Hypothesis Testing Road Map

Use this matrix as a guide for selecting the correct statistical test for your Six Sigma project. Analysis is by data type.

	Discrete X	Continuous X
Continuous Y	**Graphs** • Histogram • Box plot • Dot plot **Normality Test** • Anderson-Darling **Compare Means Tests** • 1-sample t • 2-sample t • ANOVA **Variance Tests** • Chi-square method • Bonett method **Equal Variance Tests** • Bartlett's test • Levene's test **Compare Medians Tests** (Nonparametric tests) • Wilcoxon • Mann-Whitney • Kruskal-Wallis	**Graphs** • Scatterplot • Fitted line plot **Relationships Tests** • Correlation • Linear regression • Multiple regression
Discrete Y	**Graph** • Pareto chart **Proportion Tests** • 1-proportion • 2-proportions **Test for Association or Independence** • Chi-square contingency tables	Logistic regression test (seldom used in Six Sigma projects)