

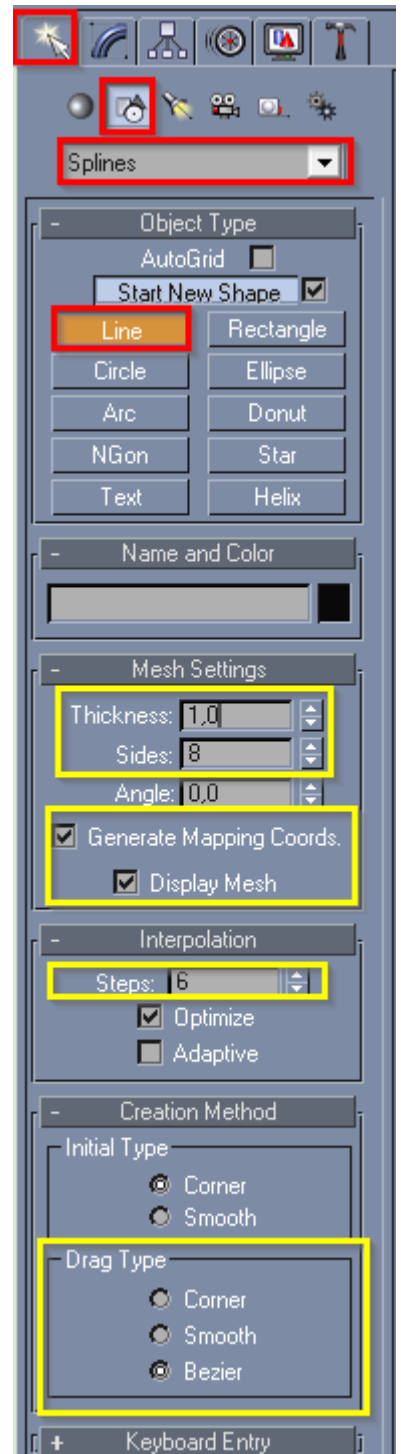
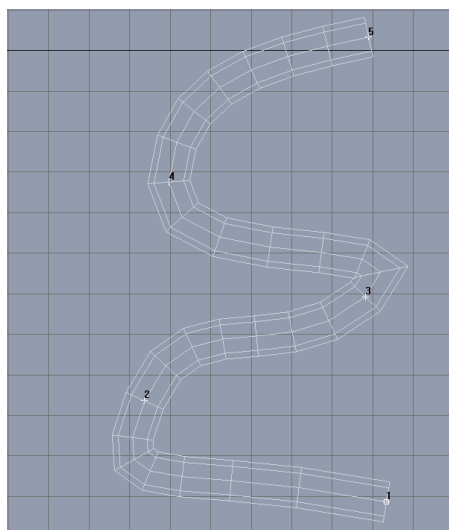
Line tutorial for GMAX

I decided to create a little tutorial on line-splines and how to utilize them to create cables, hoses or nicely hanging lines. It took me a very long time to figure this feature out and it is actually so simple, but I have not seen it in any video or tutorial that I have gone through so far – correct me if I am wrong.

