## Finding Intercepts with the TI-83+

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

. **Y**=

Highlight function and press Clear

### Start by setting the viewing window

Zoom

6:ZStandard

#### Enter an equation.

**Y=** 

y1 = 2x + 1

Graph

## To find the y intercept (x=0)

2<sup>nd</sup> Calc

1:Value

x = key in 0

Enter

The cursor automatically moves to the y intercept.

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

# To find the x-intercept (y=0)

2<sup>nd</sup> Calc

2:zero

**Left Bound?:** Use the left or right arrow to move the cursor to the left of the intercept.

**Enter** 

Right Bound?: Use the right arrow to move the cursor to the right of the intercept

**Enter** 

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

Enter

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