

To graph, you must have an **equation**, which has an equal sign. If it does not have an $=$, then it is an expression.

To begin graphing, you have to know the **y-intercept**, the part of the graph that touches the y axis. We are graphing in the form of $y=mx+b$

We're using $y=2x+1$

b is the y-intercept and m is slope

"b" is 1 so the y-int is 1

"m" is 2 so slope is 2

Now draw a point at the y-intercept, as shown in Fig.1

Then look at the slope, which is m .

m is 2. Write 2 in fraction form, which is $\frac{2}{1}$.

Remember, slope is rise over run.

So you go up 2 and right 1.

So count 2 dots up from the y-intercept and move over 1 dot to the right and plot a dot.

Then go 2 dots up again and 1 dot over, this time plotting another dot.

Continue until you have a good amount of dots to work with. As shown in Fig.2.

Then connect the dots to draw the graph. Fig.3.

Slope negative $\searrow$
Slope positive $\nearrow$

