

Checking Error Assumptions in Minitab

It is a good idea to store standardized residuals in the data worksheet

Stat → Regression → Regression

In regression dialogue box, click *Storage*.

Check *Standardized Residuals* under *Diagnostic Measures*

Checking for randomness and constant variance

To produce a scatterplot of the standardized residuals against the fitted values:

Stat → Regression → Regression

Click *Graphs* and check the box next to *Residuals versus fits*

To produce a scatterplot of the standardized residuals against each of the independent variables:

Stat → Regression → Regression

Under *Residuals versus the variables*, enter each of the independent variables

Checking for normality

To produce graphs as part of the regression analysis:

Stat → Regression → Regression

Click *Graphs* and check the boxes next to *Histogram of Residuals* and *Normal Plot of Residuals*

To see an idealized normal density plot overtop of the histogram of residuals:

Make sure you have stored the standardized residuals in the data worksheet (see above.)

Graph → Histogram → With Fit → OK.

Under *Graph variables*, select the column in which the residuals were stored (something like SRES1), then click OK.

To create a stem and leaf plot

Make sure you have stored the standardized residuals in the data worksheet (see above.)

Graph → Histogram → With Fit → OK.

Under *Graph variables*, select the column in which the residuals were stored (something like SRES1), then click OK.