

iPocketDraw for Dummies (Like Me!)

For years, I've used the long-discontinued DrawingBoard, from Ashlar. For a number of reasons, I've decided to move to a more current product, and I chose iPocketDraw and its desktop version, RealCADD.

I've always had a problem learning a new program, when the instructions show nothing more than a list of tools, and how they work individually. I've always done better when I have a project, and I learn how to use the tools that I need, and how they interact. Yes, this might mean that I only use 35% of the program, but it's the 35% that I need to use. When I need another tool, *then* I'll learn how to use it!

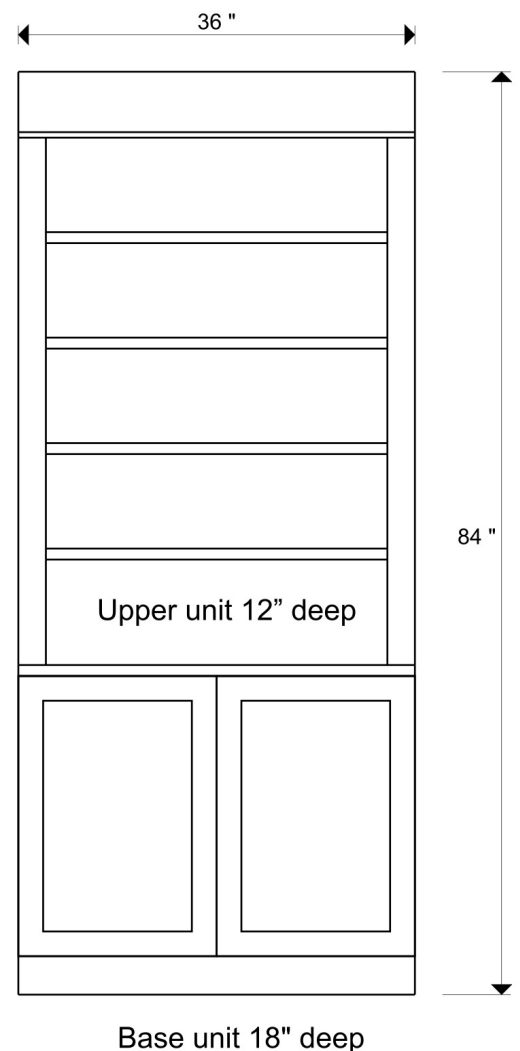
A note before we start: although you can use your finger to draw, I find that a stylus makes the job much more precise. The one I like is the TruGlide Pro, from lynktec.com, but use whatever is most comfortable for you.

As a cabinetmaker, most of my projects are pretty simple, as shown in this drawing:

So what are my needs for this project? Pretty basic:

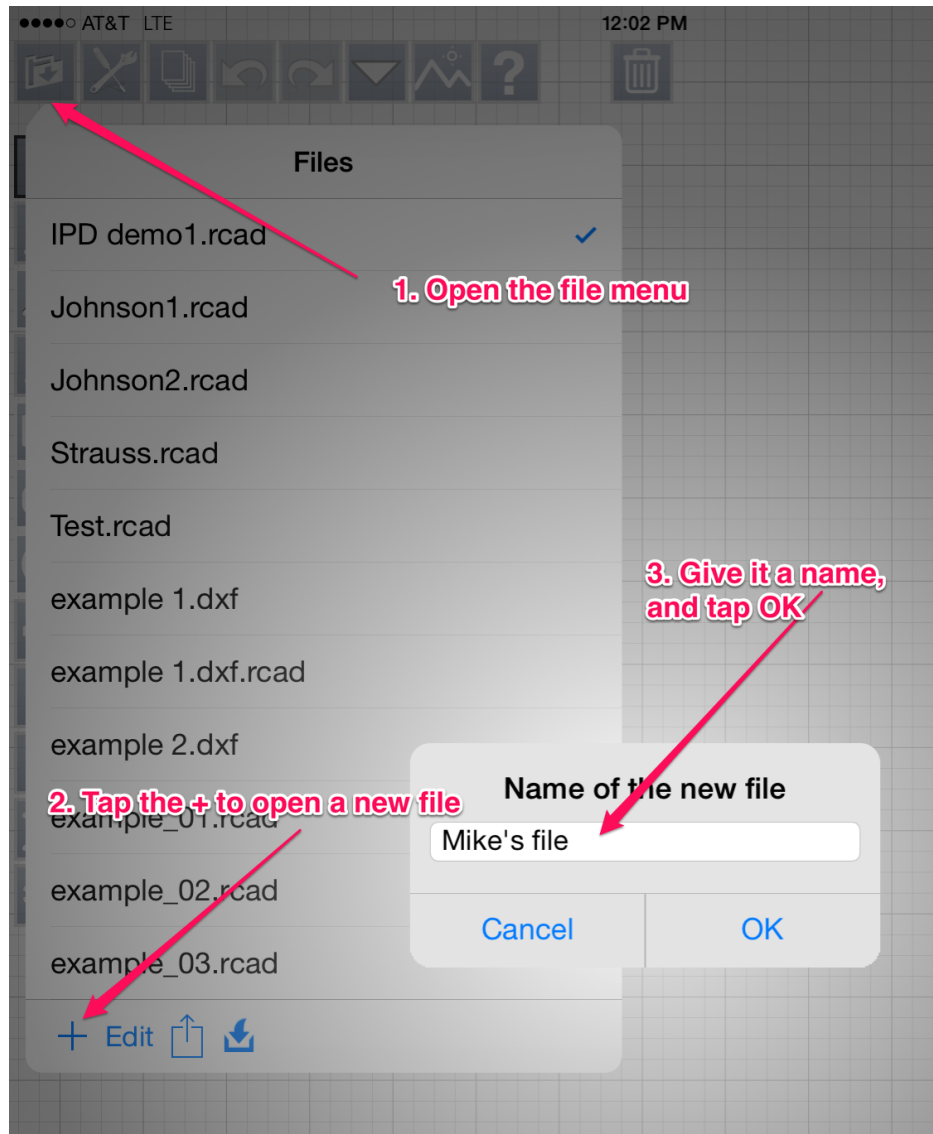
- Lay out a rectangle
- Draw parallel lines to represent trim
- Divide a line into segments, to lay out my shelves
- Draw my doors: rectangles, with parallel rectangles within
- Show some dimensions
- Add some text

Let's look at it step-by-step, and look at the tools we use for each operation. As we do this, note that I am **not** going to go into a full discussion of each tool: just enough info to do what we need to do. Nor do I claim that my way is the only way, or the best way. It's just what works for me!



