In this example we will use the Modify tool when graphing to vary the parameters of a graph  $y = (x+2)^2 + 1$ .

Start in graph and draw the graph of  $y = (x + 2)^2 + 1$  using the scale set by Zoom, Initialize.

☼ Edit Zoom Analysis ◆ Sheet1 | Sheet2 | Sheet3 | Sheet4 | Sheet5 |  $\nabla y_1 = (x+2)^2 + 1$ y2:0 □v3:□ **y4:**□ y5:0 \_\_y6:□ □ v.7·□ Real  $\square$ Deg

Tap **Resize** so that the graph occupies the whole window.

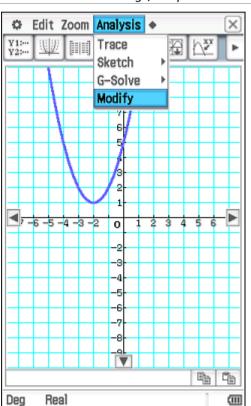
Tap Analysis, Modify.

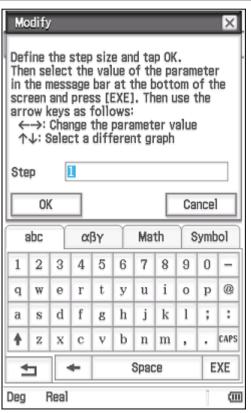
IMPORTANT: If there are no arrow-heads (on-screen cursors) at the end of your axes, you will need to check the G-Controller box in Settings, Graph Format.

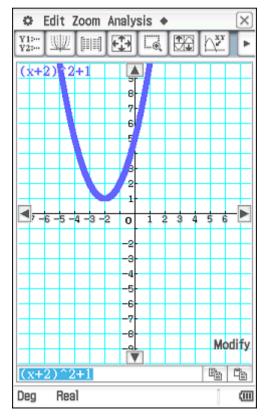
Set the Step to 1 and tap **OK**.

The Step is the amount by which the parameters of the graph will be changed.

Note that the curve is drawn with a thick line and that the function is now displayed at the bottom of the screen.







Select just the '1' coefficient at the end of the function equation and tap the left and right cursors.

Note how the modified function moves, whilst a copy of the original function remains as a thin line.

Now select just the '2' coefficient inside the (x+2) bracket and tap the left and right cursors.

To stop using the Modify tool, close the graph window using  $\boxed{\aleph}$ .

