












JMP® 10 Quick Guide















Instructions presume an open data table, default preference settings, and appropriately typed, user-specified variables of interest.
RMC = Click Right Mouse Button





Graphing	What	How
	Frequency Distribution	Analyze > Distribution (For categorical variables, frequencies are displayed. Otherwise, quantiles and moments are.)
	Bar Chart	Graph > Graph Builder > Drag Continuous Variable to Y and Categorical to X > Click Bar Icon Or: Graph > Chart
	Pie Chart	Graph > Graph Builder > Drag Continuous Variable to Y and Categorical to X > Click Pie Icon Or: Graph > Chart > Options > Pie Chart
	Histogram	Graph > Graph Builder > Drag Variable to Y or to X > Click Histogram Icon Or: Analyze > Distribution
	Stem and Leaf Plot	Analyze > Distribution; select <input checked="" type="checkbox"/> Stem and Leaf
	Scatter Plot 2D	Graph > Graph Builder > Drag Continuous Variable to Y and another one to X Or: Analyze > Fit Y by X (Bivariate) Or: Graph > Overlay Plot
	Scatter Plot 3D	Graph > Scatterplot 3D
	Scatter Plot Matrix	Graph > Scatterplot Matrix Or: Analyze > Multivariate Methods > Multivariate
	Trellis Plot	Graph > Graph Builder > Drag Column to Y and one to X; Drag Nominal or Ordinal Column to Wrap
	Line Chart	Graph > Graph Builder > Drag Cont. Variable to Y and another one to X > Click Line Icon Or: Graph > Overlay Plot; select <input checked="" type="checkbox"/> y options > Connect Thru Missing
	Box Plot - One Level	Graph > Graph Builder > Continuous column to Y > Click Box Plot Icon Or: Analyze > Distribution
	Box Plot - Two or More Levels	Graph > Graph Builder > Continuous column to Y and categorical to X > Click Box Plot Icon Or: Analyze > Fit Y by X (choose continuous Y and categorical X); select <input checked="" type="checkbox"/> Display Options > Box Plot




Basic Statistics	Descriptive statistics	Analyze > Distribution; (basic stats are shown by default; to see more select  Display Options) or Tables > Summary or Tables > Tabulate	
	z- or t- test	1-Sample: Analyze > Distribution; select  Test Mean 2-Sample: Analyze > Fit Y by X (cont. Y and 2-level cat. X); select  t Test or Means/ANOVA/Pooled t Paired t: Analyze > Matched Pairs	
	Testing Proportions (<i>make 0/1 indicator Nominal or Ordinal</i>)	1 Proportion: Analyze > Distribution; select  Test Probabilities 2 Proportions: Analyze > Fit Y by X	
	Contingency table – Chi-Square test	Analyze > Fit Y by X (both X and Y must be categorical)	
	Covariance	Analyze > Multivariate Methods > Multivariate; select  Covariance matrix	
	Correlation	Analyze > Multivariate Methods > Multivariate Or Analyze > Fit Y by X > Density Ellipse	
	Test for Normality/Goodness-of-fit	Analyze > Distribution; select  Continuous Fit > Normal; select  by Fitted Normal > Goodness of Fit	

Probability & Random Variables	Probability Variables	On data table: <ol style="list-style-type: none"> 1. Select  Columns > New Column; 2. RMC on new column > Formula; 3. Select Probability from Functions Window; 4. Select desired probability function. <p><i>Note: For more information on the expected parameters see Help under Probability Functions</i></p>	
	Random Variables	On data table: <ol style="list-style-type: none"> 1. Select  Columns > New Column; 2. RMC on new column > Column Info; 3. Click on drop down box next to Initialize Data > Random <p><i>Note: For more information on the expected parameters see help under Random Function</i></p>	On data table: <ol style="list-style-type: none"> 1. Select  Columns > New Column; 2. RMC on new column > Formula; Select Random from Functions Window; 3. Select desired Random function.
	Distribution Fitting	Analyze > Distribution; select  Continuous Fit, then select desired distribution(s).	