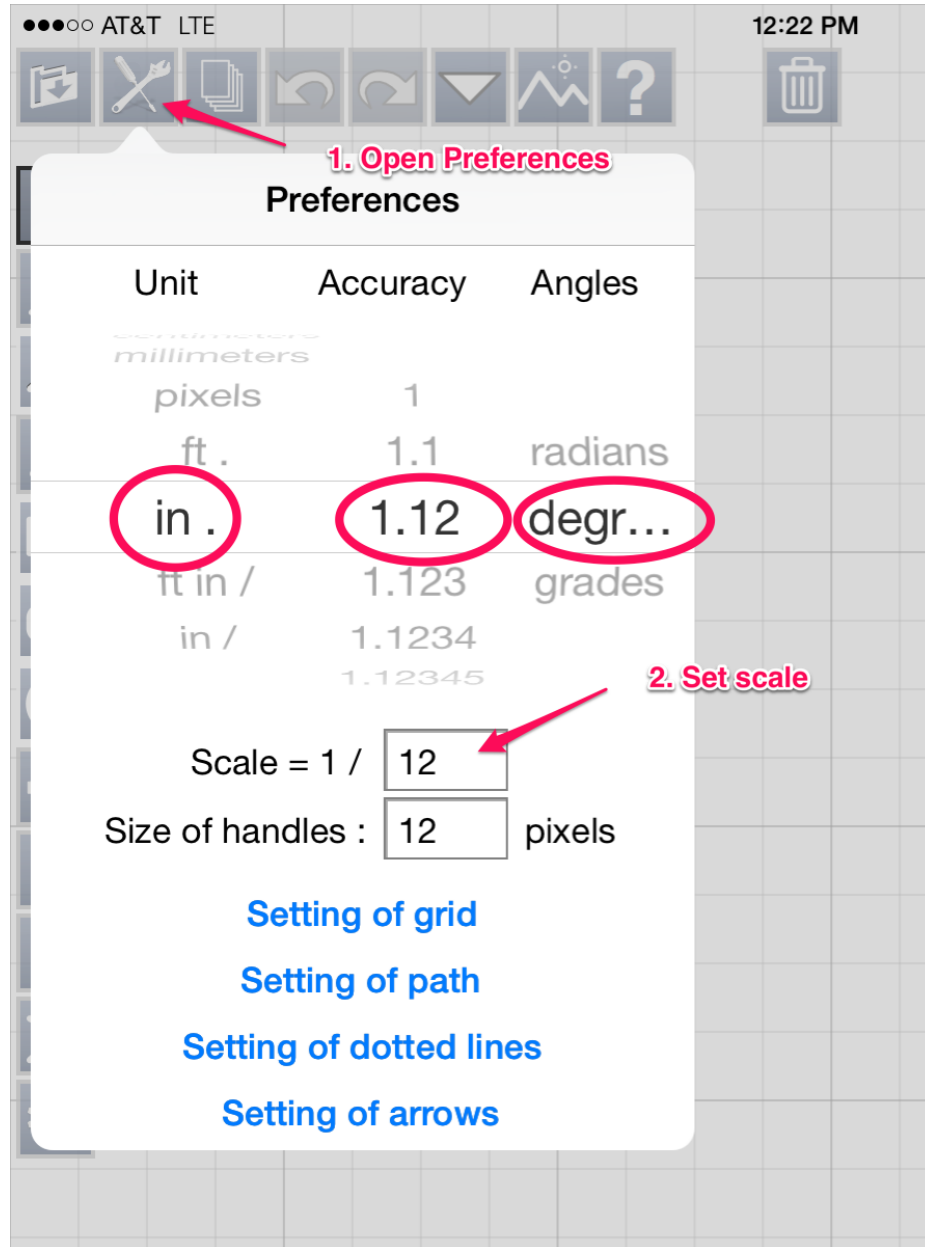
SETTING UP A NEW DOCUMENT

First, let's go to the File icon, start a new document, and give it a name. "Mike's file" will do for now.



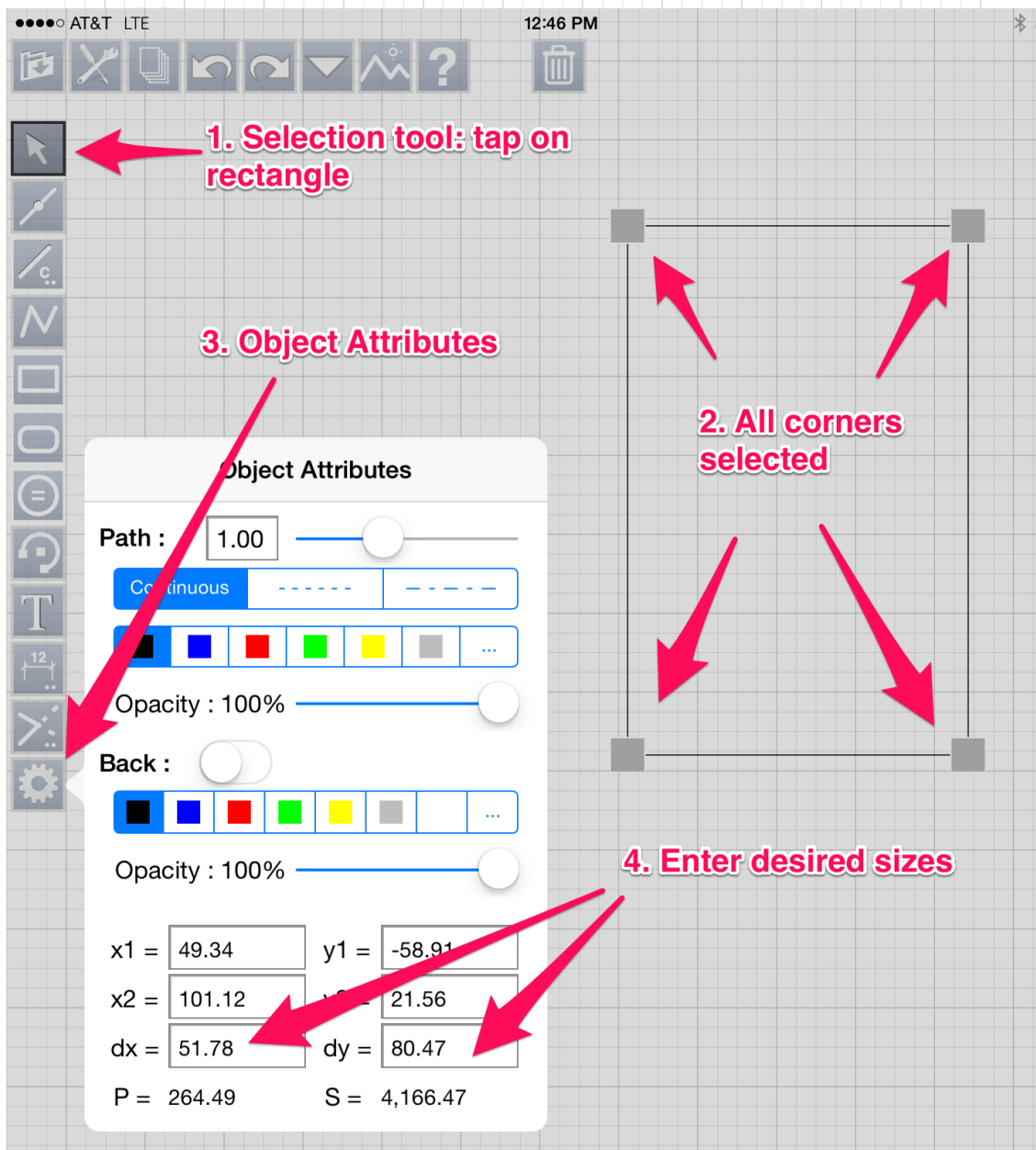
Set the scale, and other preferences.

Open the preferences menu. Since the unit is 36 inches by 84 inches, we can set the scale to 1/12. That's the same as saying 1 inch = 1 foot. Our document will print out at 3 inches by 7 inches, so with the dimensions and text, it should fit nicely on an 8-1/2 x 11 page. Close enough. Also notice that I have chosen to work in inches, with 2 decimal accuracy, and angles states in degrees.



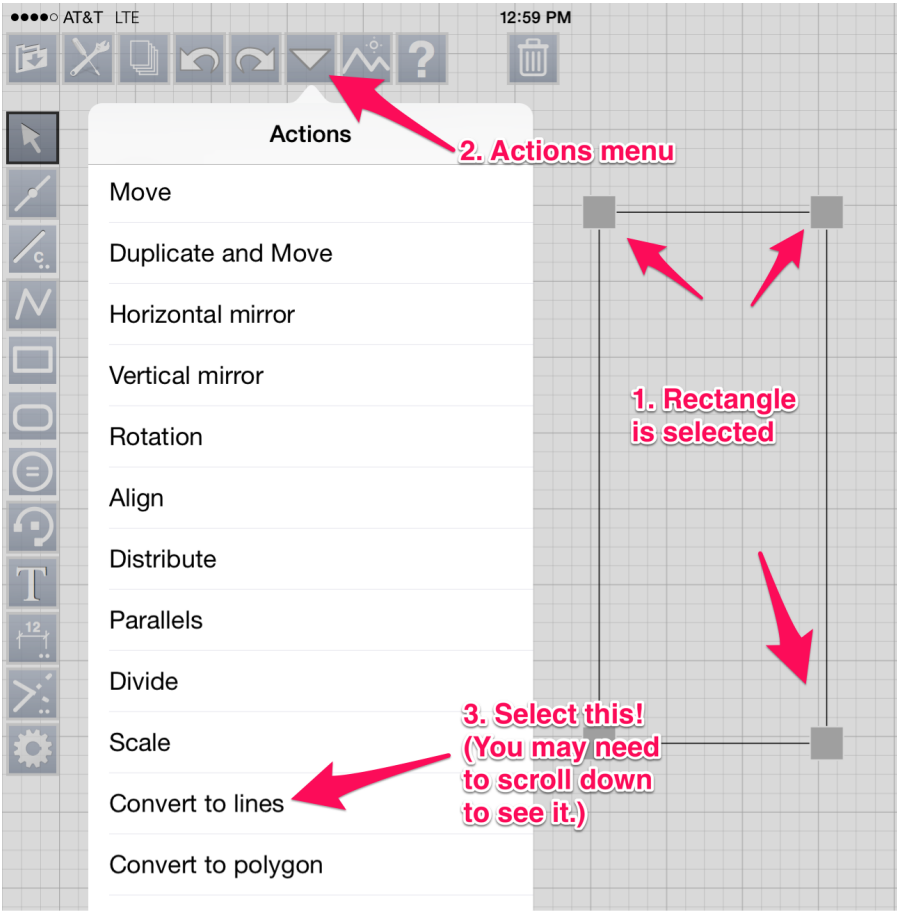
DRAWING THE RECTANGLE

Choose the rectangle tool. (If it's not there, but instead, you see a square with an equal sign in it, tap that. It will turn back to a rectangle. Many of the tools are multifunction. If you don't see the one you want, tapping on the icon cycles through them.)

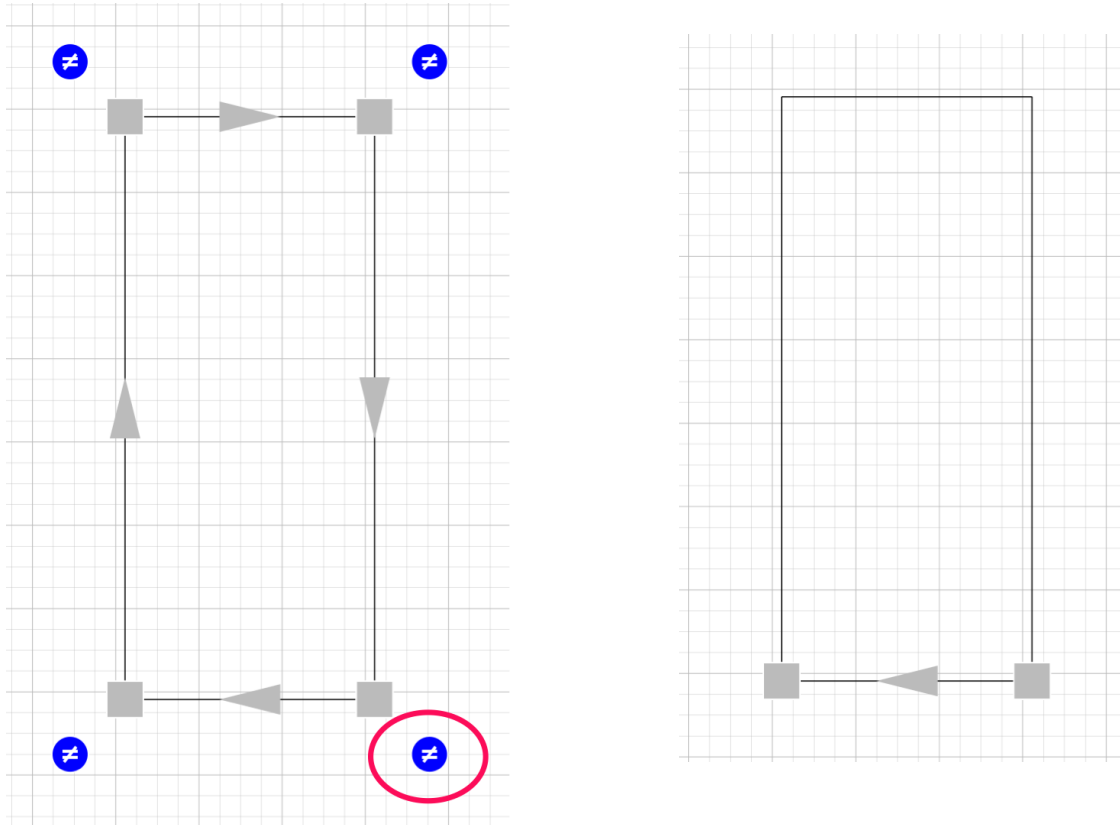


CONVERT THE RECTANGLE TO LINES

The next step is to break the rectangle into 4 separate lines, so we can draw the parallels. With the selection tool, tap the rectangle. Again, you will see the handle at each corner. Go to the Actions menu, and scroll down to Convert to Lines.



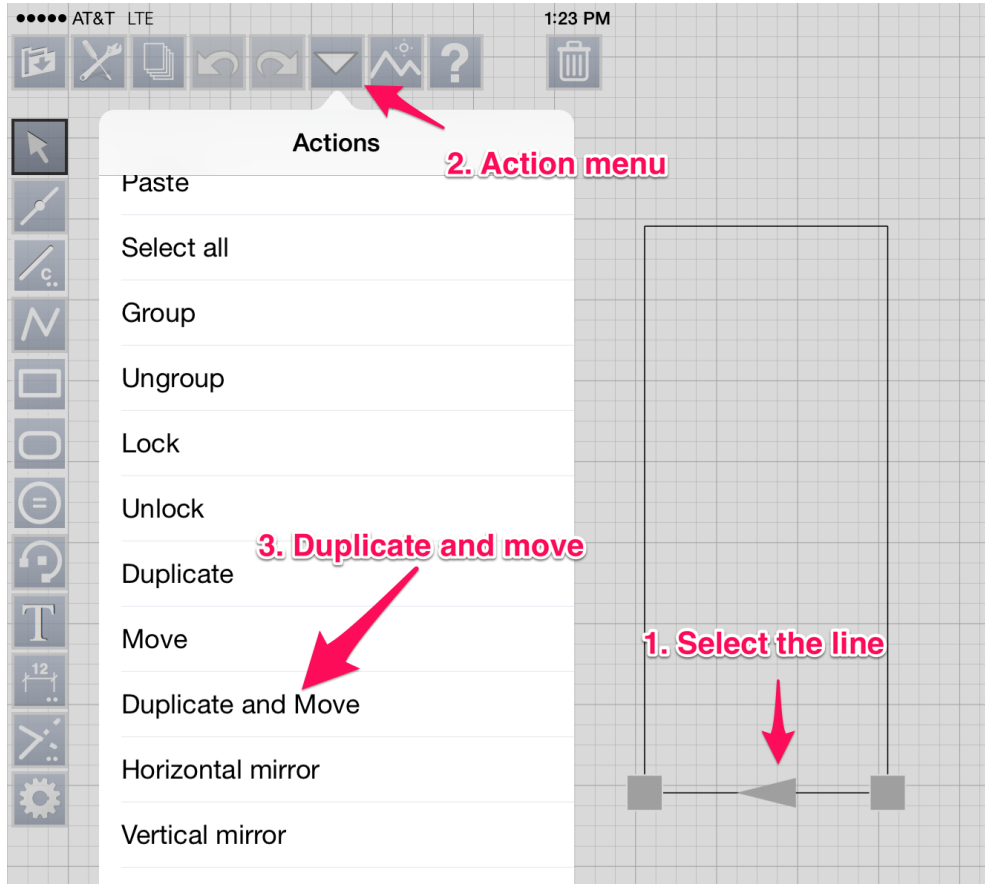
Tap there, and you will see arrows appear on each line, indicating that they are separate. But all of them are selected. (The blue icon shows that multiple lines are selected.) Tap anywhere, to deselect all the lines. Now, if you tap on any line, you will see that *only* that line is selected.



DRAWING PARALLEL LINES

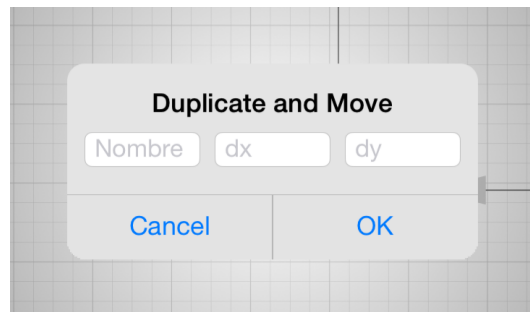
Now, we'll draw the horizontal parallels, to show the top and bottom trim, and the center shelf. We are working in the Y direction for all of these. **Entering a negative distance will move the line UP, and a positive will move the line DOWN.**

Since we want to draw a new line, parallel to the one we are starting from, the command we want in the Actions menu is Duplicate and Move. (Why not the parallel tool? Honestly, I don't like the way it works. It considers the original line's *direction*, as well as its position, to determine whether the line goes up or down, left or right. It confuses me, so I stay away from it in most cases.)



