# Tips and Tricks

Auto Zoom

When graphing a function, attempt to set reasonable values for the domain (Xmin and Xmax), draw the graph and then use Auto Zoom to quickly rescale the y-axes (Ymin and Ymax) for a better view window.

For example, when maximising the volume of a cylindrical can made with a fixed surface area of 500cm^2, the volume function is given by $V = 250r - \pi r^3$. Imagine a can with a surface area of 500cm^2 – it probably has a radius of about 10cm. So we'll set the domain from 0 to 10.
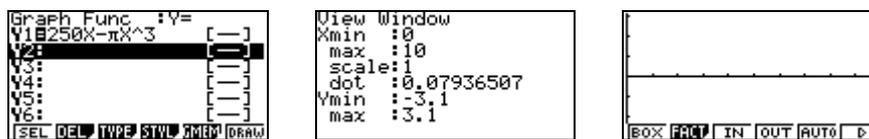

The drawn graph above is not much to write home about. Tap Zoom (F2) Auto (F5) and instant success.
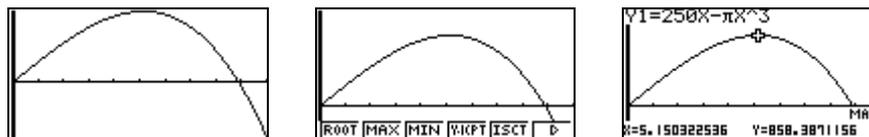
Tap the down cursor arrow to move the maximum away from the top of the screen and GSolv (F5) Max (F2) to solve our problem!

Work with results

Whenever the fx-9860G calculates a result, the values are always stored somewhere – mostly in variables which can be accessed via the VARS menu. In the above example, the coordinates of the max (or any other graph calculation) are stored in the variables X and Y which can be accessed in RUN as shown below.
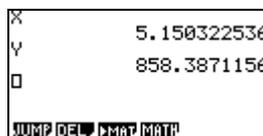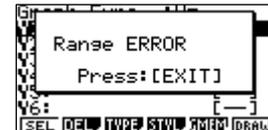
Common Error Messages

Ma Division by zero is the most common culprit here. Also look out for logs and square roots of negative numbers.
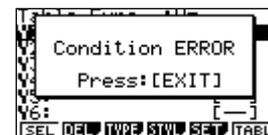
Range When in graph or statistics mode check the View Window in case the min and max values are the same for one of the axis.

Syntax This means the calculator doesn't understand the equation or function that has been entered. The most common culprit is using the negative (-) sign instead of subtract [-].

Condition In graph or table, no function is currently selected.

Memory There just isn't enough of it! Go to Memory, Main and see what's taking up all the space. Then delete what you don't need. (You may want to save a copy first into Storage memory before deleting from Main memory).
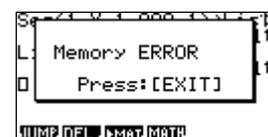
Dimension Usually different number of numbers in List 1 and List 2. This often happens in statistics when using a frequency table or calculating two variable statistics.