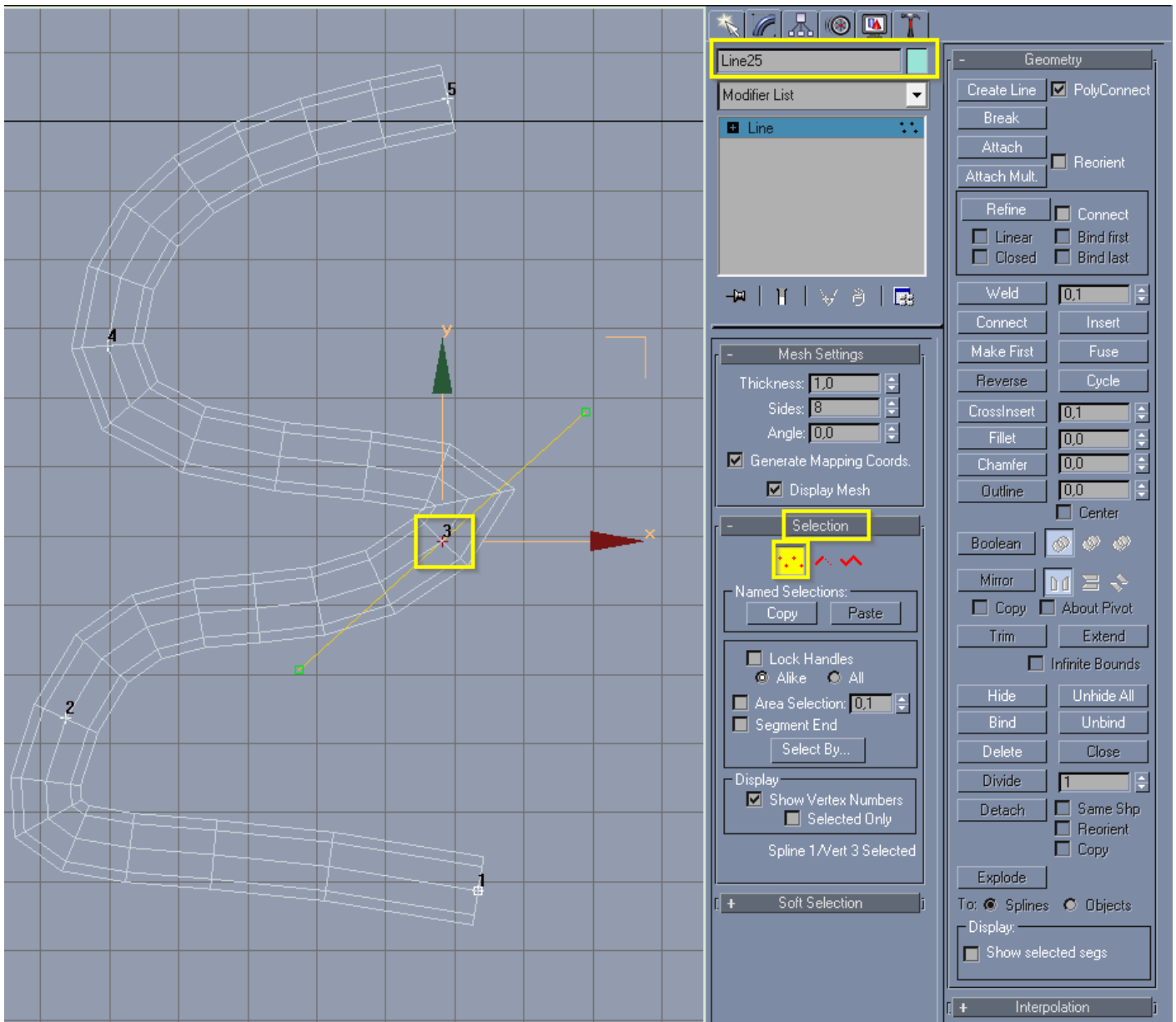
Summary

1. Select a simple line-spline
2. Set mesh settings
3. Create the line
4. Adjust your line

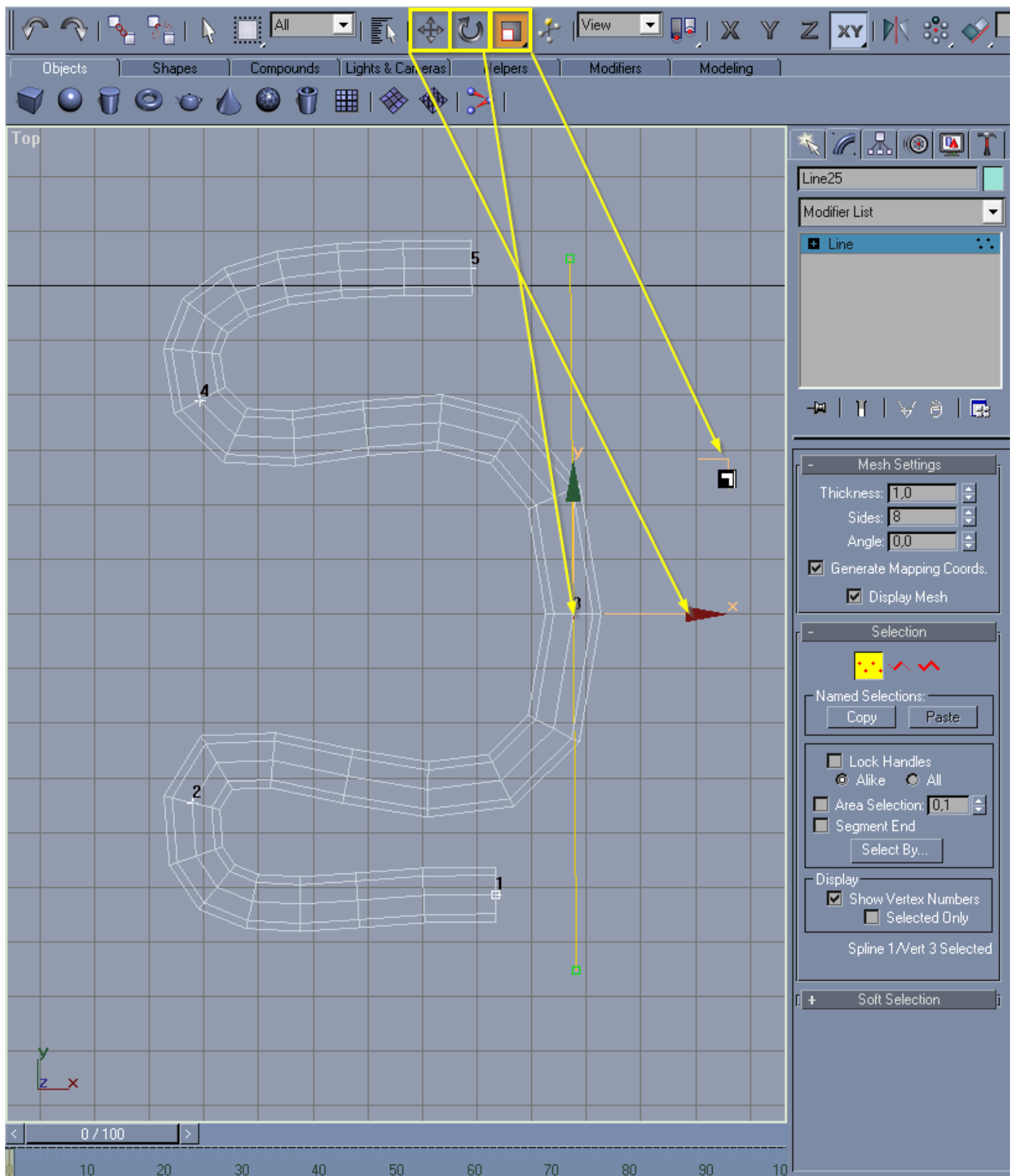
1. Select the line object under create > shapes > splines (red hints)
2. Adjust relevant settings for your line (this step can be done before and for some settings also after your line is created; yellow hints)
 - a. **Thickness** defines the diameter with which the line is extruded
 - b. **Sides** defines how “round” your extrusion is going to be
 - c. **Generate Mapping Coords.** + **Display Mesh** have to be ticked
 - d. **Steps** defines how smooth the corners along the extrusion are going to be
3. Now draw your line as you please
 - a. In order to create a smooth line click and hold the click for a moment, while moving in a direction (if **Drag Type** **Bezier** is selected) when stopping to hold you will see the line now bends depending on where you move your mouse
 - b. Now create as many bends as you wish, again holding your click for a moment before letting go; doing a single click will create a sharp turn in your line (don't worry if it looks a little weird)

