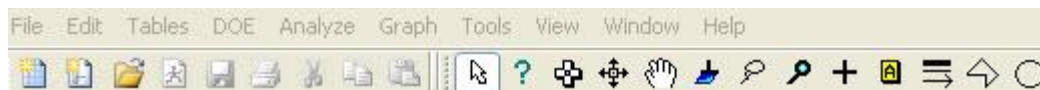


JMP® Student Edition Reference Guide

For complete information and tutorials, please see the Using JMP Student Edition handbook available under Help→Books. For information about JMP Student Edition see www.jmp.com/se.

Instructions presume a data table is open and the user will specify the appropriate variables of interest.



Graphing



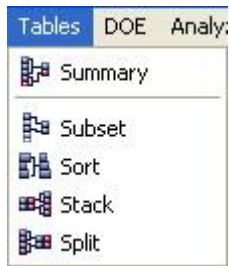
Frequency Distribution	Analyze→Distribution
Bar Chart	1. Graph→Graph Builder→Drag Continuous Variable to Y and Categorical to X→RMC→Points→Change to →Bar 2. Graph→Chart
Pie Chart	Graph→Chart→Options→Pie Chart
Histogram	Analyze→Distribution
Stem-and-leaf display	Analyze→Distribution; select <input checked="" type="checkbox"/> Stem and Leaf
Scatter Plot 2D	1. Graph→Graph Builder → Drag Continuous Variable to Y and another one to X 2. Analyze →Fit Y by X (Bivariate) 3. Graph → Overlay Plot
Scatter Plot 3D	Graph →Scatterplot 3D
Line Chart	1. Graph → Graph Builder→ Drag Continuous Variable to Y and another one to X→ RMC in graph→Smoother→Change to →Line 2. Graph → Overlay Plot; select <input checked="" type="checkbox"/> y options → Connect Points
Box Plot - One Level	1. Graph → Graph Builder → Continuous column to Y→RMC→Points→Change to→Box Plot 2. Analyze → Distribution
Box Plot - Two or More Levels	1. Graph → Graph Builder → Continuous column to Y and categorical to X→RMC→Points→Change to→Box Plot 2. Analyze→ Fit Y by X; select <input checked="" type="checkbox"/> Display Options → Box Plot

Basic Statistics



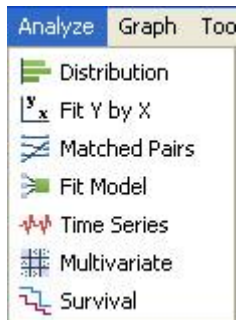
Descriptive statistics	<ol style="list-style-type: none"> Analyze → Distribution; select <input checked="" type="checkbox"/> Display Options → More Moments Tables → Summary Tables → Tabulate
z- or t- test <ol style="list-style-type: none"> 1-Sample 2-Sample Paired t 	<ol style="list-style-type: none"> Analyze → Distribution; select <input checked="" type="checkbox"/> Test Mean Analyze → Fit Y by X; select <input checked="" type="checkbox"/> t Test or Means/ANOVA/Pooled t Analyze → Matched Pairs
Testing Proportions (make 0/1 indicator Nominal or Ordinal) <ol style="list-style-type: none"> 1 Proportion 2 Proportion 	<ol style="list-style-type: none"> Analyze → Distribution; ; select <input checked="" type="checkbox"/> Test Probabilities Analyze → Fit Y by X
Contingency table – Chi-Square test	Analyze → Fit Y by X
Covariance	Analyze → Multivariate Methods → Multivariate; select <input checked="" type="checkbox"/> Covariance matrix
Correlation	Analyze → Multivariate Methods → Multivariate
Test for Normality Test/Goodness-of-fit Test	Analyze → Distribution; select <input checked="" type="checkbox"/> Continuous Fit → Normal; select <input checked="" type="checkbox"/> by Fitted Distribution → Goodness of Fit Test

Probability/Random Variables



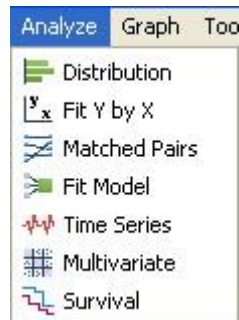
Probability Variables	On data table select Columns → New Column; select Column Properties → Formula; select Probability from Functions Window; select desired probability function. Note: For more information on the expected parameters see help under Probability Functions
Random Variables	On data table select Columns → New Column; select Column Properties → Formula; select Random from Functions Window; select desired Random function. Note: For more information on the expected parameters see help under Random Functions
Distribution Fitting	Analyze → Distribution; select Continuous Fit, then select either Normal, LogNormal or Weibull

