

## Graphing Calculators!

Let's start by graphing  $y = 2x - 4$ . Press **Y=**. Then under  $Y_1=$ , type in  $2x - 4$ .

(**X** is next to the green button. subtract is above the +)

Then press **ZOOM** and type **6**. Watch what happens! Cool!

Press **TRACE**. Notice the blinking cursor! There's a point there...what's its name? Give the point: \_\_\_\_\_.

You can move the blinking cursor around by using the arrows.

Now type just the number 2, then **ENTER** (lower right). Notice the blinking cursor again!

Give the point = \_\_\_\_\_.

Notice that those two points are on the axes. They are the y-intercept and the x-intercept.

Now graph  $y = -3x + 12$ . (the negative is next to the decimal point)

Uh oh! The y-intercept is off the graph! We need to change the **WINDOW**.

We need to make the Ymax bigger so that we can find the y-intercept. Do that, then press **GRAPH**.

Press **TRACE** again to find the y-intercept: \_\_\_\_\_

Can you look at the graph and guess the x-intercept? \_\_\_\_\_

(check by typing the number in and pressing **ENTER**)

By the way, those little lines bunch up on the y-axis very fast. Press **WINDOW** again and set Yscl = 2. That means the little lines on the y-axis now go by 2's. Press **GRAPH** again to see it

Now graph  $y = x + 16$ . You type it in like " $y = x+16$ ". **GRAPH** that.

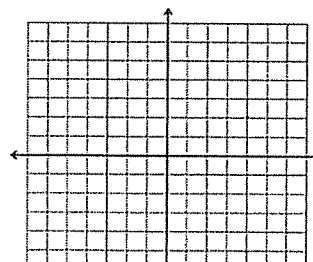
Uh oh! We can't see either end of the graph. To get a good graph we need see where it crosses both axes.

The y-intercept is where  $x = 0$ . Set  $x = 0$  and solve for the y-intercept. \_\_\_\_\_

The x-intercept is where  $y = 0$ . Set  $y = 0$  and solve for the x-intercept. \_\_\_\_\_

Now we know how to fix the **WINDOW**. Change the Xmin and Ymax to be at least as big as our x-intercept and y-intercept. Then **GRAPH**.

Sketch the graph you see on your graphing calculator:  
Include #'s on your axes.



Now, graph  $y = 10x + 400$ .

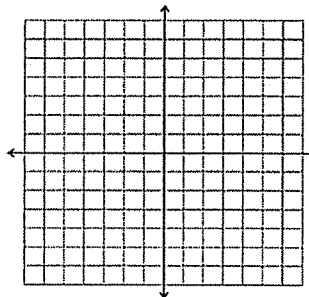
YIKES!! It's totally off of our window!! We need to change our window so that we can see it.

Find the y-intercept. Then change the window to put it on.

Then find the x-intercept. Do that by setting \_\_\_\_ equal to \_\_\_\_\_. Then change the window to put it on.

You'll need to change the Xscl to make the dashes look nice.

Sketch the graph you see on your graphing calculator:  
Include #'s on your axes.



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Now graph  $y = 5x - 100$ . You'll have to fix your window again!

y-intercept:

x-intercept:

Sketch the graph you see on your graphing calculator:  
Include #'s on your axes.