Select the bottom line>Actions>Duplicate and Move

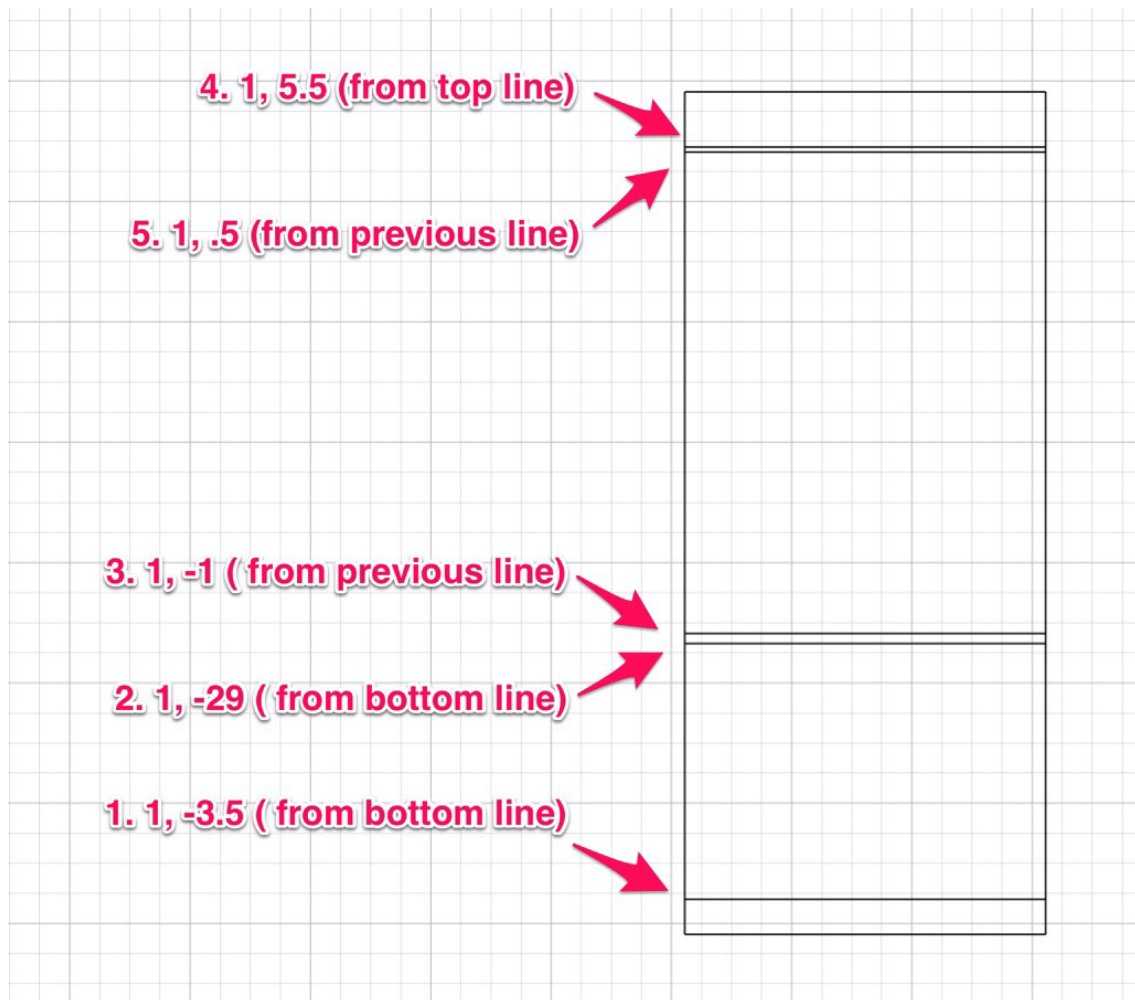
You will see this dialogue box. Enter 1 in the Nombre (number of lines) field, and -3.5 in the dy field. This specifies the Y axis, and the direction and distance: up, 3-1/2 inches.



A single new line will be drawn 3-1/2 inches from the bottom. Note that the **new** line is now selected. Tap on the pad to deselect it. Reselect the bottom line, and perform the same action, with the numbers 1 and -29. This gives us the bottom of the center shelf. This time, *leave it selected*, and do it again, 1 and -1. That's the top of our 1 inch thick shelf.

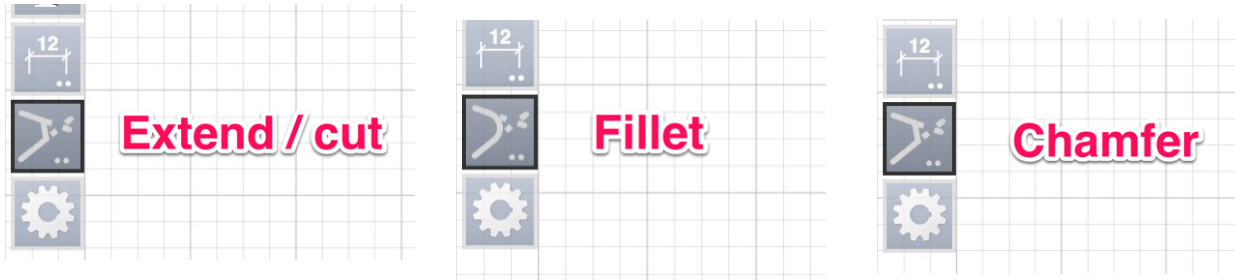
Notice that you have two options, when drawing your duplicates: you can measure from the original line by reselecting it, or directly from the new line.

At the top, we want a 5-1/2 inch wide board, with a piece of 1/2 inch thick trim under it. Select the top line>Actions>Duplicate and Move>1, 5.5>OK. Follow this with Actions>Duplicate and Move>1, .5>OK.

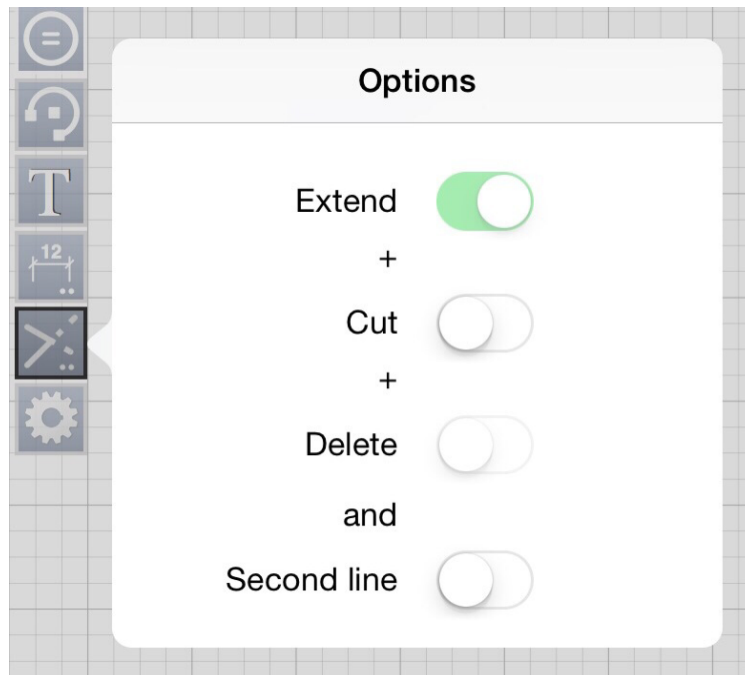


THE EXTEND AND CUT TOOL

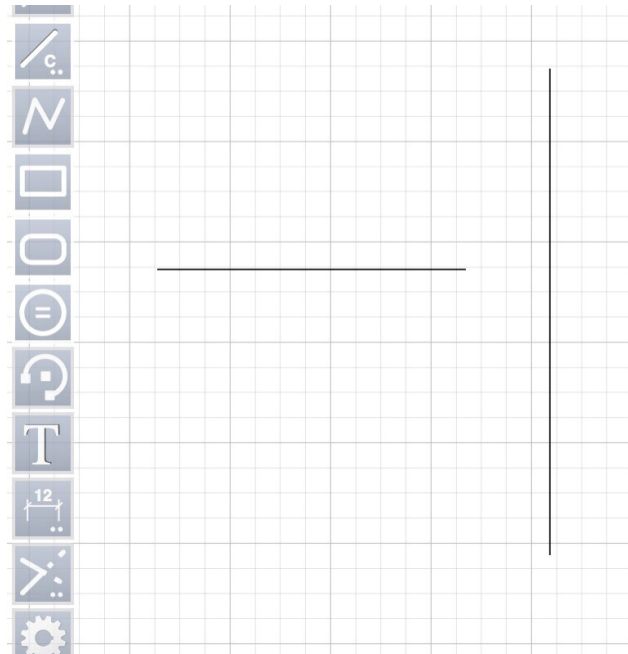
Before the next step, I need to digress to discuss the extend and cut tool. This is one phase of the tool that also can create a fillet and a chamfer, neither of which concern us at this time. Just be sure that you're in the correct mode. Tap on the icon, until the extend/cut tool appears.



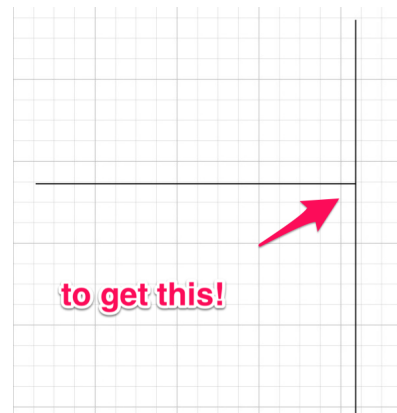
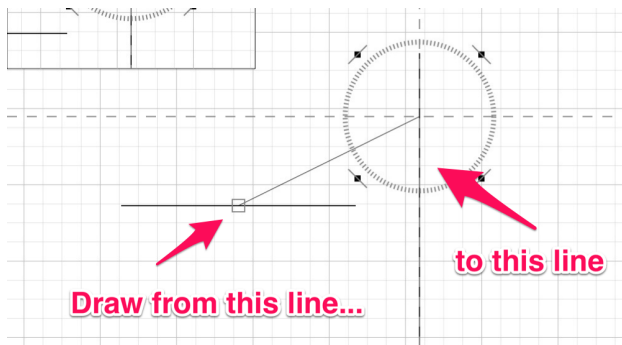
Once you're in the correct mode, a quick double-tap will open the options screen. You see "switches" for Extend, Cut, Delete, Second Line. We'll look at them one by one.



