

The Points Menu

This is another lesson that is done on the computer and doesn't have anything to do with sewing. But it is the basis for understanding how this program works, so I've left it pretty much intact from Ver 6 and just added pictures which I believe will help. It was LONG without the pictures, so as a written piece, it is enormous now. Most lessons will not be this long. There are lots of points to break it up, but because there is a learning curve here, I really felt it important to keep it together. Most of the things you will be doing are very repetitive. But once you get them down, you will have the key to working with the program. (There is a broken up version that is not for print, which has flash movies.)



For this lesson, want to point you to the Undo icon, on your icon bar. This is your Undo key and will take you back. Don't be afraid to use it, I know I love the new multiple UNDO feature on Ver. 7. I use it a lot!



We have learned so far that our drawings are made up of points AND in this lesson we will learn that there are two types of points. The location of these points is remembered by the computer as coordinates. As we start into editing, we learn that we can edit entire objects in Patternmaker, or we can edit the points that make up the object. We will be starting with the points making up the object first because PM that is the easiest.

So are we ready? Start your programs! GRID and PONTSON (F5 and F4). I've written the first figure with a lot of SNAP-TO's because they make things look nice, but if they start becoming a problem-TURN THEM OFF and eyeball it!!!! You may also encounter a time when you go up to the pull down menu and it is all grayed out. Look at your status bar, is it green or purple. If it is green, look at the Blue Command Bar-the computer is waiting for you to do something. RIGHT CLICK to tell the computer you are done and ready to move on. If a Pop-up box comes up click CANCEL and start again. You may have to do this more than once.

FILE MERGE, ADD VERTEX and MOVE VERTEX

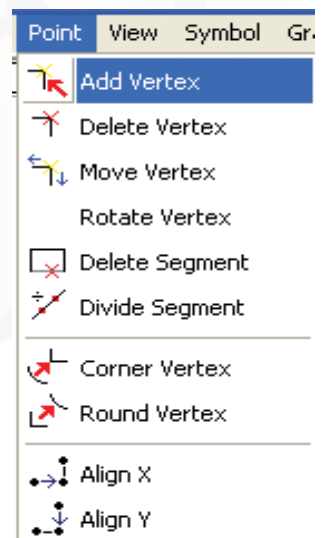
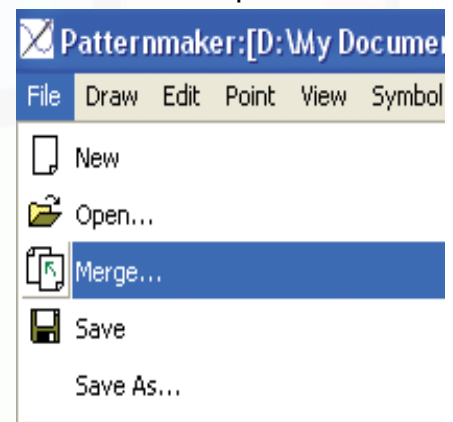
For those of you who did the PACT, I am going to differentiate from it a bit. The PACT was based on the Home Studio Version, but more and more people are buying the Deluxe Editor for V7. So we are going to start out this one a bit differently by using the File Merge Function. Included with this lesson is pointspat.pat. (look to the left for the attachments tab. Expand that and you will find the file!) You will be using this file to do all your work in. You want to save a copy with your regular patterns (In the Patternmaker>Personal Files>Patterns folder so that you have it to work on. I gave you some extra figures, don't worry if you mess one up-just go to the next one and as long as you don't save over it, you can Merge as many as you want into your existing file. And by using the New File/File Merge Command scenario, you will never save over a basic pattern/sloper that you wanted to keep, so it is a good habit to get into.

The first figure is a surprise.

► Open up PM to a NEW pattern. You can either clear everything on your desktop or click the NEW icon. Now go up to the Windows Command Bar and LC on FILE> MERGE. A box opens up that looks just like your OPEN FILE box. While the OPEN FILE Box will open an existing pattern in a new window, the MERGE Command will IMPORT a Pattern into your existing pattern and MERGE the two into one file. It is a GREAT tool and I will be using it later. LC on pointspat and then LC on OPEN. You should see a number of rectangles, circles and lines. If you don't, hit END to Zoom ALL.

► Line up on your first Rectangle. Now head on up to your Menu Bar and select POINT. There are no icons to click in the Standard Version of PM, but I have customized my icon bar to add them. Finish this lesson and see if you don't want to do the same.

► The first selection there is ADD VERTEX,  and that is what we are

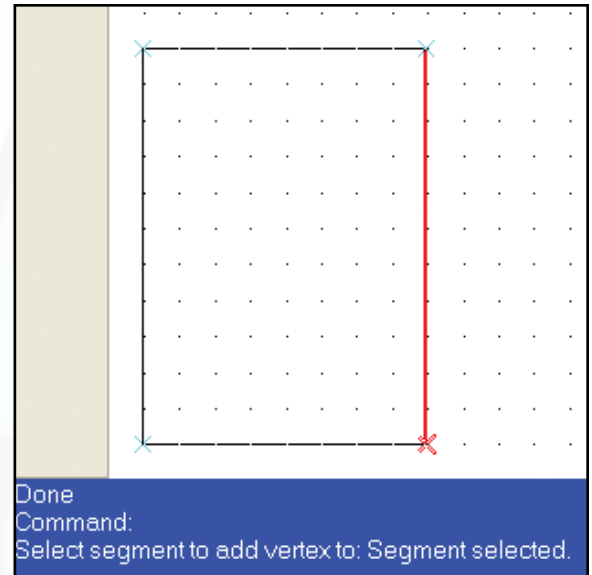


going to do so left click on that. Now ADD VERTEX

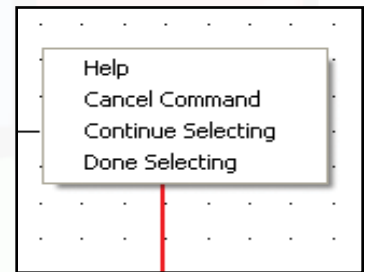


appears in your status bar.



- ▶ The blue box asks you to SELECT A SEGMENT. A Segment is a line whether straight or curved between two vertices. If it is curved, you will see a 3rd green vertex a distance offset, but between the two blue ones. I want you to select the 11 segment on the right side of your first rectangle. To SELECT, LEFT CLICK. It should now appear red.



