

Graphing an Equation

Instructions for the TI-84 Plus

You should work through the help sheet *Preparing your Calculator for Graphing* before you begin this help sheet.

Example: Graph the equation: $4x^2 + 2y = -8$.

In order to graph $4x^2 + 2y = -8$, the equation must be solved for y . Rewrite the equation to solve for y : $y = -2x^2 - 4$. The equation is now in the form necessary to be entered

into the function editor. Press  to access the function editor. The cursor should be

to the right of Y1. Enter the equation by pressing the following:   

   . Notice that we used different keys for negative, , and minus, .

The screen should look like the one in figure 1. To graph the function, press . The graph should look like the one in figure 2.

Fig. 1

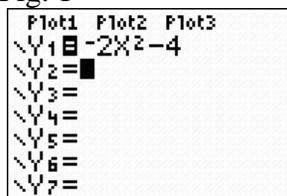


Fig. 2

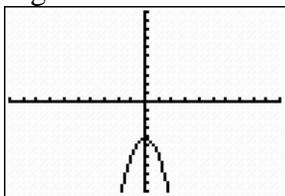
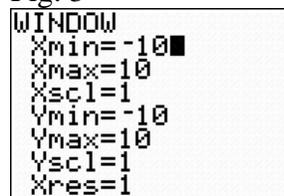


Fig. 3



You will notice that with the standard window settings, the result does not show much of the graph. To change the window settings, start by pressing . You will see the standard window settings in figure 3.

You will want to change the window settings so that more of the graph is shown. Try changing the Ymin to -15. You do this pressing  three times until the cursor is to the right of Ymin. Press    .

The new window settings are shown in figure 4. To see the graph with the new settings, press . The resulting graph is shown in figure 5.

Fig. 4

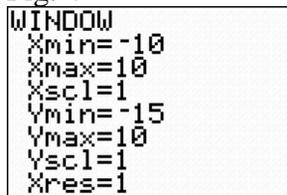
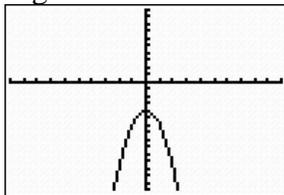


Fig. 5



You have now completed graphing the equation $4x^2 + 2y = -8$. You can get back to your home screen by pressing  .