

# TURNING A BALL THE EASY WAY

FWS 2016

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# Sphere – a perfect shape

## No spheres in nature

Earth

Peas

Pearls

Rain drops

Volcanic Bombs



# Turning a sphere

## WITH A BOWL GOUGE

- ▣ Fun
- ▣ Quick, Easy
- ▣ Fairly accurate  $\pm 1/8$
- ▣ improves curves in other work
- ▣ Improves bowl gouge skill
- ▣ Increases confidence

## WITH A JIG

- ▣ Accurate  $\pm 1/64$
- ▣ Balls smaller than 2" easier for me with a jig
- ▣ Great for architectural elements

# Turned Spheres

- ▣ Bowls
- ▣ Hollow Forms
- ▣ Boxes
- ▣ Ornaments
- ▣ Jewelry
- ▣ Desk ornaments
- ▣ Salt & Pepper
- ▣ Elements of turnings
- ▣ Furniture Elements
- ▣ Architectural Elements
- ▣ Molds for concrete
- ▣ Globes

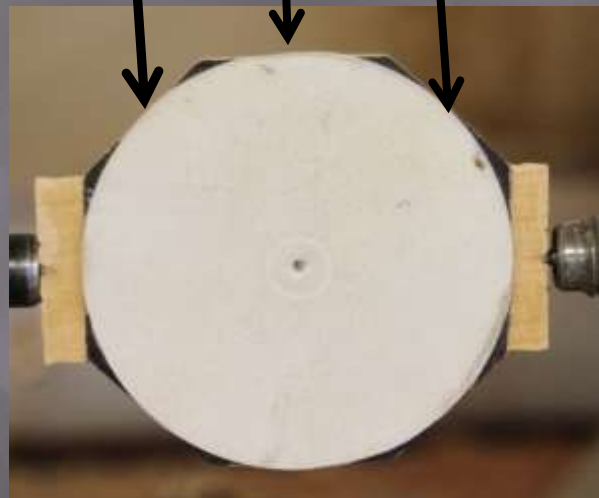


# Sneaking up on the Curve



# Hexagon on cross section

center of each face touches the sphere

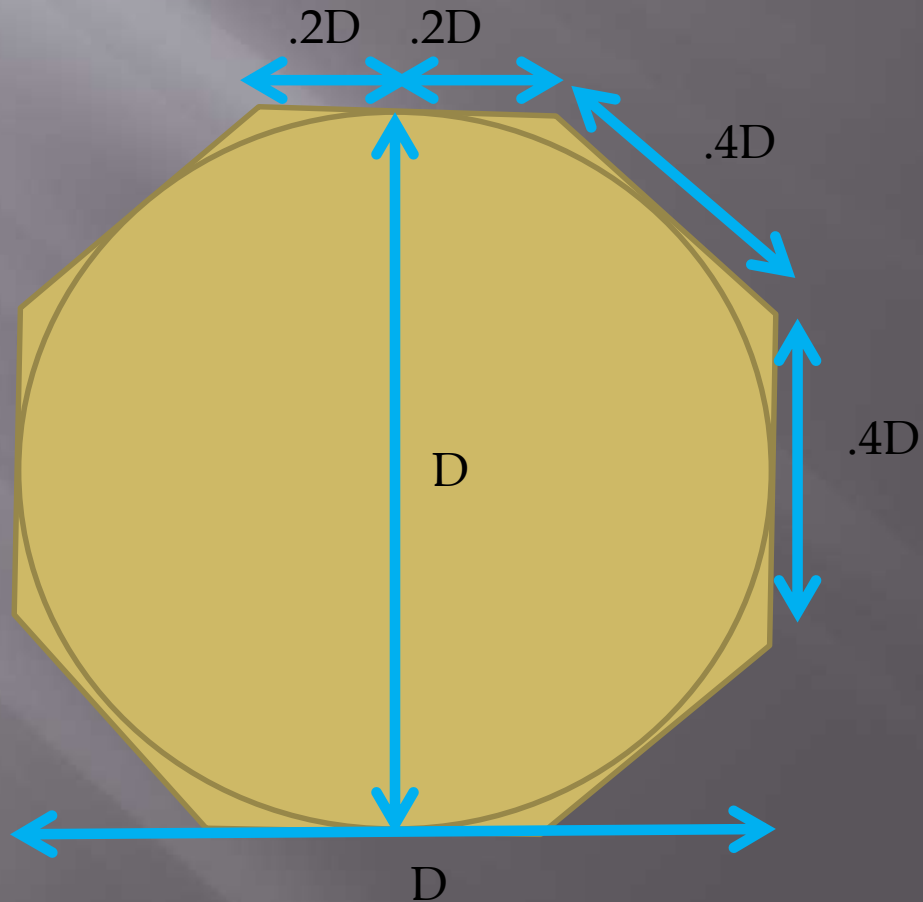


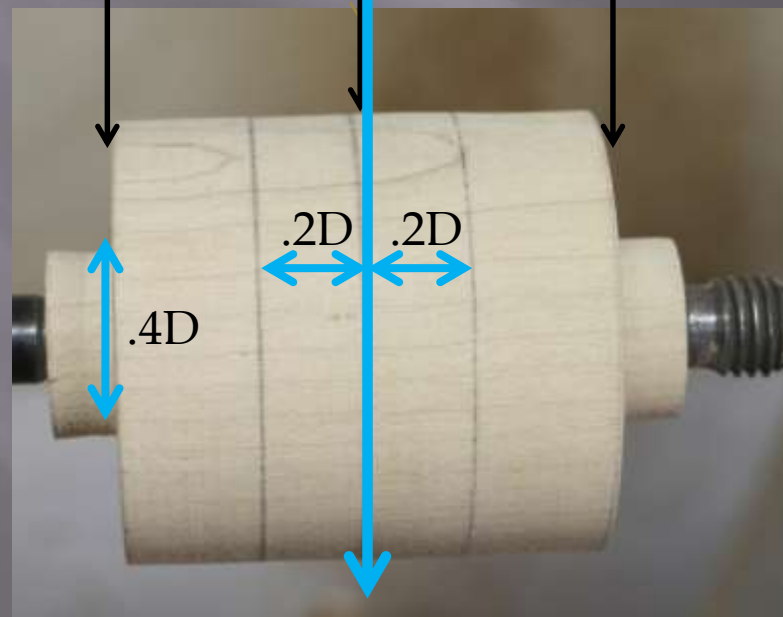
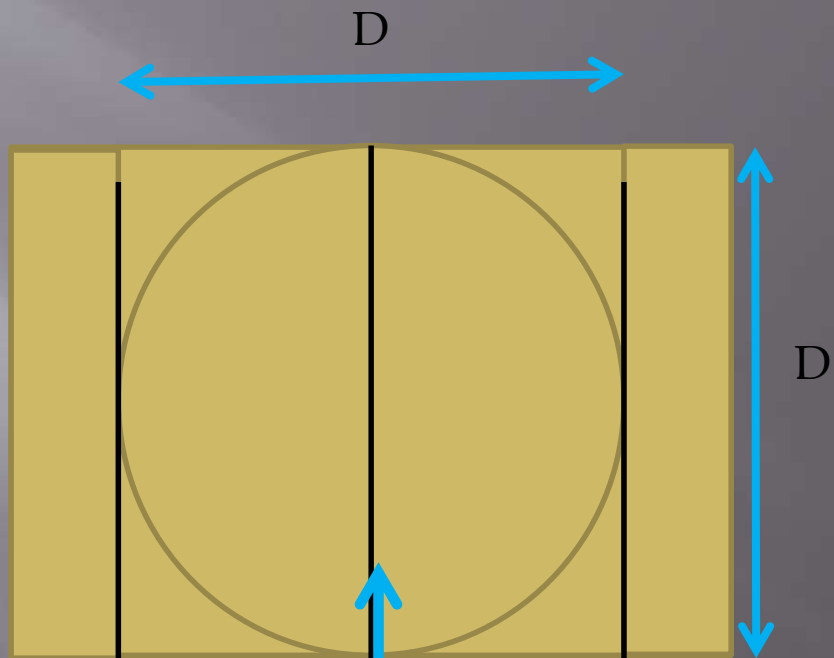


Layout Approximation  
 $.4$  is used instead of  
 $0.414213562373095$

Easy to calculate at  
 the lathe

Error of each line is  
 about  $1/64$  of an inch  
 A fat pencil line





Too much light  
sides are high



Too much light. The top center  
of the ball is round - remove  
wood on the right side



Just about right

