Symbols Frequently Used in Statistics

Symbol	Meaning
Σ	Sigma; means "the sum of"
$\bar{x}$	Sample mean
μ	Mu; Population mean
s	Sample standard deviation
σ	Sigma; Population standard deviation
s^2	Sample variance
σ^2	Population variance
$\hat{p}$	Sample proportion
p	Population proportion
n	Number of data values in a sample
z	z score (standardized value)
t	t statistic
C	Confidence level
H_0	Null hypothesis
H_a	Alternative hypothesis
Df	Degrees of freedom
$N(\mu,\sigma)$	Normal distribution with mean μ and standard deviation σ
χ^2	Chi-square statistic
β	Power of the Test
$\binom{n}{r}$	Combination of n objects in r groups $\left({}_nC_r\right)$
$P(A\|B)$	Probability of event A given B
r	Correlation coefficient
r^2	Coefficient of determination
Residual	Residual
Q1	First (lower) quartile
Q3	Third (upper) quartile
IQR	Interquartile range
M	Median