- ▶ If this is the correct segment, RIGHT CLICK to tell the computer you are done.
- ▶ A Pop-up box appears. It asks if you want Help, Continue Selecting, Done Selecting or Cancel. We are DONE SELECTING, so LEFT CLICK that.



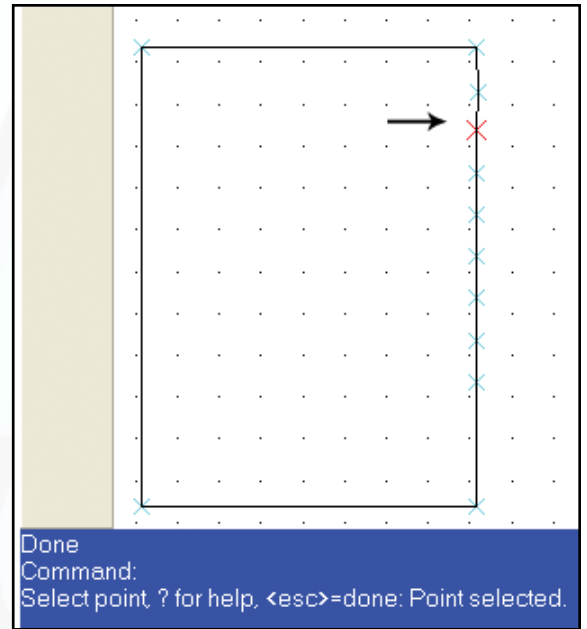
- ▶ Now the Blue Bar is going to ask you for the position of your vertex.

- ▶ Turn on SNAP-TO GRID,  then  go back to your line. You should see a wide green/aqua X come up underneath your pointer at grid points. In this SNAP-TO mode, you will **only** be able to ADD or select Vertices on grid points.

- ▶ LEFT CLICK on the grid point that is right beneath the right upper corner. And you should see a new vertex right where you added it.
- ▶ Continue to add 7 more vertices in line down for a total of 8 added for a total of 10 vertices on this line.

- ▶ Turn off your SNAP-To GRID.

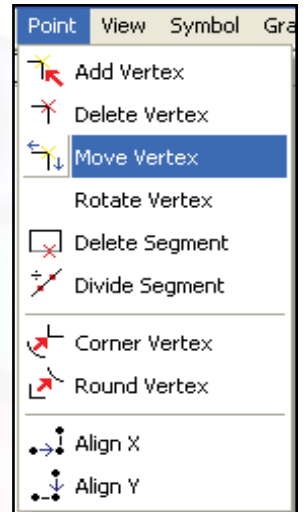
Show me how to do it! (Movie version only)




MOVE VERTEX

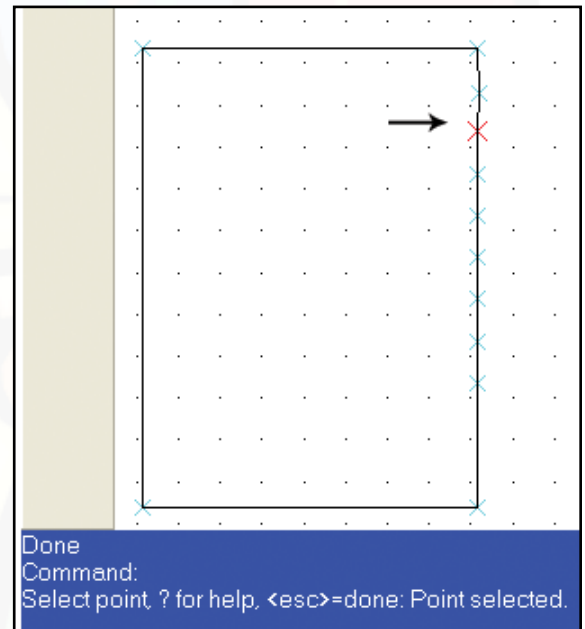


Now that you have ADDING VERTEX down, we are now going to move them to where we want them. With the top of the rectangle being point 1 on this line, we want point 2 to be right underneath it. This is where we added it, so we shouldn't need to move it. But point 3 is out of place.



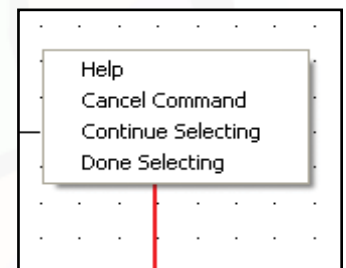
► So back up to the Menu Bar, Back to POINT and this time select MOVE VERTEX. 

► Look to the blue bar and it asks us to SELECT POINT. LEFT CLICK on point 3. It should highlight in red and in the blue bar, it should say POINT SELECTED. (If it doesn't, you probably forgot your SNAP-TO GRID in the last paragraph. No problem, turn it off to select and then turn it back on before you click on the Destination.)

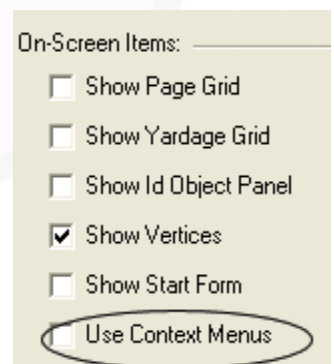


► If this is all the points we want to select and here it is, we RIGHT CLICK.

► A Pop-up box appears. It asks if you want Help, Continue Selecting, Done Selecting or Cancel. We are DONE SELECTING, so LEFT CLICK that. By now I hope you have gotten the hang of this RIGHT CLICK! It is driving me nuts, so I will turn it off by going to Settings>Configure>Use Context Menus and Uncheck it! Ok, I'm better, back to the exercise!

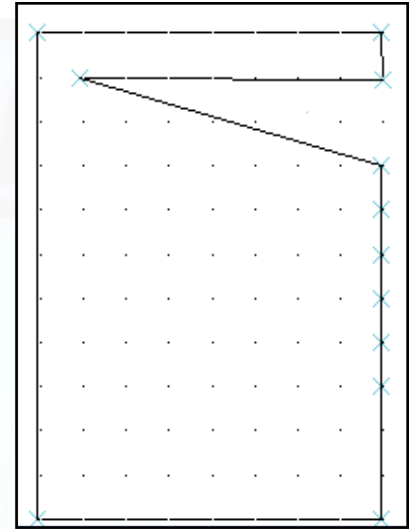


► It then asks for a BASE POINT. This is a starting reference point, and while I generally use the same point, it doesn't have to be. Remember our relative coordinates? Suppose you wanted to move it a certain distance away from something else. You could



specify that as the base point and then input the distance.