Analysis of Variance



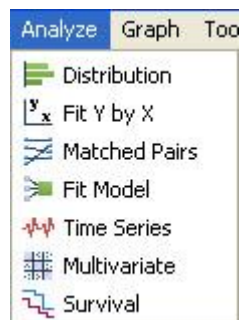
One-Way	Analyze → Fit Y by X; select Means/Anova
Two or more Factors	Analyze → Fit Model
Randomized Blocks	Analyze → Fit Y by X; include column in Block role
Multiple Comparison Methods	Analyze → Fit Y by X; select Means/Anova; select Compare Means
Test for Equal/Unequal Variances	Analyze → Fit Y by X; select Means/Anova; select Unequal Variances

Regression



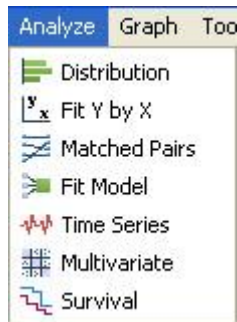
Scatter Plot	<ol style="list-style-type: none"> Analyze → Fit Y by X (Bivariate) Graph → Overlay
Simple Least Squares	<ol style="list-style-type: none"> One Independent Variable One or More Independent Variables <ol style="list-style-type: none"> Analyze → Fit Y by X; select <input type="checkbox"/> Fit Line Analyze → Fit Model
Logistic Regression	<ol style="list-style-type: none"> One Independent Variable One or More Independent Variables <ol style="list-style-type: none"> Analyze → Fit Y by X; select <input type="checkbox"/> Fit Line Analyze → Fit Model
Multiple Regression	Analyze → Fit Model
Stepwise Regression	Analyze → Fit Model → Personality – Select Stepwise
Residual Analysis	Analyze → Fit Model; Run Model; select <input type="checkbox"/> Row Diagnostics
Interaction Plots	Analyze → Fit Model; Run Model; select <input type="checkbox"/> Factor Profiling → Interaction Plots
Durbin-Watson Test	Analyze → Fit Model; Run; select <input type="checkbox"/> Row Diagnostics → Durban Watson Test

Time Series



Time Series Plot	Analyze → Modeling → Time Series
Moving Averages	Analyze → Modeling → Time Series; select <input type="checkbox"/> ARIMA
Exponential Smoothing	Analyze → Modeling → Time Series; select <input type="checkbox"/> Smoothing Models
Holt-Winters Method	Analyze → Modeling → Time Series; select <input type="checkbox"/> Smoothing Model → Winters Method

Nonparametric Techniques



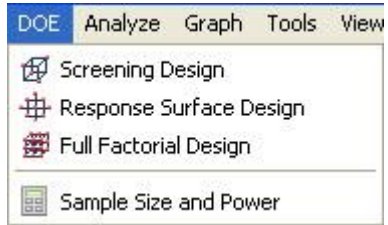
Wilcoxon Rank Sum Test	Analyze → Fit Y by X; select <input checked="" type="checkbox"/> Nonparametric → Wilcoxon Test
Fishers Sign Test (for 2x2 tables only)	Analyze → Fit Y by X
Wilcoxon Signed Rank Sum Test	Analyze → Distribution; select <input checked="" type="checkbox"/> Test Mean → Check Wilcoxon Signed Rank Box
Kruskal-Wallis Test	Analyze → Fit Y by X; select <input checked="" type="checkbox"/> Nonparametric → Wilcoxon Test
Spearman's P	Analyze → Multivariate Methods → Multivariate; select <input checked="" type="checkbox"/> Nonparametric Correlations → Spearman's P

Quality Control



Control Charts	
1. X-bar	1. Graph → Control Chart → XBar
2. Individual Measurements (IR)	2. Graph → Control Chart → IR
3. p Chart	3. Graph → Control Chart → p
4. u Chart	4. Graph → Control Chart → u
5. CUSUM	5. Graph → Control Chart → CUSUM
Pareto	Graph → Pareto Plot

Design of Experiments (DOE)



Factorial Design	1. DOE → Full Factorial Design 2. DOE → Screening Design
Screening Design	DOE → Screening Design
Response Surface Design	DOE → Response Surface Design
Sample Size and Power Calculations	DOE → Sample Size and Power