Simple:

Exclude/Omit data: Right click row and select ‘Exclude’

Change alpha-level for choosing between 90%, 95% or 99% confidence intervals:
In “fit model”, before pressing “run” and conducting the test, right click the “model specification” header and set alpha level to the desired level

Advanced:

Regression line

1. Analyze > Fit Y by X > Insert columns in Y and X > Right click header > Fit line

Predictions based on regression line

1. Do a regression line/multiple regression lines
2. Click red arrow to the left of ‘linear fit’ > Save predicteds
3. Insert number in row you want prediction for

To get prediction limits:

1. Click red arrow to the left of ‘linear fit’ > Indiv Confidence Limit Formula

Test/get residuals of linear regression model

1. Do a regression line
    a. **Single regression line:** Click red arrow to the left of ‘linear fit’ > Fit model > Look at the Residual by predicted plot
    b. **Multiple regression lines:** Right click header > row diagnostics > plot residual by predicted

Multiple linear regression

1. Analyze > Fit model > Select your Y > Select your covariates and click add > Set emphasis to ‘minimal report’ > run

One sample t-test (Test the mean of a sample)

1. Analyze > Distribution > Set Y as column you want to test the mean for
2. Right click header > test mean > type hypothesis value

Two sample t-test (Compare the mean of two groups)

1. Analyze > Fit Y by X > Set Y as column you want to test the mean for + Set X as the column containing the group variable
2. Right click header > t-test or Means/Anova/Pooled t

To see what test to use do the following:
1. Analyze > Distribution > Set Y as column you want to test the mean for + Set By as the column containing the group variable
2. Compare the two std deviations. If they are within 2*factor of each other then use Means/Anova/Pooled t if not then use t-test

Pearson χ2-test (Chi test - Test difference in frequency between groups)

1. Analyze > Fit Y by X > Set Y and X as the two groups you want to test difference between

Oneway ANOVA

1. Analyze > Fit Y by X > Insert values
2. Right click header > Means/Anova

To check for variance homogeneity (same standard deviations in the four groups):
1. Right click header > Unequal variances
2. Right click header > compare means > All pairs, Tukey HSD

Twoway ANOVA (Test of no interaction)

1. Analyze > Fit model > Insert Y > Select all other variables at once > click macros > full factorial > Set emphasis to ‘minimal report’ > run

Hypothesis of no interaction the [Variable 1]*[Variable 2] row in the ‘effect tests’ section

If the test is not significant then do:
1. Right click header > Estimates > Sequential tests
2. If p-value is above the significance level (and the interaction is not significant), you can look at the first line.
3. IF NOT: Re fit the model, so line 1 and 2 in the sequantial test switches places (do this by selecting the variables in a different order before clicking macros)
4. Fit a model with effects that are significant
5. Right click the header > estimates > Indicator Parametrization Estimates

Analysis of covariance

2. Analyze > Fit model > Select your Y > Select numerical variable and categorical variable and add > Select them again and click cross > Set emphasis to 'minimal report' > run

If there is no interaction then refit the model but omit the cross part from above instructions.

1. Estimates > Indicator parameterization examples

If you want to see the confidence interval for estimates then right click on the headers in the indicator parameterization table and select columns.

QQ-plot

When you have made a Two Way Anova and you want to make an appropriate graph showing the distribution of the residuals from the model:

1. Right click on the header > Click save columns > Click Studentized residuals
2. Analyze > Distribution > Set studentized residuals as Y
3. Right click 'studentized residuals' header > Normal quantile plot