- ▶ For this exercise, LEFT CLICK on the same point you are moving. Now move your mouse. The point moves with you and the lines re-draw to connect. Since your SNAP-TO GRID is still on, it should jump between grid points. Position Point 3 1 grid point down and to the right of the left top corner of the rectangle. Now move on down to Point 4. This vertex needs to be 4 grid points below vertex 3. So again, Select Point 4 (LEFT CLICK), POINT SELECTED and it highlights in red.

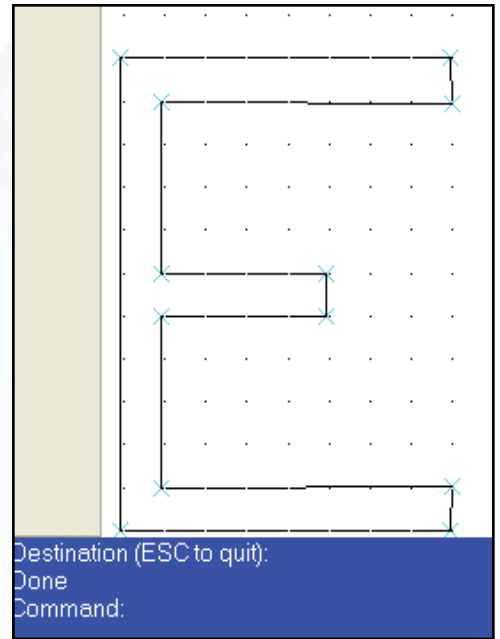


- ▶ RIGHT CLICK to tell the computer we are done. BASE POINT?
- ▶ LEFT CLICK on the same point and it moves.
- ▶ DESTINATION? 4 grid points below point 3, or 5 grid points below and 1 to the right of the top left corner.
- ▶ Vertex 5 needs to be 5 grid points below the top right corner of what was once a rectangle. Vertex 6 needs to be one grid point immediately below Vertex 5. Vertex 7 needs to be 6 down and one to the right of the top left corner. Have you figured out what we are doing yet? Keep going! Vertex 8 needs to be 1 up and to the right of the lower left corner, and lastly Vertex 9 needs to be 1 up and directly above the lower right corner. Does it look like a block E? It should.
- ▶ Oooops, I changed my mind. I don't like the way the middle of the E sticks so far out, please go back and move it. But this time instead of selecting one vertex at a time, we need to select BOTH. It is really simple.
- ▶ After you see the first POINT SELECTED and it highlight in red, don't right click immediately

- ▶ Instead LEFT CLICK on that second vertex and they will move in tandem, with their nice straight line between them. When you have selected all your vertices that you want-
- ▶ THEN RIGHT CLICK, LEFT CLICK on DONE SELECTING in the Pop-up Box and go on as normal with moving the vertices.

- ▶
- ▶ Something to think about is that I PURPOSELY did not use coordinates in the above exercise because if you are doing it yourself, it is very easy just to use the mouse and this is probably the way you would have done it. But for me to convey the instructions, it made for cumbersome reading. It would have been a lot simpler for me to write and you to read everything in coordinates relative to the 4 corners.

- ▶ ***Please show me! (Movie Version Only)***



ROUND VERTEX



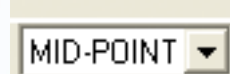
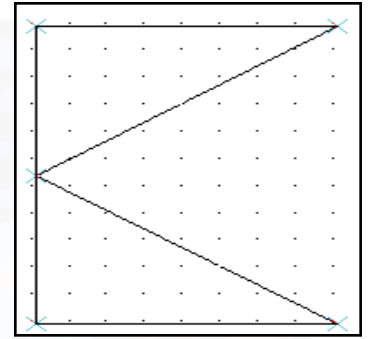
Let's try another one.

Find RECTANGLE number 2. We are

going to add a vertex to the middle of the right line, and move it to the

middle of the left line. Remember your  SNAP-TO MID-POINT and

try it on your own.



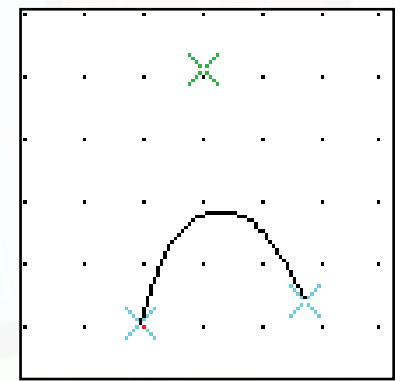
This is supposed to be a B and we really don't want it to look like a torpedo bra, so we need to

start with the curved lines. A curved line is made up of 3 points or

vertices. 2 Blue Vertices mark each end of the line or segment and

1 Green Vertex controls the curve. To make a ROUND VERTEX

(green) out of a CORNER VERTEX (blue), we do the following:



▶ POINT MENU,



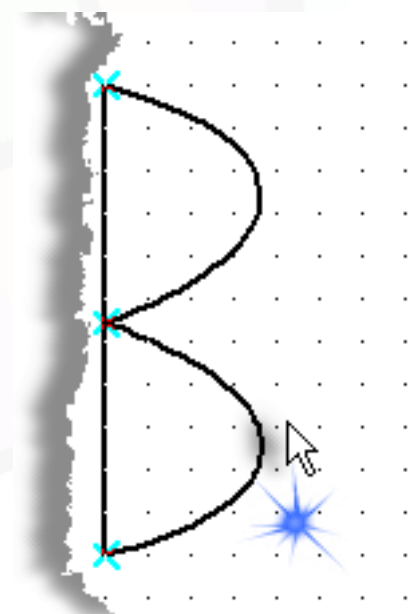
▶ ROUND VERTEX, look at the blue instruction bar, what does it say?

▶ LEFT CLICK on the Point you want to change to highlight it. In our case, we want to change the points on the B to curves.

▶ RIGHT CLICK to tell the computer you are done.

