Symbols and abbreviations used in statistics

Symbols related to the underlying population of interest	
N	Size of the population
μ	Population mean (mu)
σ	Population standard deviation (sigma)
σ^2	Population variance (sigma-squared)
ρ	Population correlation coefficient (rho)
π	Population proportion (pi)
Symbols related to the underlying sample of interest	
n	Size of the sample
m or $\bar{x}$	Sample mean (x-bar)
s or SD	Sample standard deviation
s^2	Sample variance
r	Sample correlation coefficient
p	Sample proportion
Other symbols and abbreviations	
x	Random variable
df	Degrees of freedom
t	t statistic
χ^2	Chi-squared statistic
Z	Z statistic
F	F statistic
min	Minimum
max	Maximum
α	Type 1 error
β	Type 2 error
1 - β	Power
Σ ( )	Summation operator - sum up the numbers in the brackets
π ( )	Product operator – multiply together the numbers in the brackets
e	e - constant term with value of 2.718 used in many formulas
π	pi - constant term with value of 3.142 used in many formulas
ln	Natural logarithm, or log base e
log or $\log_{10}$	Log base 10