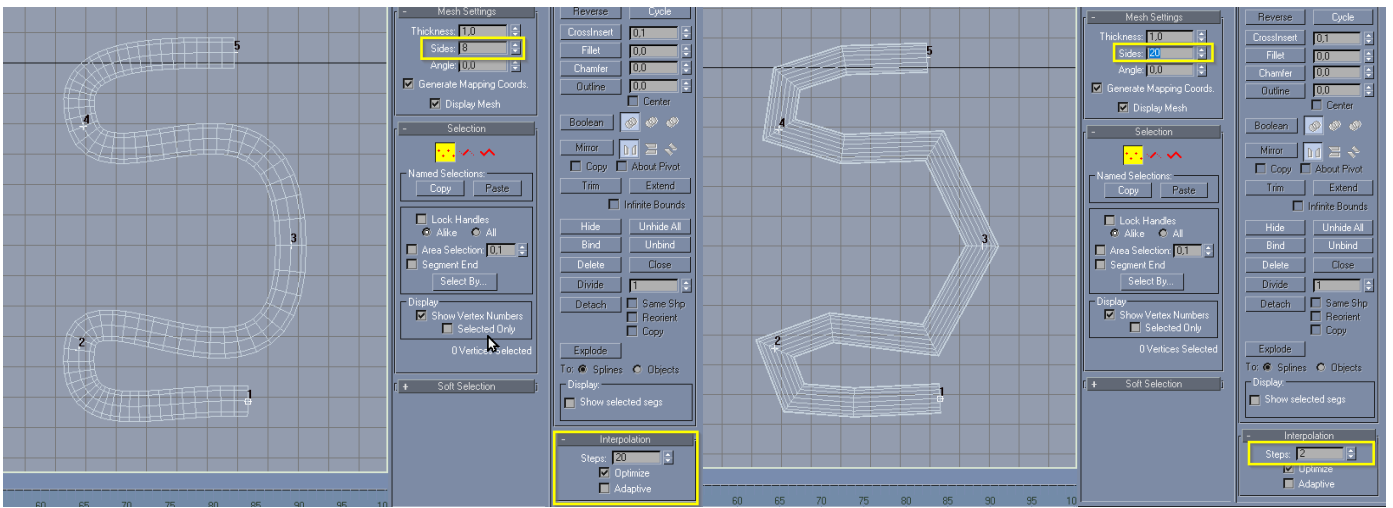


4. Next we are going to alter the line to fit what we would like
 - a. Select the line you just drew and click **Vertex** under *Selection*
 - b. Then select one of the vertices. You will now see the coordinate axes to select and move and a yellow line with two green squares on the end that shows the orientation and the extent of the bend

