

Simple Math for making a Sphere

Diameter x .41 will give you the diameter to turn your ends for making a hexagon.

Mark a centerline on the cylinder by rotating the cylinder.

Diameter X.41 \div 2 Equals the place from the centerline to where the 45°cut starts.

Cut your 45°.

You now have an octagon in profile.

Mark a line halfway on each 45°

I like using a 3/8 detail gouge to round off the corners joining the top centerline to the centerline on the 45°. Remove some wood from your spinning axis and continue you curve keeping in mind where the sphere needs to end. Keep about 3/8 of your axis intact. Cut of axis with a hand saw. Each end of the axis piece will now become a cup for holding your sphere.

Place sphere in your cup centers with the cutoff nubs in the plane of cutting. Watch for shadows and remove the ghosting shadow. Draw a new centerline and rotate the sphere in the cups. Remove ghost shadows and repeat. I can usually get rid of the ghost shadow in 3 rotations of the axis.

Sand through the grits rotating the sphere three times per grit