▶ Now, move the green curve vertices to finish our B. In this program, the selection process is always the same, every time-LC to highlight or select and RC to tell the computer you are done selecting and ready to do something else.

▶ Remember, each round vertex needs a CORNER point on each side of it to mark the end of the segment. If you don't have that, it will say CAN'T ALTER VERTEX.





Show me how! (movie version only)



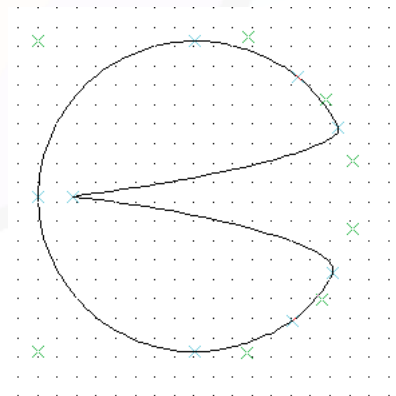
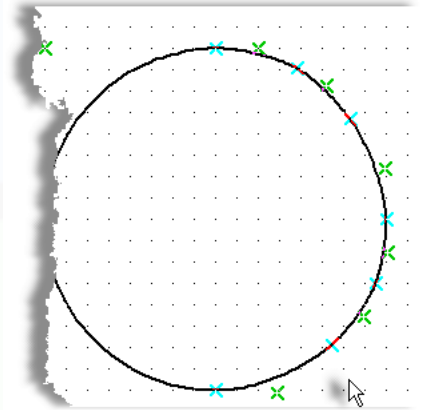
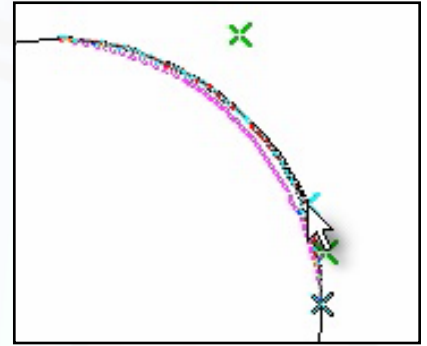
DELETE VERTEX


Now let's move on to adding Vertices to a CIRCLE. This is the exact same process, the exact same keystrokes, but a little bit different result. We are shooting for a C so:

- ▶ POINT,
- ▶ ADD VERTEX,
- ▶ SELECT SEGMENT (in the Blue Bar). For this one, we need to add 4 vertices-2 at 1 and 2 o'clock and 2 more at 4 & 5 o'clock. LEFT CLICK and highlight your segment, when it turns red-
- ▶ RIGHT CLICK to tell the computer you are done,
- ▶ put in your point,
- ▶ Notice each time you add a vertex; you still have a curve, with the two blue vertices and the one green.
- ▶ Put in all 4 vertices.

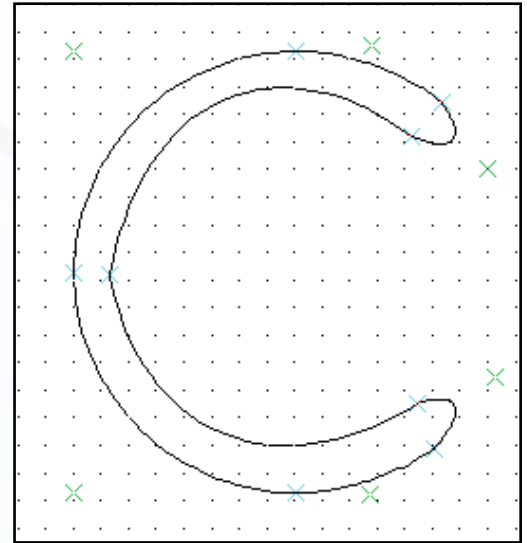
Now we are going to Move them. Same exact procedure as moving vertices on a straight line, but here you will have to move both the end point (blue) vertices and the green vertices as well.

- ▶ First move the vertex at 3:00. You want it about 1.5 spaces to the




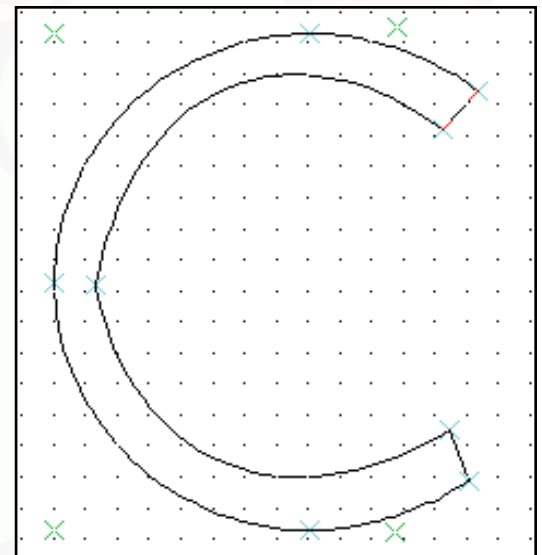
right of the 9:00 vertex. So, MOVE VERTEX, 

- ▶ LEFT CLICK on the point to highlight it,
- ▶ RIGHT CLICK to tell the computer you are done.
- ▶ LEFT CLICK again for BASEPOINT
- ▶ And then move it to DESTINATION.
- ▶ Move both of the curve (green) vertices to form nice curves.
- ▶ Then move the 2:00 and 4:00 vertices to make the full block C shape.
- ▶ Move their curve vertices as well.



No, I really don't like that.

- So let's go back up to the POINT menu 
- ▶ This time select DELETE VERTEX.
- ▶ It will ask you to SELECT POINT? LEFT CLICK to highlight both of the green curve vertices for the small end sections of the 'C'.



- ▶ RIGHT CLICK to tell the computer you are done. And the vertices are gone. In its place you have a straight line and a very nice looking C.
- ▶ So when you delete the Green/Curve Vertices, you end up with straight lines.

Show me how! (movie version only)

CORNER VERTX

Are you getting an inkling maybe? Ok, but say you really needed to use those green curve vertices, but you wanted them to be endpoints instead. This is easily doable.