Analysis of Variance	One-Way	Analyze > Fit Y by X; select  Means/Anova (Y must be continuous; X categorical)
	Two or more Factors	Analyze > Fit Model
	Randomized Blocks	Analyze > Fit Y by X; include a categorical 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	Analyze > Fit Y by X (Bivariate) Or, Graph > Graph Builder > Drag continuous column to Y and another to X	
	Simple Least Squares	One Variable:	Analyze > Fit continuous Y by continuous X; select  Fit Line Or, Click Line Icon from Scatterplot in Graph Builder (see above).
		One or More Independent Variables:	Analyze > Fit Model
	Logistic Regression	One Variable:	Analyze > Fit categorical Y by continuous X; select  Fit Line
		One or more independent variables:	Analyze > Fit Model
	Multiple Regression	Analyze > Fit Model	
	Stepwise Regression	Analyze > Fit Model > Personality – Select Stepwise	
	Residual Analysis	Analyze > Fit Model; Run Model; select  Row Diagnostics Or Analyze > Fit Y by X; Select  and choose a fit; Select  from fit report and “Save Residuals” or “Plot residuals”	
	Interaction Plots	Analyze > Fit Model with interaction effects; Run Model; select  Factor Profiling > Interaction Plots	
	Durbin-Watson Test	Analyze > Fit Model; Run; select  Row Diagnostics > Durban Watson Test	

Nonparametric techniques	Wilcoxon Rank Sum Test	Analyze > Fit Y by X; select  Nonparametric > Wilcoxon Test
	Fishers Sign Test (for 2x2 tables only)	Analyze > Fit categorical Y by categorical X
	Wilcoxon Signed Rank Sum Test	Analyze > Distribution on continuous X; select  Test Mean > Check Wilcoxon Signed Rank Box
	Kruskal-Wallis Test	Analyze > Fit continuous Y by categorical X; select  Nonparametric > Wilcoxon Test
	Spearman’s ρ	Analyze > Multivariate Methods > Multivariate; select  Nonparametric Correlations > Spearman’s ρ

Time Series	Time Series Plot	Analyze > Modeling > Time Series
	Moving Averages	Analyze > Modeling > Time Series; select  Smoothing Models > Simple Moving Average
	Exponential Smoothing	Analyze > Modeling > Time Series; select  Smoothing Models
	Holt-Winters Method	Analyze > Modeling > Time Series; select  Smoothing Model > Winters Method

Data Mining	Decision Trees	Analyze > Modeling > Partition
	Clustering	Analyze > Multivariate Methods > Cluster
	Neural Networks	Analyze > Modeling > Neural
	Logistic & Multiple Regression	Analyze > Fit Model

Quality Control	Control Charts	Run Chart: * X-bar: * Individual Measurements (IR): * P Chart: U Chart: CUSUM:	Analyze > Quality and Process > Control Chart > Run Chart Analyze > Quality and Process > Control Chart > Control Chart > XBar Analyze > Quality and Process > Control Chart > Control Chart > IR Analyze > Quality and Process > Control Chart > Control Chart > P Analyze > Quality and Process > Control Chart > Control Chart > U Analyze > Quality and Process > Control Chart > Control Chart > CUSUM
		* Can also be created with the Control Chart Builder: Analyze > Quality and Process > Control Chart Builder	
	Pareto	Analyze > Quality and Process > Pareto Plot	
	Ishikawa (“Fishbone”) Diagram	Analyze > Quality and Process > Diagram	
	Variability Chart (Multi-Vari)	Analyze > Quality and Process > Variability/Attribute Gauge Chart	
	Capability	Analyze > Quality and Process > Capability With additional graphs on same output: Analyze > Quality and Process > Control Chart > IR; check Capability Box. > OK, Fill in Specification Limits	

Design of Experiments	Custom Design	DOE > Custom Design
	Factorial Design	DOE > Full Factorial Design <i>Or:</i> 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

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For complete information and tutorials, please refer to the JMP Help available under “Help > Books” and “Help > Tutorials”.