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Nombre	Notación	Distribución de probabilidades (discr)	Esperanza	Varianza	FGM
Binomial	$B(n,p)$	$\binom{n}{k}p^k(1-p)^{n-k} \quad k=0,1,\ldots,n$	np	$np(1-p)$	$(pe^t+1-p)^n$
Bernoulli	$B(p)$	$p^k(1-p)^{1-k} \quad k=0,1$	p	$p(1-p)$	(pe^t+1-p)
Binomial Negativa	$BN(r,p)$	$\binom{k-1}{r-1}p^r(1-p)^{k-r} \quad k=r,\ldots,\infty$	$\frac{r}{p}$	$\frac{r(1-p)}{p^2}$	$(\frac{pe^t}{1-(1-p)e^t})^r$
Poisson	$P(\lambda)$	$\frac{\lambda^k e^{-\lambda}}{k!} \quad k=0,\ldots,n$	λ	λ	$e^{\lambda(e^t-1)}$

Nombre	Notación	Densidad de probabilidades (continuo)	Esperanza	Varianza	FGM
Uniforme	$U(a,b)$	$\frac{1}{b-a} \quad a \leq x \leq b$	$\frac{(a+b)}{2}$	$\frac{(b-a)^2}{12}$	$\frac{e^{bt}-e^{at}}{(b-a)t}$
Beta	$\beta_{\alpha,\beta}$	$\frac{\Gamma(\alpha+\beta+1)x^{\alpha-1}(1-x)^{\beta-1}}{\Gamma(\alpha+1)\Gamma(\beta+1)} \quad 0 \leq x \leq 1$	$\frac{\alpha}{\alpha+\beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$	
Gamma	$G(r,\lambda)$	$\frac{x^{r-1}e^{\frac{-x}{\lambda}}}{\lambda^r\Gamma(r)} \quad x \geq 0$	$r\lambda$	$r\lambda^2$	$\frac{1}{(1-\lambda t)^r}$
Exponencial	$e(\lambda)$	$\frac{1}{\lambda}e^{\frac{-x}{\lambda}} \quad x \geq 0$	λ	λ^2	$\frac{1}{1-\lambda t}$
Ji-Cuadrado	χ^2_n	$\frac{x^{\frac{n}{2}-1}e^{\frac{-x}{2}}}{2^{\frac{n}{2}}\Gamma(\frac{n}{2})} \quad x \geq 0$	n	$2n$	$\frac{1}{(1-2t)^{\frac{n}{2}}}$
Normal	$N(\mu,\sigma^2)$	$\frac{1}{\sqrt{2\pi}\sigma}e^{\frac{-(x-\mu)^2}{2\sigma^2}} \quad -\infty \leq x \leq \infty$	μ	σ^2	$e^{t\mu+\frac{\sigma^2t^2}{2}}$
t-Student	t_n	$\frac{\Gamma(n+1/2)(1+\frac{x^2}{n})^{\frac{-(n+1)}{2}}}{\sqrt{n\pi}\gamma(\frac{n}{2})} \quad -\infty \leq x \leq \infty$	$0 \quad n>1$	$\frac{n}{n-2} \quad n>2$	
F-Fisher	$F_{r,s}$	$\frac{\Gamma(\frac{r+s}{2})r^{r/2}s^{s/2}x^{(r/2)-1}}{\Gamma(r/2)\Gamma(s/2)(rx+s)^{(r+s)/2}} \quad x \geq 0$	$\frac{s}{s-2} \quad s>2$	$\frac{2s(r+s-2)}{r(s-2)^2(s-4)} \quad s>4$	

BS:
$\Gamma(p) = \int_0^\infty x^{p-1}e^{-x}\mathrm{d}x$
$\Gamma(p) = (p-1)\Gamma(p-1) \qquad p \in \mathbf{N}$