

## Graphing with Grace: Quick Reference Guide

To create a graph with the required information:

1. Start grace, click on Data, Data Set Operations. Right click on the empty list area (no data sets listed yet), Create new, In spreadsheet, then enter the data. Exit the last cell, and click Accept. Set S0 is now created, and displayed in the graph. Click AS to scale the graph.
2. Double-click on one of the data line which will bring the Set Appearance window. Turn off the lines that are joining the data points using Line properties Type: None. Now display the data points using Symbol Properties Type: Circle.
3. Fit the data with a straight line. Click on Data, Transformations, Regression. Click accept if the correct set of data is hi-lighted in the Apply to set: list. (If S0 is the only set, it is already selected.) Click on Close to close the Regression window.
4. Double-click on the graphs title and make a title: 'your y-variable' as a function of 'your x-variable'.
5. Label each axis by double-clicking the existing label and modifying the label fields. Put the units in square bracket.
6. Delete all the text in the Subtitle field. Copy the equation of the regression line from the Console window by hi-lighting it and then middle-clicking in the Subtitle field.
7. Round the slope and intercept values using the errors for each number shown in the console window (scroll back in the console window to find them). State the error values rounded to one sigfig.
8. Put the correct units on the slope and intercept values (no square brackets).
9. Print a copy for both people to staple in to the report book. Do not cover work that needs to be marked.