

Finding Intercepts with the TI-89

Intercepts are the points where a graph crosses either the x or y axis. So either the x coordinate or the y coordinate will be 0. If you want the x-intercept, y will be zero. If you want the y-intercept, let x equal 0.

Before you begin, clear all previously stored functions

Diamond Y=
F1
8: Clear Functions
Enter

If any Plots have been stored, unselect them by **Highlighting** and then **F4**

Start by setting the viewing window

Diamond Window
F2 Zoom
6: ZoomStd

Enter an equation.

Diamond Y=
y1 = 2x + 1
Diamond Graph

To find the x-intercept (y=0)

(The x-intercept is also referred to as the root or zero of the equation)

F5: Math
2: Zero
Lower Bound?: - move cursor to the left of the x intercept using the left or right cursor arrows
Enter
Upper Bound?: - move cursor to the right of the x intercept using the right arrow
Enter

Coordinates of the x intercept are shown on the bottom of the screen (-.5,0)

To find the y intercept (x=0)

From the graph screen

F5: Math
1: Value
Eval x=? Key in 0
Enter

Coordinates of the y intercept are shown on the bottom of the screen (0,1)