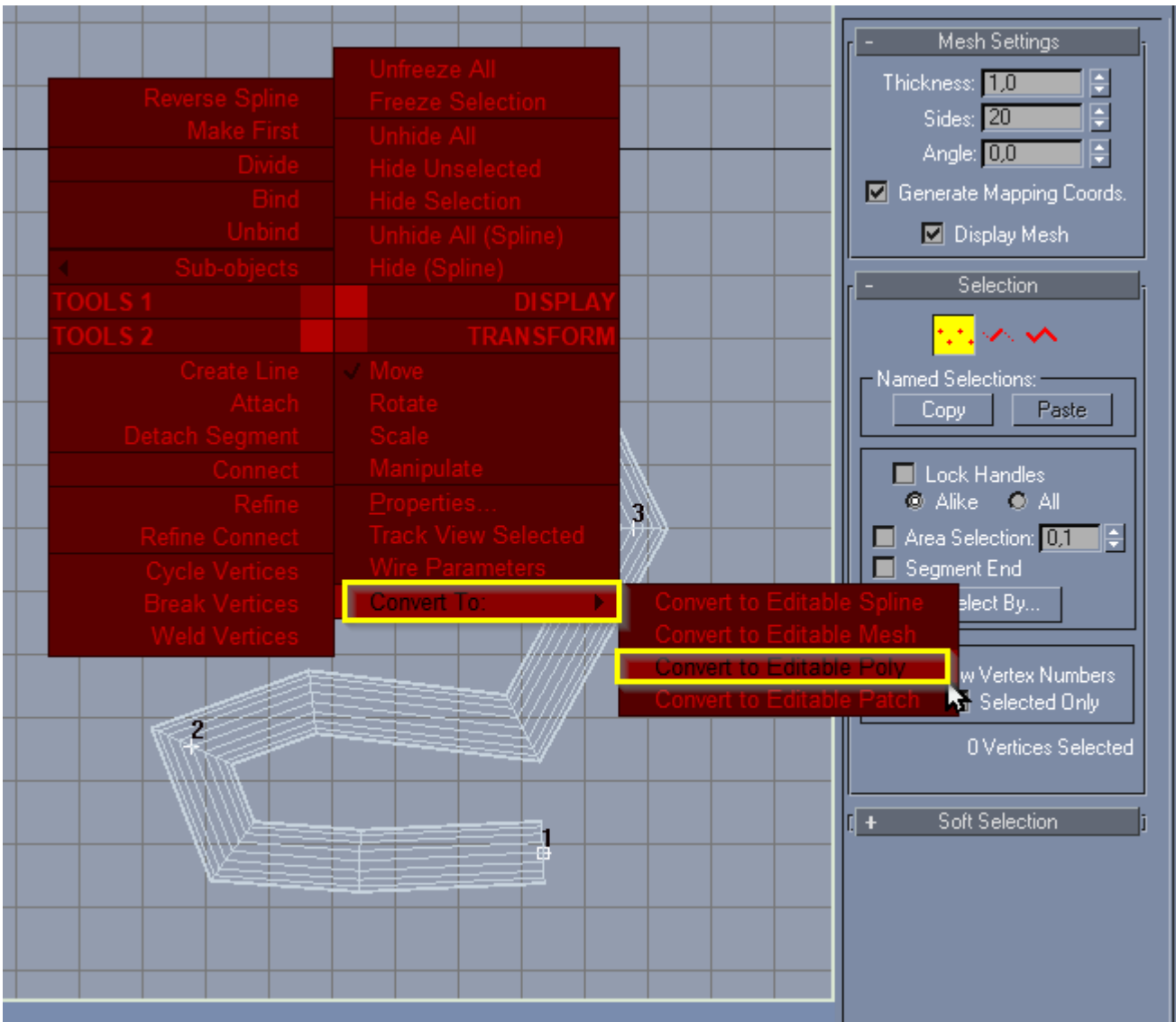


- c. **Move**, **rotate** and **uniform scale** on the vertex to adjust your line as pleased; of course you can move a vertex in all 3 dimensions to create the shape you wish





Once your line is shaped as you please, convert it into an editable poly by right clicking on it (not doing this causes my lines not be rendered, if anyone knows a hidden setting I missed please let me know)
Be mindful about this step, once converted into a poly the alteration settings are following the properties of a poly and you have a different set of tools to work on your object.



With this knowledge you should be able to create nice lines, pipes, hoses very quickly and simply.

Here is an example of a bow spring line that you can create this way:

