

Finding Intercepts with the TI-86

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

Graph
F1: Y=
F4: DelF
Enter

If any Plots have been stored, unselect them.

Arrow up and/or over to highlight the Plot
F5: Select

Start by setting the viewing window

Graph
F3: Zoom
F4: ZStd

Enter an equation.

F1: Y=
 $y_1 = 2x + 1$
Exit
F5: Graph

To find the x-intercept (y=0)

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

More

F1: Math

F1: Root

Left Bound?: - move cursor to the left of the x intercept using the left or right cursor arrows

Enter

Right Bound?: - move cursor to the right of the x intercept using the right arrow

Enter

Guess?: Move cursor close to the x-intercept.

Enter

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

(If you get a number in scientific notation like 4E-14, that is a very small number and you can replace it with 0.)

To find the y intercept (x=0)

Graph

More

F1: Math

More

F2: Ylcpt

Enter

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