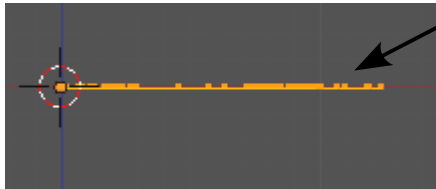


## Chapter 20- Springs, Screws and Gears

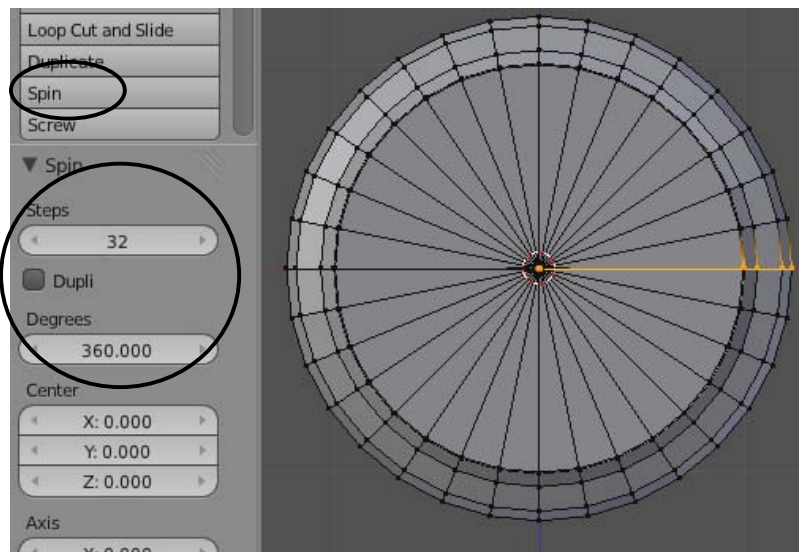
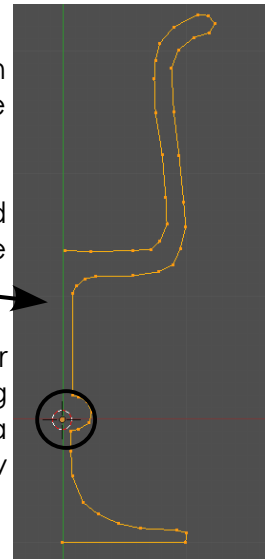
### Creating Revolved Shapes

If you wanted to make a revolved shape, like a goblet or an alien flying saucer, you could start with a circle and extrude it to make the shape, but you could also use the *Spin* command.

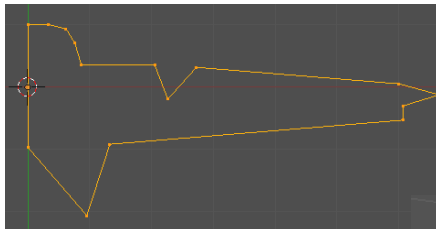
For this example, I started with a plane, deleted one vertex, and shaped/extruded the mesh into the profile of a goblet. Make sure the 3D Cursor is somewhere on the center axis line of the mesh.



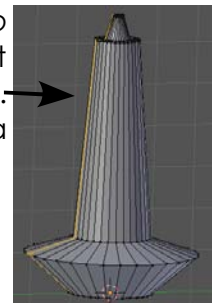
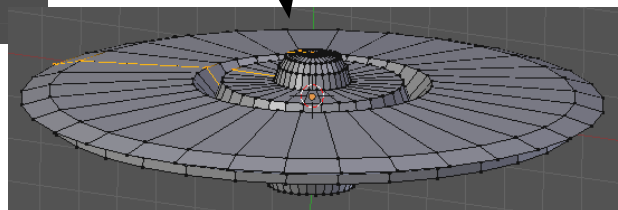
Switch to a front view (or whichever view you need) so you are looking down at the shape and displays as a line. Spinning is related to the view you are working with.



Just like we did for the gear, make sure all vertices are selected and hit the "Spin" command. You will need to change the "Steps" (I used 32), and the "Degrees" to 360 for a full circle. You will also want to select all vertices and "Remove Doubles".



To the left is a profile extruded in the top view. The examples show spinning that shape in a *front* view and a *side* view. The active view at the time does make a difference!



Don't forget- there are Modifiers listed that can do some of these features, only a bit differently. You can actually specify an object for an axis and a few other things. Feel free to experiment with them now that you have a better understanding of how to do revolves.