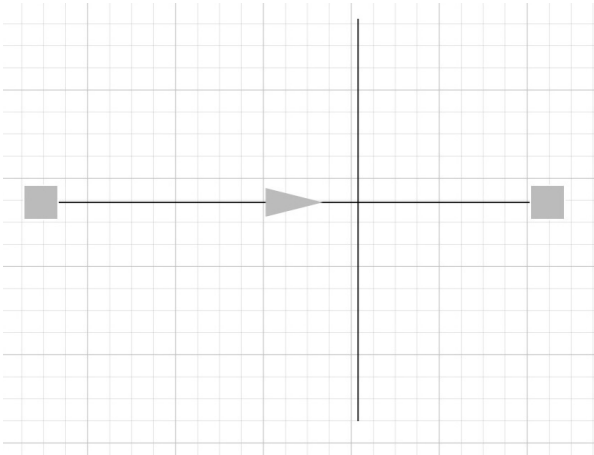
In a new, scratch document, draw a vertical line, and a horizontal that does not cross it.



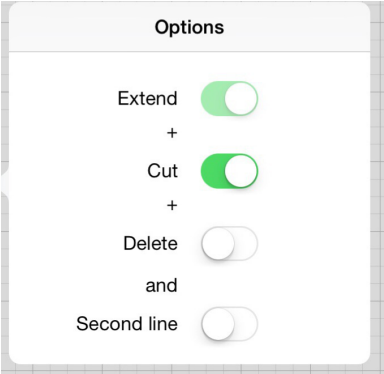
In the options window, make sure that just the top switch is selected: Extend. Tap back on the screen to dismiss the options window. Make sure the tool is selected, and draw a line from anywhere on the horizontal to anywhere on the vertical. The horizontal will extend, stopping at the vertical. I think of it as "this is the line that I want to affect, and this is the line that limits that effect."



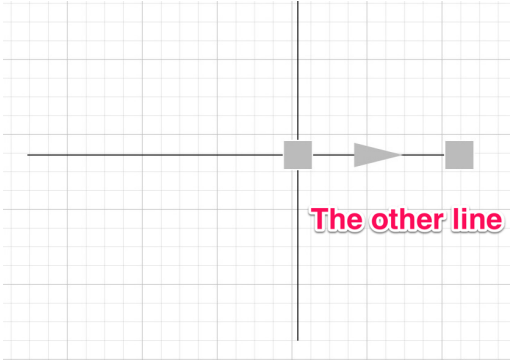
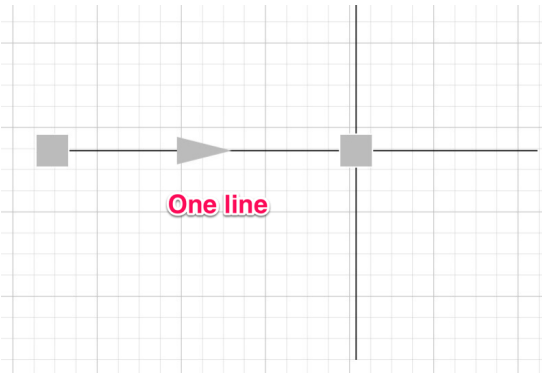
Draw another vertical, and another horizontal that crosses it, this time. With the selection tool, tap on the horizontal. You will see that it is one continuous line.



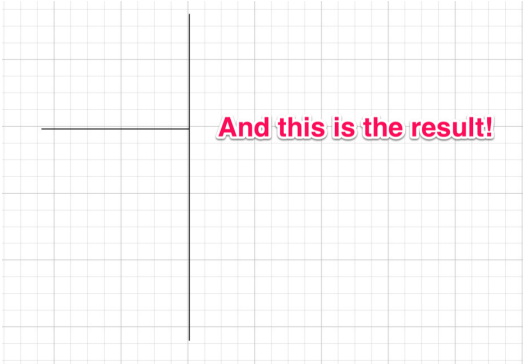
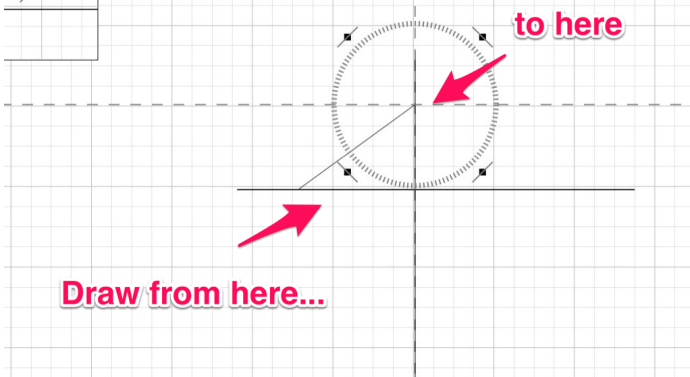
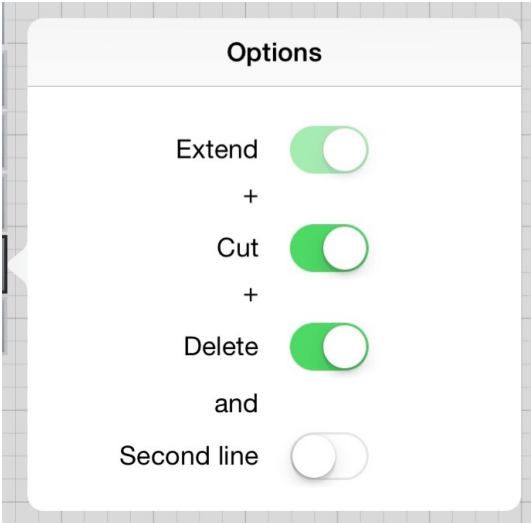
Set the options to Extend and Cut.



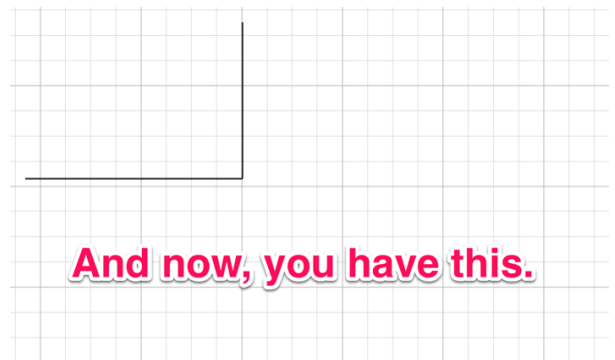
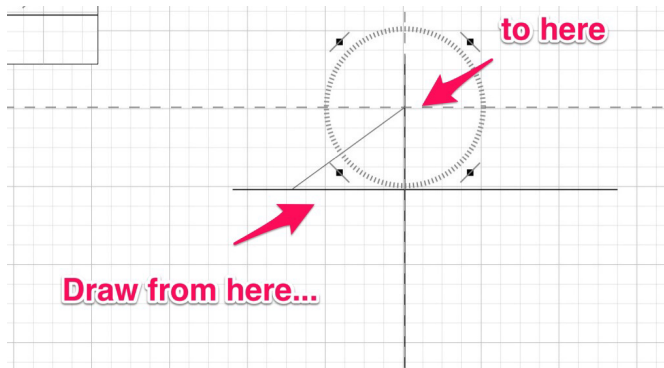
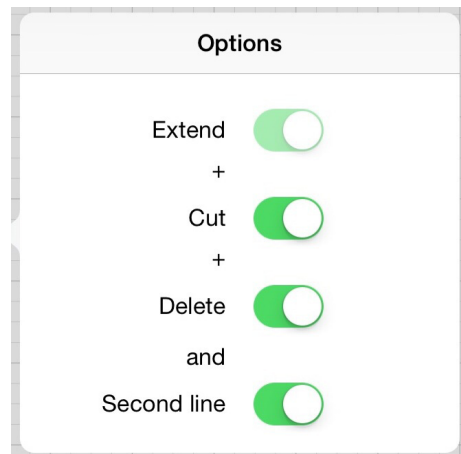
Draw the line from the horizontal to the vertical. You won't see any change. Tap the selection tool, and tap the horizontal line. Now you see that it has been divided into two line segments, one on each side of the vertical! If you wanted to, you could simply delete one or the other.



Draw your crossing lines again. In the options window, add Delete to the other two switches. Draw from the horizontal to the vertical, and this time, the "other" end of the line is deleted. Remember, "this is the line that I want to affect, and this is the line that limits that effect."



Finally, draw the crossing lines, and add "and Second line." Draw from the horizontal to the vertical, and both of the untouched lines are deleted.

