta}$	$\dfrac{\alpha}{\beta^2}$	$\left(\dfrac{\beta}{\beta - t}\right)^\alpha$
Beta	$\frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)}x^{\alpha-1}(1-x)^{\beta-1}$		$x \in [0,1]$ $\alpha, \beta > 0$	$\dfrac{\alpha}{\alpha+\beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$	

Relações amostrais:

Distribuição	Suposições	Relação
Média	$X \sim N(\mu, \sigma^2)$	$\bar{X}_n \sim N\left(\mu, \dfrac{\sigma^2}{n}\right)$
Chi-quadrado	$X \sim N(\mu, \sigma^2)$	$\displaystyle\sum_{i=1}^{n}\left(\dfrac{X_i - \mu_i}{\sigma_i}\right)^2 \sim \chi^2_{(n)}$
Chi-quadrado	$X \sim N(\mu, \sigma^2)$	$\displaystyle\sum_{i=1}^{n}\left(\dfrac{X_i - \bar{X}_i}{\sigma}\right)^2 \sim \chi^2_{(n-1)}$
t-Student	$Z \sim N(0,1)$ $U \sim \chi^2_{(n)}$	$\dfrac{Z}{\sqrt{U/n}} \sim t_{(n)}$
t-Student	$X \sim N(\mu, \sigma^2)$ $S = \dfrac{\displaystyle\sum_{i=1}^{n}\left(\dfrac{X_i - \bar{X}_i}{\sigma}\right)^2}{n-1}$	$\dfrac{\sqrt{n}(\bar{X} - \mu)}{S} \sim t_{(n-1)}$
F-Snedecor	$U \sim \chi^2_{(m)}$ $V \sim \chi^2_{(n)}$	$\dfrac{U/m}{V/n} \sim F(m,n)$