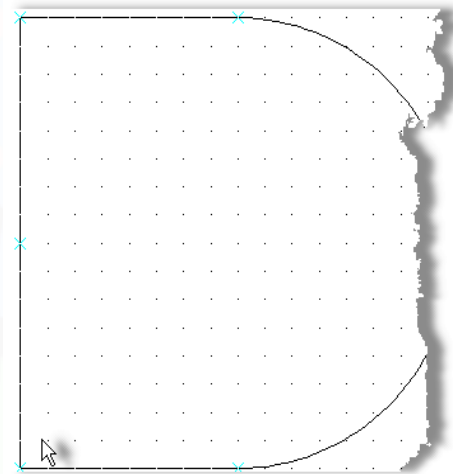
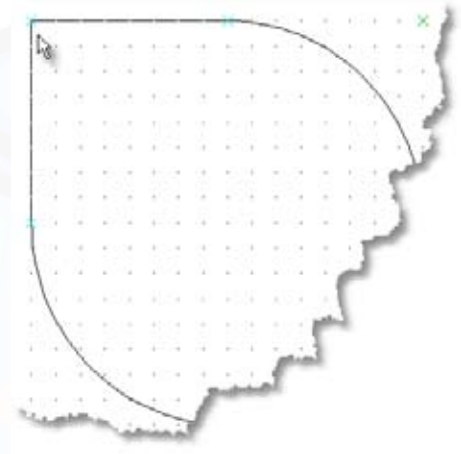
▶ Find another CIRCLE. Now locate the green vertices at 10:30 and 7:30. If you are getting this, you do both points at once, if not do them individually.

▶ POINT MENU,

▶ CORNER VERTEX, 

▶ SELECT ARC CORNER POINT(S)
TO STRAIGHTEN, LEFT CLICK to highlight,

▶ RIGHT CLICK to tell the computer you are done. And you have a D. You can generally always corner a curve (green) vertex, but you can't always curve a corner (blue) vertex. Again, remember you need to end points for each curved segment.



DISAPPEARING/STACKED VERTICES

Now I need to show you something. We are going to add a vertex directly on top of another one so find an open circle.

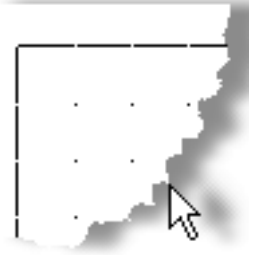
▶ So turn on SNAP-TO NEAREST before you select the location of the vertex or as we saw in lesson 1, you may not get it directly on top of it.



► Now add the vertex. You will notice that the vertex is now gray.

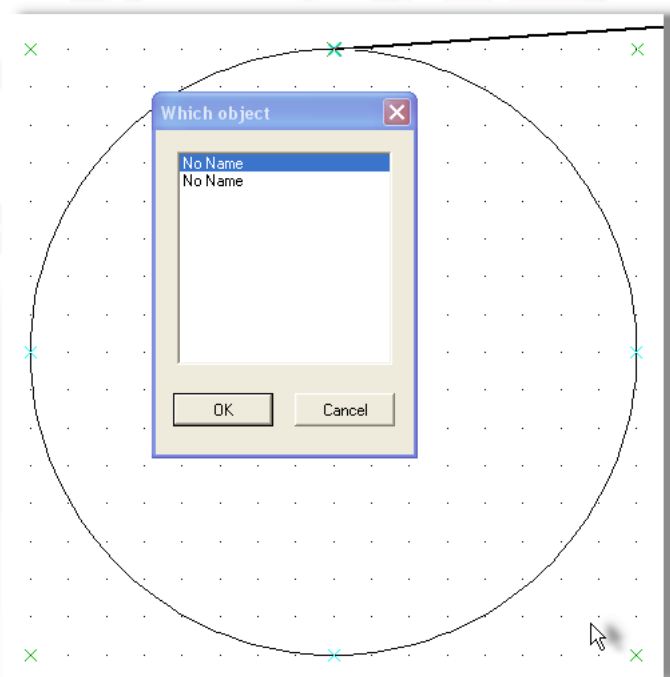
Add a couple more, right on top of the last. It stays gray.

► OK, now let's try and move one of those vertices. The top one is easy to move, but wait a minute; I must have done something wrong, now there aren't any vertices, but there is a corner there???? No, this is the way the program works. You can tell there is a vertex there because of the corner, but when there are at least two vertices, one on top of the other they disappear. In some macros, you can get as many as 6 in one spot and this will keep you from doing a lot of the edit functions. It will also mess up if you accidentally backtrack on a line when adding a vertex, because it doesn't know which way to go. When we get there, I will have you go back and check to make sure there is only 1 vertex in each spot.



Another problem you sometimes run into comes when you have the same stacked vertices and you can see them. Huh?!, Why?! This is because they are part of two different objects. You have drawn two lines, or a circle and a line coming off of it using your Snap-To Endpoint. But what happens if you want to move one of the Vertices? They are sitting right on top of one another! How do you get to the one you want? What do you do if you get this?

As you can see, the computer is asking you which object you would like to deal with, even though in this case, my command was to MOVE VERTEX. In the above picture, the vertex I have selected is on the line, because the line is what is highlighted, and the object attached to it is shown in blue on the dialog box.



If my vertex had been on the Circle, it would have been highlighted. I can change the object I want to deal with simply by selecting the object with a Left Click in the dialog box. Now, the lower object

is selected and the Circle has been highlighted

Once you click on the OK button, you will see Item Selected on your blue Command bar. Right click to tell the computer you are done selecting and proceed as normal.

