

RESUMEN DE LAS DISTRIBUCIONES N, Z, Ji, T, F

VARIABLE	DEFINICIÓN	FUNCIÓN DE DENSIDAD	PARÁMETROS	MEDIA	VARIANZA
NORMAL	X	$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}$	μ, σ^2	μ	σ^2
NORMAL ESTÁNDAR	$Z = \frac{X - \mu_X}{\sigma_X}$	$f(z) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}(z)^2}$	--	0	1
Ji cuadrada	$x_v^2 = \sum_{i=1}^v z_i^2$	Si $Y \sim x_v^2 \rightarrow f(y) = \begin{cases} \frac{1}{2^{\frac{v}{2}}\Gamma(\frac{v}{2})} y^{\frac{v}{2}-1} e^{-\frac{y}{2}}; & x > 0 \\ 0; & c. o. c. \end{cases}$	$v = \text{grados de libertad}$	v	$2v$
T Student	$T_v = \frac{Z}{\sqrt{\frac{x_v^2}{v}}}$	$f(t) = \frac{\Gamma\left(\frac{v+1}{2}\right)}{\sqrt{\pi v}\Gamma\left(\frac{v}{2}\right)} \left(1 + \frac{t^2}{v}\right)^{-\frac{v+1}{2}}; \quad -\infty < t < \infty, \quad v > 0$	$v = \text{grados de libertad}$	0	$\frac{v}{v-2};$ $v > 2$
F Fisher	$F_{v_1, v_2} = \frac{\frac{x_{v_1}^2}{v_1}}{\frac{x_{v_2}^2}{v_2}}$	$g(f) = \begin{cases} \frac{\Gamma\left(\frac{v_1+v_2}{2}\right) v_1^{\frac{v_1}{2}} v_2^{\frac{v_2}{2}}}{\Gamma\left(\frac{v_1}{2}\right) \Gamma\left(\frac{v_2}{2}\right)} f^{\frac{v_1-2}{2}} (v_2 + v_1 f)^{-\frac{v_1+v_2}{2}}; & f > 0 \\ 0; & c. o. c \end{cases}$	$v_1 = \text{grados de libertad}$ $v_2 = \text{grados de libertad}$	$\frac{v_2}{v_2-2};$ $v_2 > 2$	$\frac{v_2^2(2v_2+2v_1-4)}{v_1(v_2-2)^2(v_2-4)};$ $v_2 > 4$