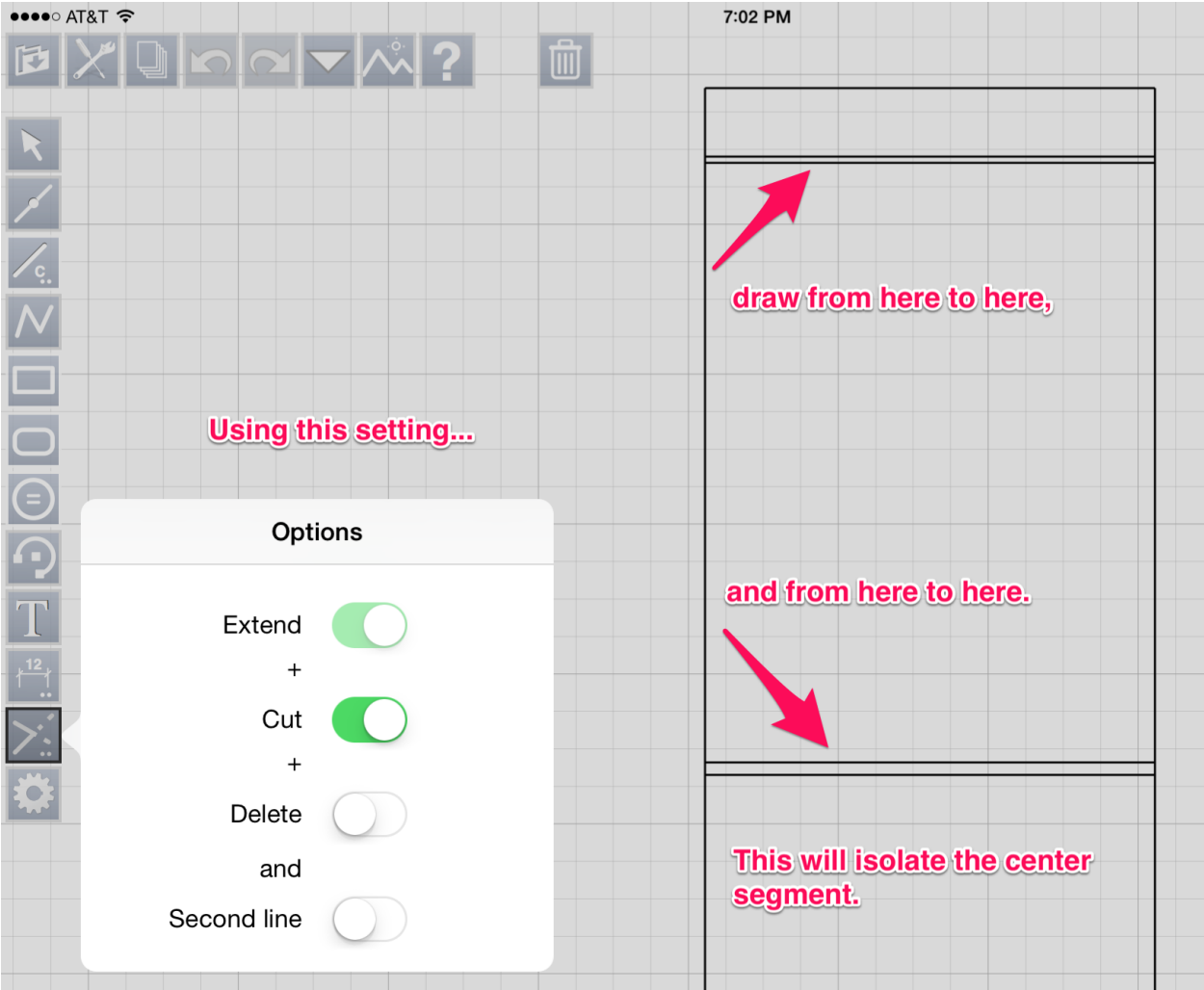


Play with this tool. It's a little confusing at first, but **very** powerful!

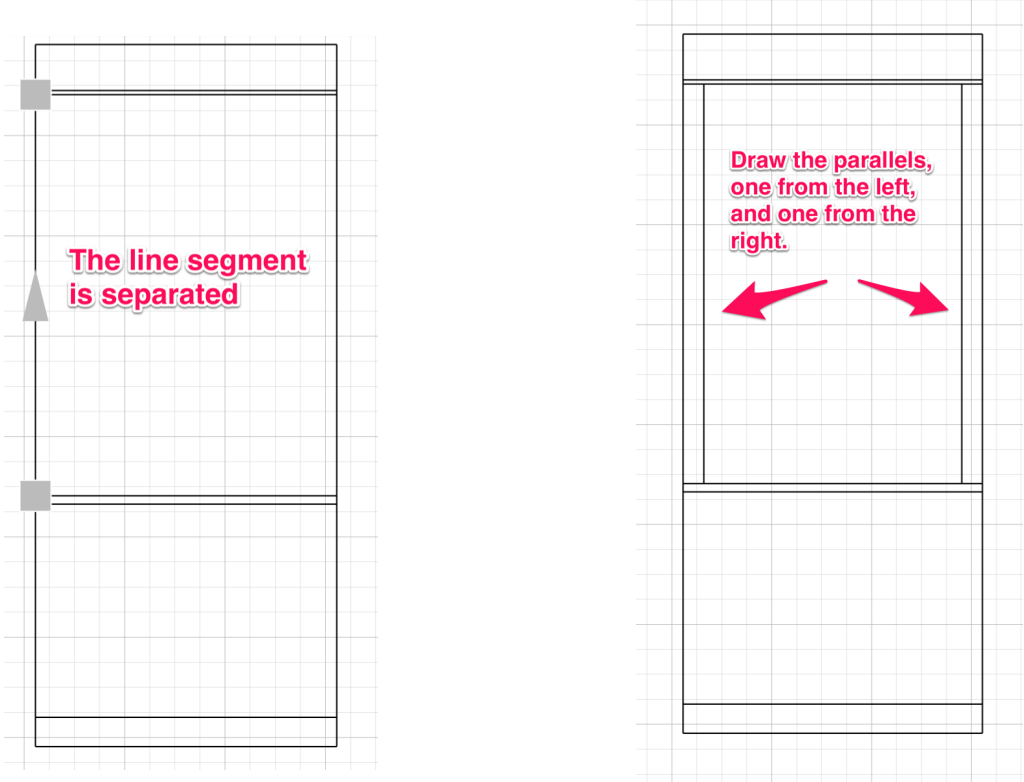
DRAWING THE VERTICAL PARALLELS

We need to draw a parallel line on each side of the upper cabinet sections, where the shelves will go. The easiest way will be to separate the line segment between the center shelf and the upper trim, and Duplicate and Move from there. So, using the Extend/Cut tool that we just played with, set it up to Extend and Cut, but **not** delete.

We want to isolate that longer section of the line, so we will use the tool and draw from the vertical down to the top of the shelf, and to the bottom of the 1/2 inch trim. Use the selection tool to see that the segment has been separated.

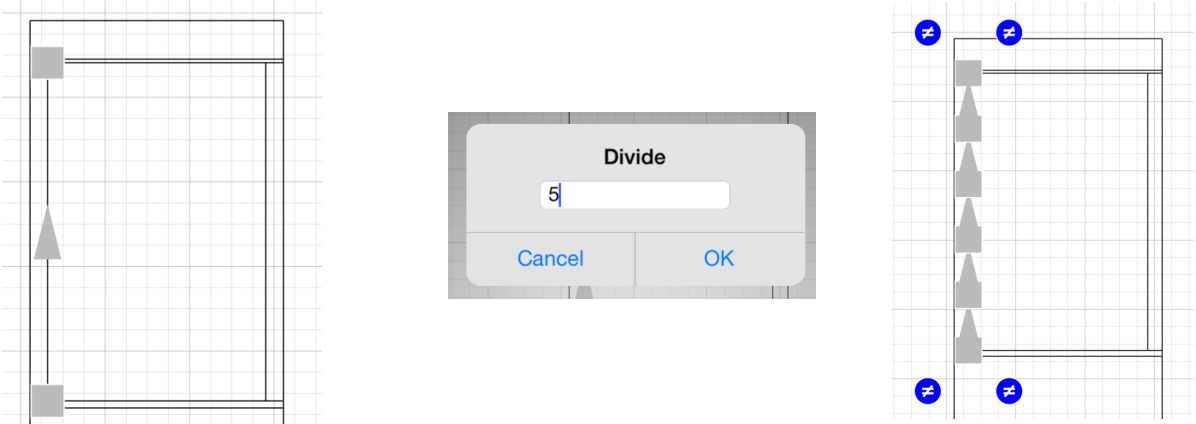


Select the left hand line>Actions>Duplicate and Move> (Nombre) 1 and (dx) 2.5. This will give us a line 2-1/2 inches to the right. Do the same on the right side, but enter -2.5. In the x axis, a **positive** moves to the **right**, and a **negative** to the **left**.



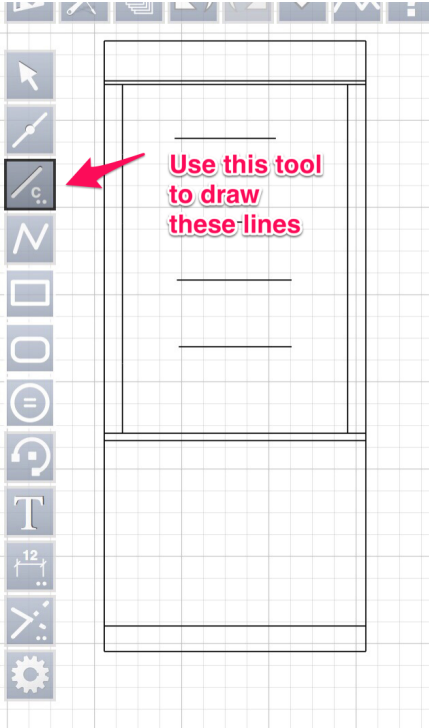
SHELVES

We'll put in four shelves. To space them (more or less) evenly, we'll divide the line that we just put in, into 5 sections. Select the line>Actions>Divide>5>OK. The line will now show the five segments.