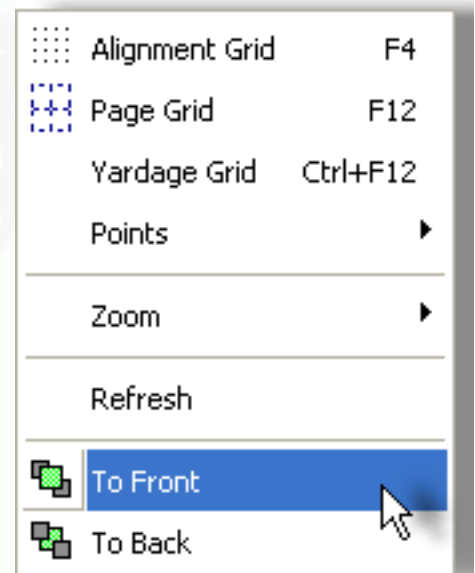
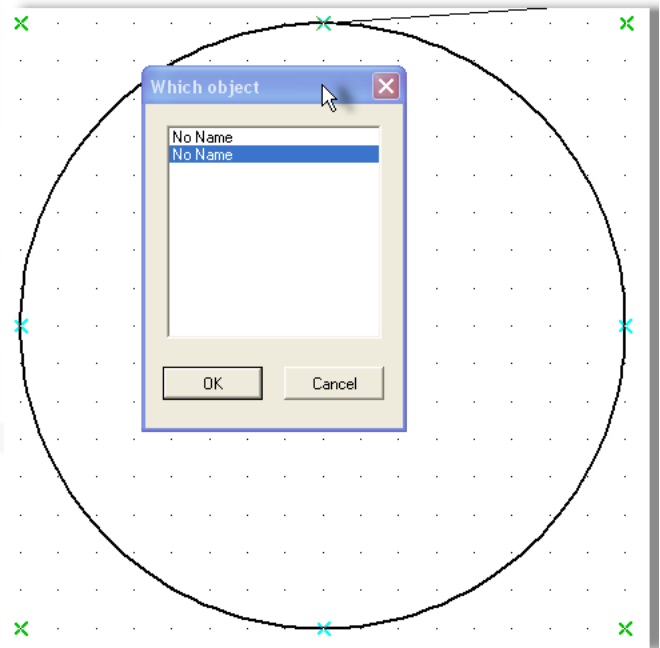
I'll cover this again in the next section on Points Menu in the Home Studio as you can name objects and Points in the Home Studio.

But what if you have a bunch of stuff and plan to deal a lot with this particular circle which is behind everything?

For that, you need to bring the entire object to the Front of the Stack. You do this by clicking on





- ▶ View
- ▶ To Front
- ▶ To Front will appear in green in your Status Bar and your Command Bar will ask you to select the Object to bring to front.
- ▶ LC to Select the Circle
- ▶ Right Click to tell the computer you are done selecting, and now the circle will be on the top of the stack.

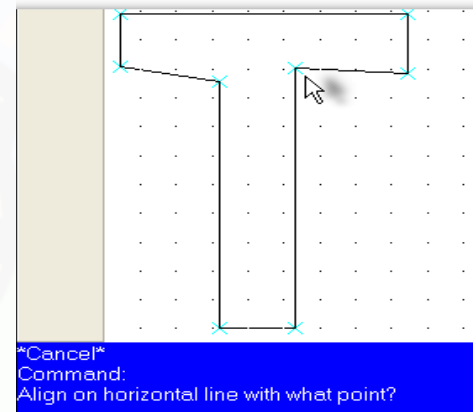
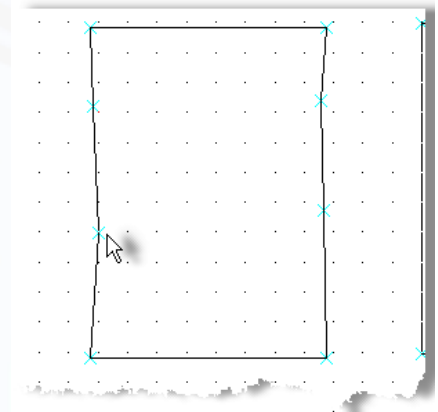
You can delete the extra vertices if you wish.




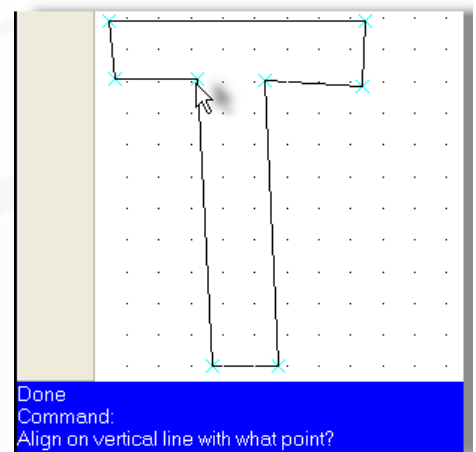
ALIGN X, ALIGN Y

Only a bit more left to go! The next one is a block 'T'. There will be no SNAP-TO's used on this because of the nature of the exercise.


- ▶ Add 2 vertices on each long side of the next RECTANGLE; it is ok if the lines get a bit wobbly.
- ▶ Now move the added vertices and the bottom 2 vertices to make the shape of a block T, again, it is ok if the lines get a bit wobbly. Now because things tend to get a bit wobbly when doing by hand, we have a way to fix this. They are called ALIGN X , and ALIGN Y . There is a bit of reverse thinking in this because if you set everything up to have the same X coordinate, it actually forms a straight VERTICAL line and if all the same Y, a straight HORIZONTAL line. This is what the commands do. ALIGN X  will give you a straight Vertical line and ALIGN Y  will give you a straight HORIZONTAL line. We do have icons, and I always have to look at them because I confuse which is which.



- ▶ In any event, select ALIGN X  for your first task.
- ▶ Now it asks you to ALIGN ON VERTICAL LINE WITH WHAT POINT? LEFT CLICK to highlight one of the vertical points.
- ▶ RIGHT CLICK to tell the computer you are done.
- ▶ SELECT POINTS TO ALIGN? LEFT CLICK to highlight all the points you want in a vertical line with your starting one and




▶ RIGHT CLICK to tell the computer you are done.

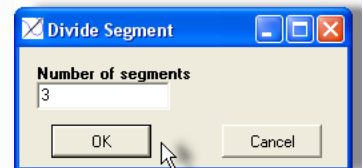
▶ Do both sides, and then try ALIGN Y  yourself.



ROTATE VERTEX/DIVIDE SEGMENT

There are two more and then you can play with on your own. In this one, we are going to demonstrate the ROTATE VERTEX . The only place I've ever used it is to rotate darts (even curved ones), but its counterpart; ROTATE in the EDIT menu is used considerably, so it is a good thing to get the hang of here.

▶ Take one of the lines that are drawn. This time we are going to DIVIDE SEGMENT  . LEFT CLICK to highlight, RIGHT CLICK to tell the computer you are done. Enter 3 in the box then LEFT CLICK, and the Line is now divided into 3 equal pieces. Great for Button lines!



