Symbols used in statistics

Table 1: List of commonly used symbols

Symbol	pronounced	Latin counterpart	Conventionally denotes
n			sample size
N			population size
y			a scalar quantity
$\boldsymbol{y}$	"bold y"		a vector
$\boldsymbol{X}$	"bold X"		a matrix
μ	mu	m	mean
σ	sigma	s	standard deviation
$\bar{X}$	X bar		sample mean
s^2	s-squared		sample variance
df			degrees of freedom
F			F statistic for ratio of variances
α	alpha	a	
β	beta	b	regression coefficient
ϵ	epsilon	e	error
ν	nu	n	sometimes used for degrees of freedom
π	pi	p	sometimes used to denote a probability
τ	tau	t	treatment effect
θ	theta	th	generic parameter
η	eta		generic parameter
λ	lambda	l	Poisson parameter
δ	delta	d	a difference
Δ	Delta	D	uppercase δ
χ^2_6	"KY"-squared 6		Chi-squared on 6 df
X^2	X-squared		Pearson's X-squared
$\sum_i x_i$			summation over i
$\hat{\beta}$	"hat beta"		an estimate of a parameter β
$\tilde{u}$	"tilde u "		an estimate of a variable u

Reference for Stats symbols A3;
Murison, R.D. 2005, Statistical Modelling in the Sciences, Pearson Education Australia.
Library reference: 519.5 M977s