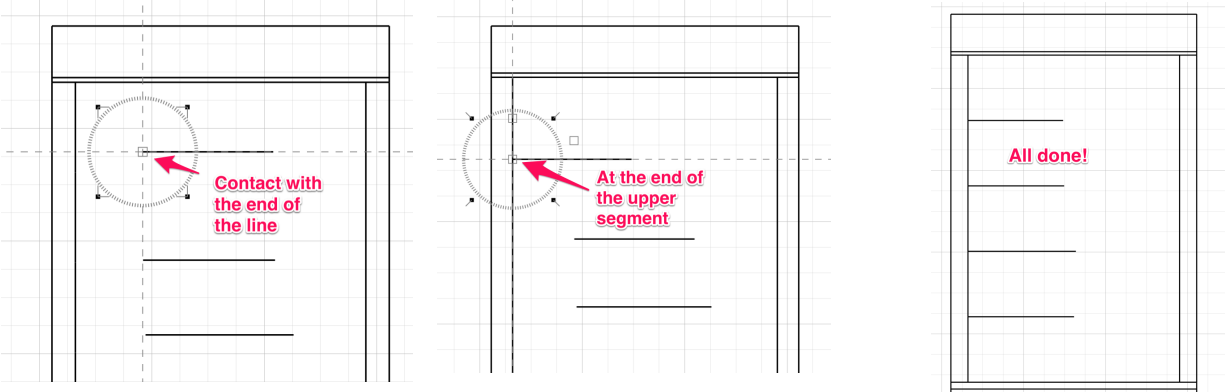


This next step is kind of tricky, but this is the best method I've found, so bear with me!

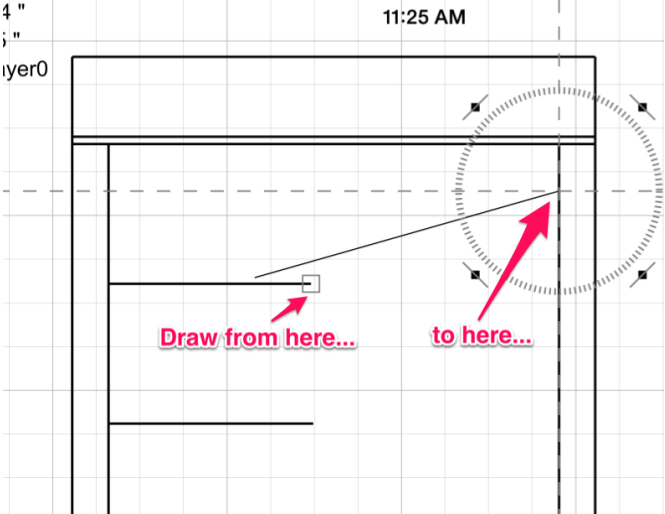
Using the **constrained** line tool, draw four short, horizontal lines in the upper space, not touching either side. Using the constrained line tool insures that the line is horizontal (or vertical, or at 45 degrees.)



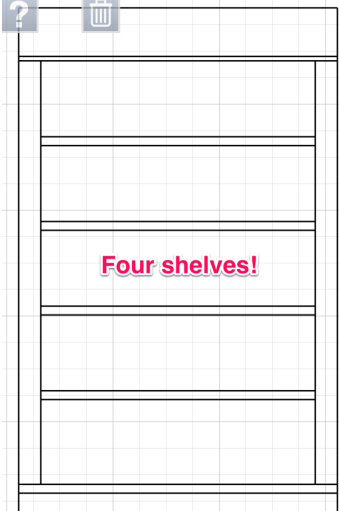
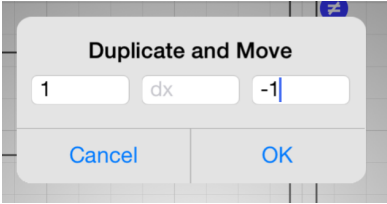
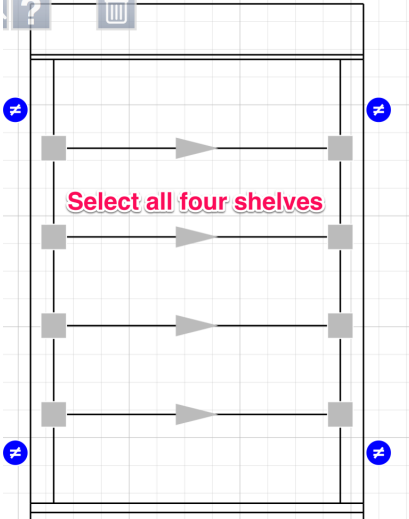
Once you've drawn the lines, choose the selection tool, but **don't** select a line. Grab a line by one end, and move horizontally until the icon indicates contact with the vertical. Without releasing the line, move it up or down until the icon indicates that it is at the end of the segment. Repeat with the other three lines. Remember, the UNDO tool is your friend!



Once you have all of the lines attached at one end, use the Extend/Cut tool (extend only) to connect them to the other side. Make sure that the option is set correctly, and draw a line from the shelf to the vertical. Repeat the operation for the other three shelves.



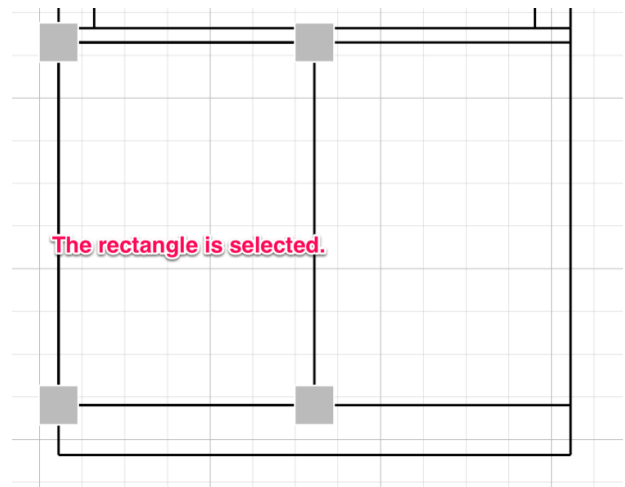
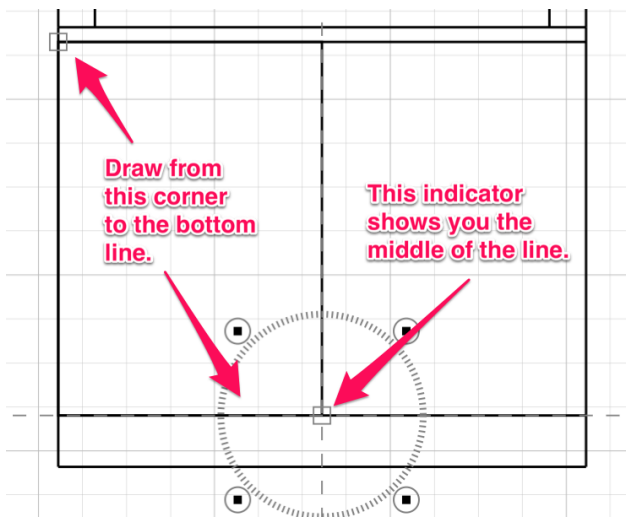
Select all of the shelves, by tapping on each one with the selection tool. Actions>Duplicate and Move> 1, -1 >OK. You should now have four shelves, 1 inch thick.



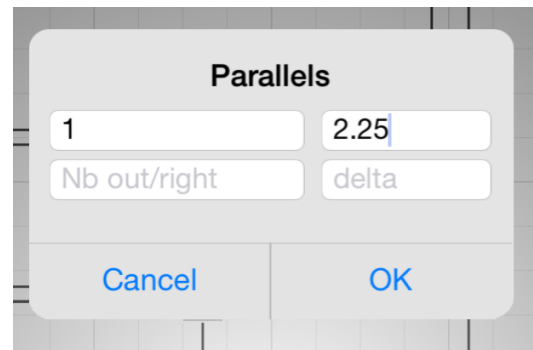
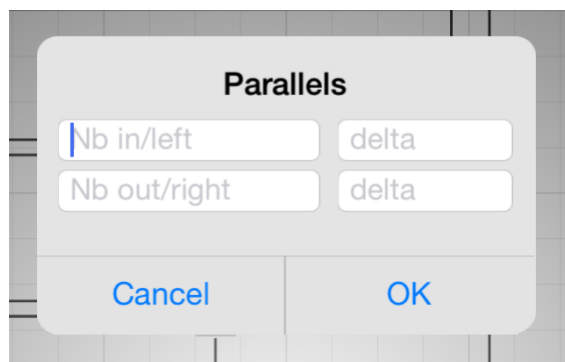
DOORS

I generally draw Shaker style drawers in my sketches. In wood, these are made up with 2-1/4 inch wide rails and stiles, with a recessed flat panel.