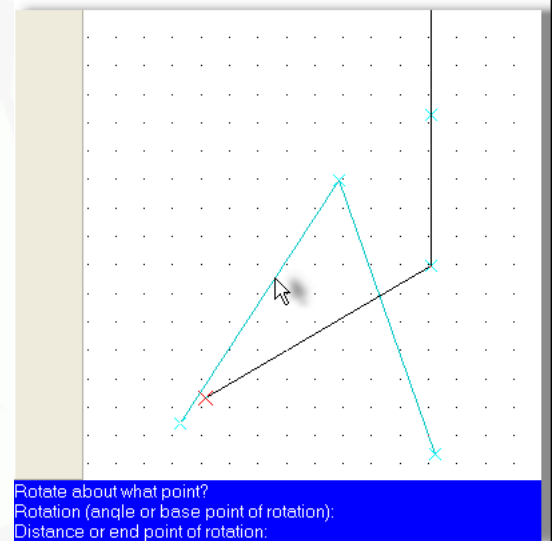
▶ Round the lowest vertex that is not an end point.

▶ Now, POINT MENU, ROTATE VERTEX,

▶ SELECT THE BOTTOM POINT, LEFT CLICK to highlight;

▶ RIGHT CLICK to tell the computer you are done.

▶ Now it will ask you to ROTATE ABOUT WHAT POINT. Pick a point about halfway up, out about 5 spaces to the left of the line and



▶ LEFT CLICK. This is the point that you are going to rotate the vertex around. Think of it as the center a circle, with the point moving on the outside of the circle. You really can't rotate a vertex around itself, but when we move on to EDITING, this is how you will rotate for Slash and Spread.

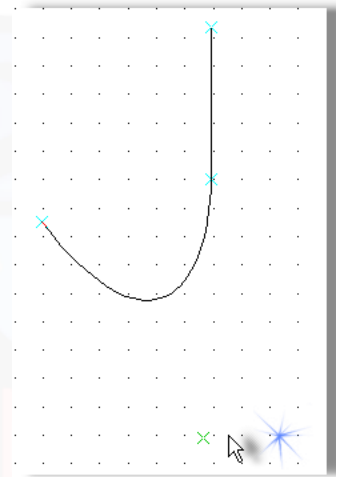
▶ Now, the Blue bar is asking for ROTATION (ANGLE OR BASE POINT OF ROTATION). Move your mouse out and you will see a blue line; this is your handle to rotate around.

▶ LEFT CLICK anyplace and now your point is engaged.

Move the mouse so your line is at the right spot and

▶ LEFT CLICK again to disengage.

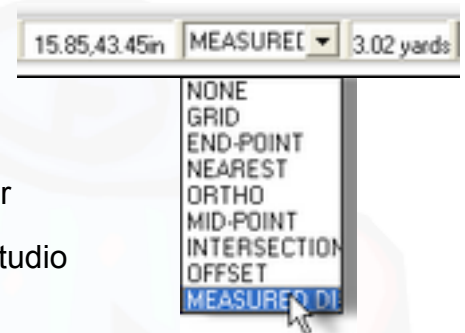
▶ Move the green vertex to make a J.



SNAP-TO MEASURED DISTANCE

Now let's move on to SNAP-TO MEASURED DISTANCE.

This feature has REALLY been improved in Version 7, and all my prior objections to it have vanished, so I'm a happy camper! (The Home Studio and above has a feature that is called ADD MEASURED VERTEX. It is just a shortcut command that does exactly what this does).



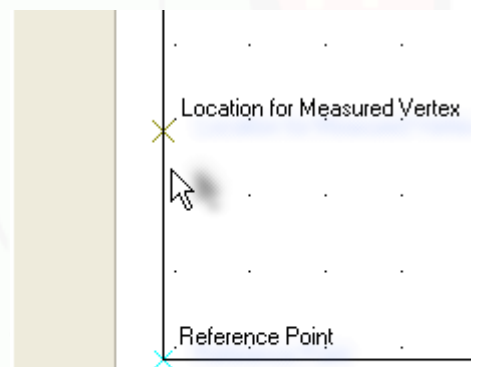
▶ Turn on SNAP-TO MEASURED DISTANCE. A box will pop up asking you for the Measured Distance. Type in 3. LEFT CLICK OK.



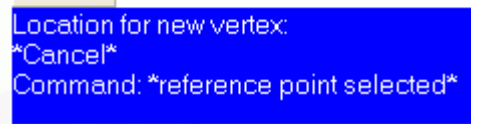
▶ POINT MENU

▶ ADD VERTEX

▶ SELECT OBJECT TO ADD VERTEX TO. LEFT CLICK to highlight on the **point** you want to use as the reference point for your measured distance. "REFERENCE POINT SELECTED." A blackish vertex will pop up at the spot for the right measured distance on either side of your reference point. Move your mouse there and don't Right Click



▶ LEFT CLICK again on the particular segment you want to add the vertex to.