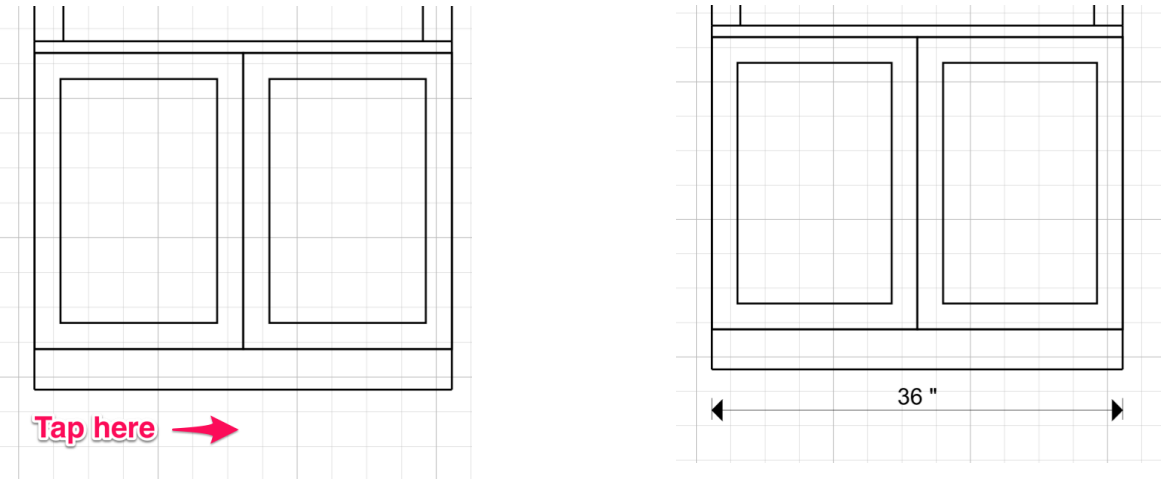
Start with the rectangle tool. Tap and hold in the upper left corner of the lower space, and draw diagonally down to the center of the bottom line. The indicator will show you when you are at the midpoint. Note that the rectangle is not selected. Tap on it with the selection tool, and all four corners will show handles. Unlike what we did all the way back in the beginning, we're going to leave this rectangle as-is.



While it's selected, go to Actions>Parallels. Here is the (to me!) very confusing Parallels Option window. We need to enter 1 in the *Nb in/left* field, and 2.25 in the *delta* window.

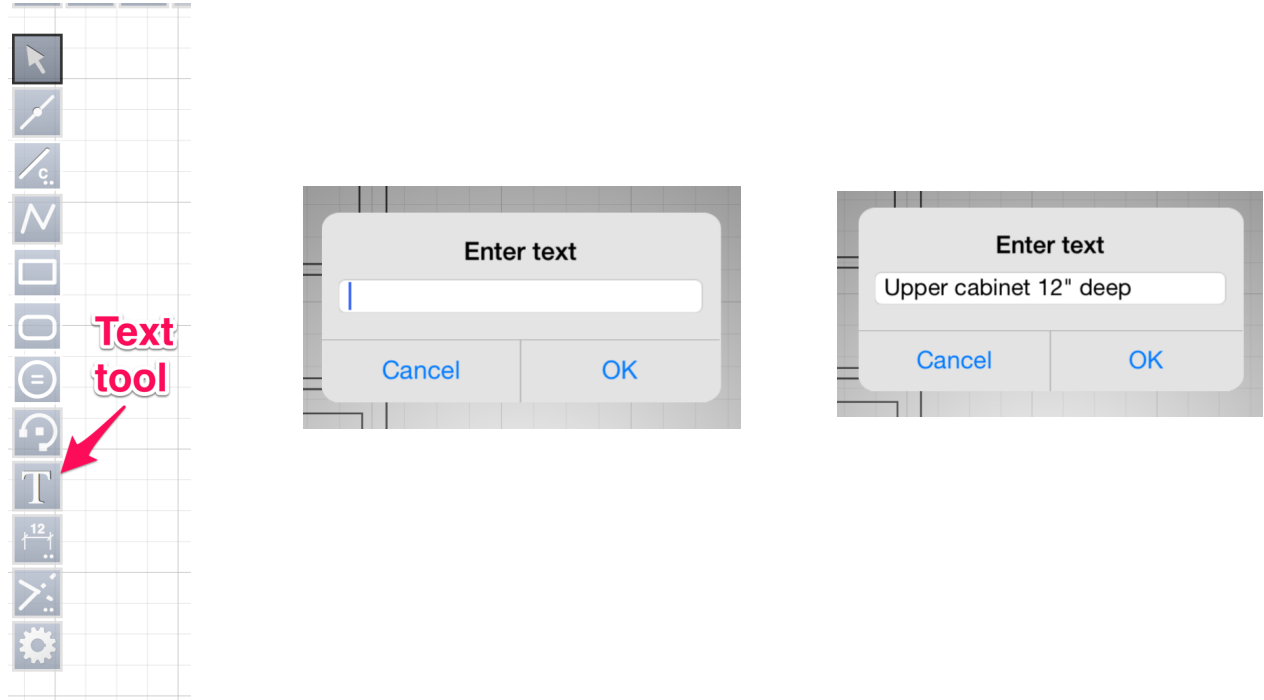


After you have done that, you won't see anything. Don't panic! Tap a bit under that line, and the dimension will appear. Do the same for the vertical dimension. You have to deselect, and reselect, the dimension tool between actions. Otherwise, you get chained dimensions, which we don't need now.

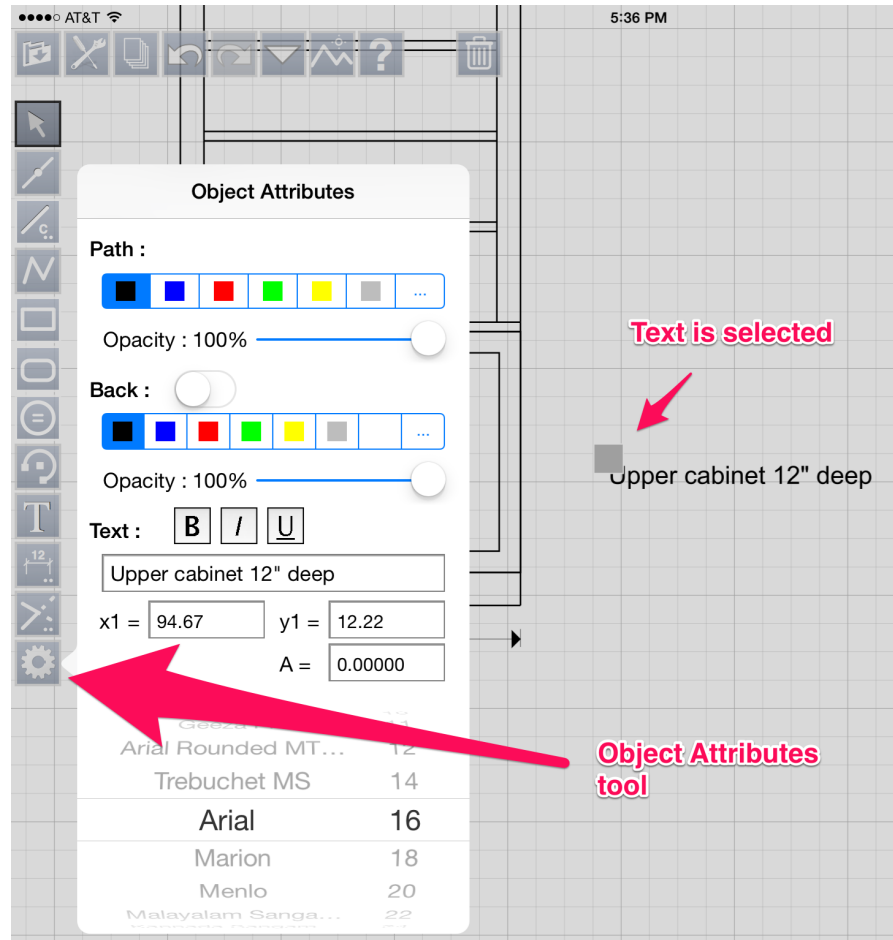


TEXT

Text is pretty straightforward. Click on the Text tool, and a window opens where you can enter your text. After you have done so, click OK. Your text appears on the drawing.



Click on the text to select it, and open the Object Attributes tool to change text font, size, color, and style. When it's the way you want it, just drag it into position.



That pretty much wraps up this tutorial. I hope you find it helpful!

Many thanks to Eric Pousse, for developing this program, and for guiding me through my learning curve. This document would not have been possible without him!

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