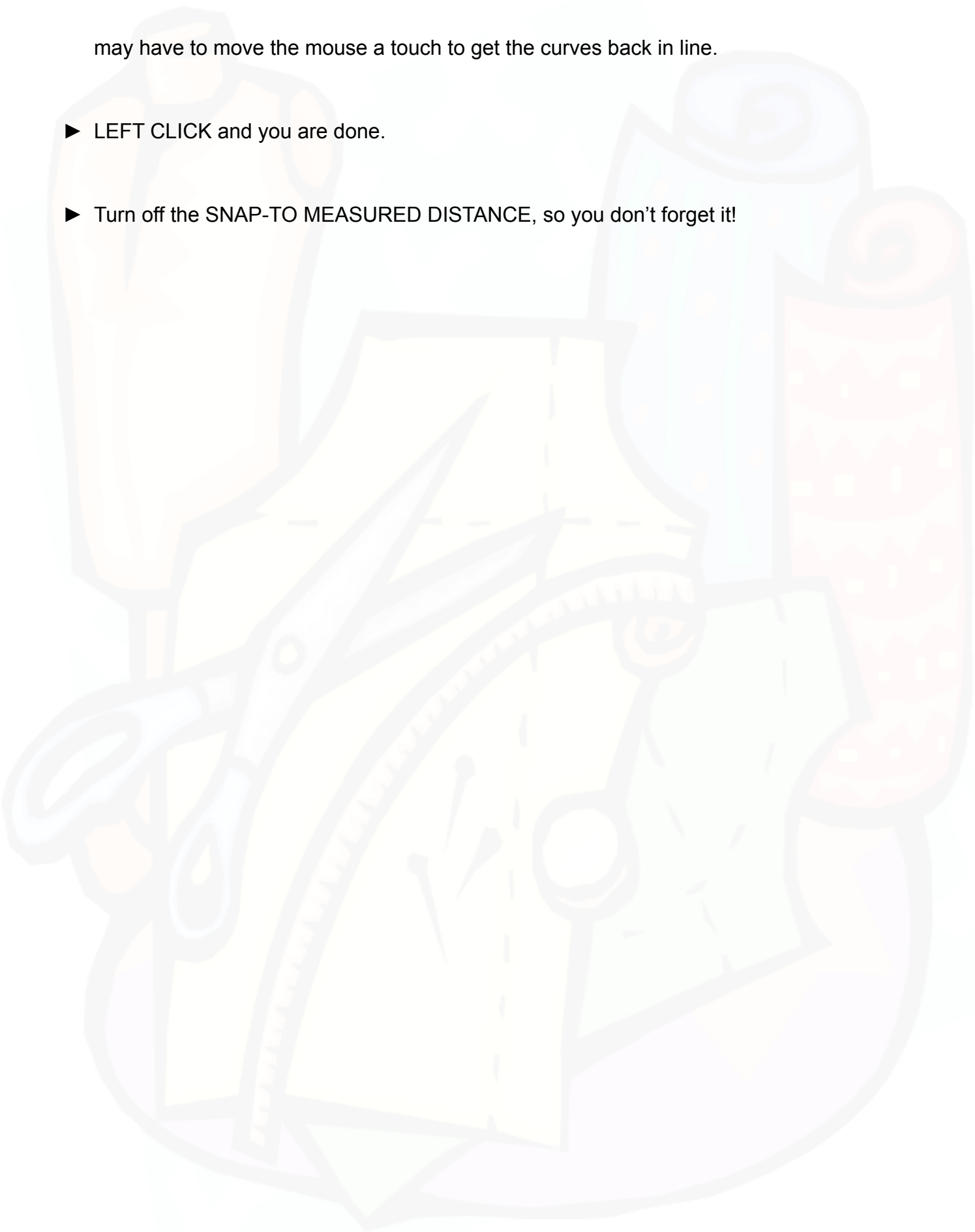


▶ RIGHT CLICK to tell the computer you are done-it will turn red and your black vertex will disappear. You may get a straight black line-don't worry. Just move your mouse a bit and the line will go back to a curve. Bring your mouse back so the black line overlaps the red line and

▶ SELECT LOCATION FOR NEW VERTEX-It is right under your mouse. You

may have to move the mouse a touch to get the curves back in line.

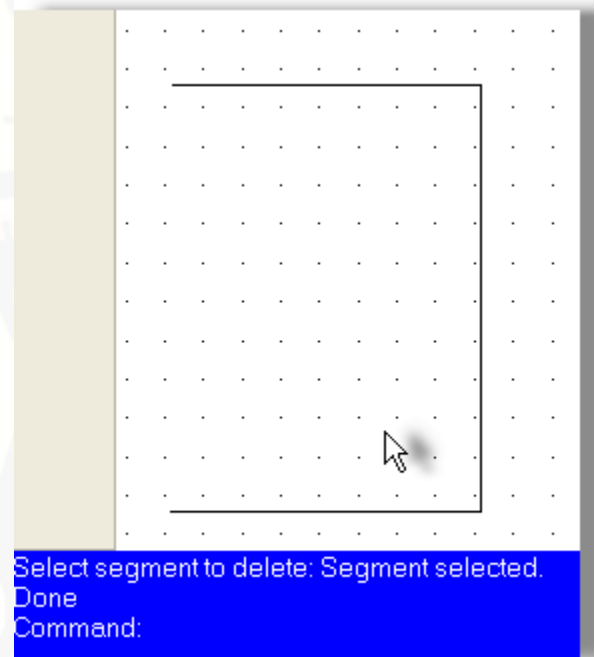
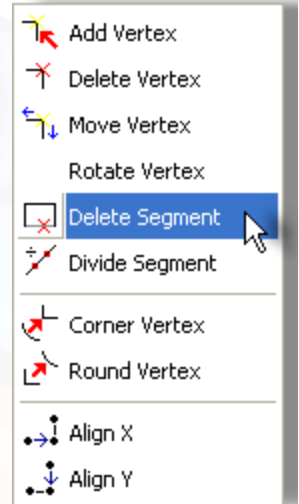
- ▶ LEFT CLICK and you are done.
- ▶ Turn off the SNAP-TO MEASURED DISTANCE, so you don't forget it!



DELETE SEGMENT

This is the easiest command in the Deluxe Editor POINT Menu so I saved it for last. It basically does exactly what it says.

- ▶ Pick one of your remaining figures
- ▶ POINT MENU
- ▶ DELETE SEGMENT (Remember, a segment is just a line between 2 points).
- ▶ Choose a segment and
- ▶ LEFT CLICK to highlight,
- ▶ RIGHT CLICK to tell the computer you are done. The segment disappears.



APPLAUSE!!!!!!! This is a LOOONG lesson and you've done a lot of hard work, but once you get this down, you are REALLY on the way to completely understanding Patternmaker. If you still feel you need practice on this then try writing your name, either in Block letters or as best you can. You judge how much of your name.

REVIEW AND TROUBLESHOOTING

In this lesson set we covered a HUGE amount of material. We went over the entire POINT menu as well as probably 85-90% of the foundation of the program! When this was originally written, A LOT

of people had trouble following it because it was done without pictures. Hopefully their addition will make things clearer. The BIGGEST thing that you should take away from this lesson is “LEFT CLICK to highlight, RIGHT CLICK to tell the computer you are done selecting.” Once you get the mouse click sequence in your head, you will have no trouble with the rest of the program. If you are having trouble with things not responding, the first place you should be looking is the Blue Command Bar-what does it say to do? How is your Status Bar-is it Green or Purple? The next place to look is your SNAP-TO Menu. Chances are if things aren’t working like they should, you’ve left a SNAP-TO command on.

