

## A. New Metric Document.

Step 1. Confirm new document and units are mm, Fig. 1.

## B. Extrude.

Step 1. On the Solid tab **SOLID** click **Create Sketch**  in the Sketch area of toolbar and click **Right plane**  in canvas.

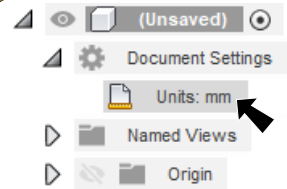


Fig. 1

Step 2. Click **Center Diameter Circle**  (C) in the Create area of toolbar.

Step 3. Sketch **two circles** at the Origin , Fig. 2.

Step 4. Click **Dimension**  (D) on the toolbar.

Step 5. Dimension circle **diameters 3.7 and 7.8**, Fig. 2.

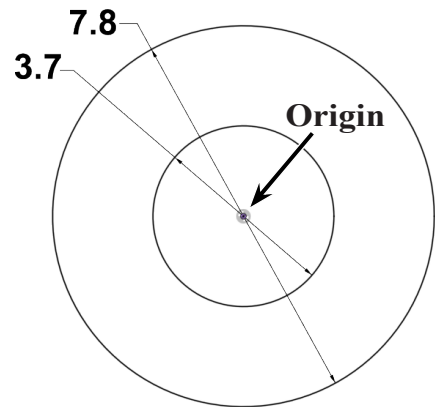




Fig. 2

Step 6. Click **Fit**  (F6) on the Navigation Bar.

Step 7. On the Solid tab **SOLID** click **Extrude**  (E).

Step 8. In the Extrude panel set, Fig. 3  
Profile click **profile between circles**, Fig. 4  
Start **Profile Plane**  
Direction **Symmetric**   
Measurement **Whole Length**   
Distance **.8**  
click OK.

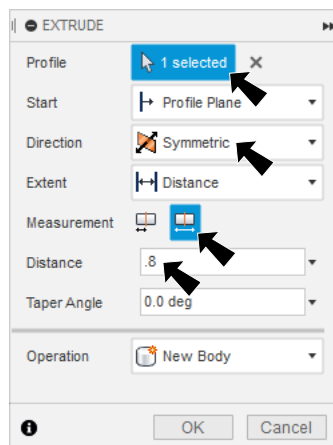


Fig. 3

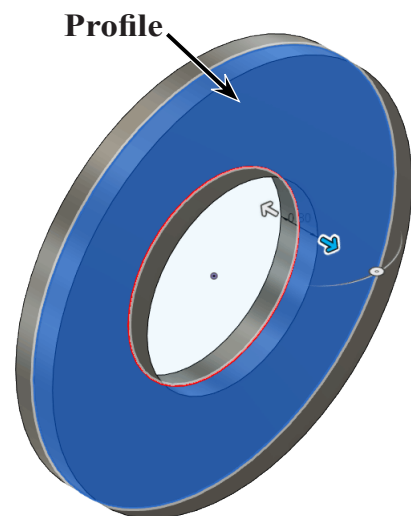


Fig. 4

## C. Save as "WASHER".

Step 1. Click File Menu > Save.

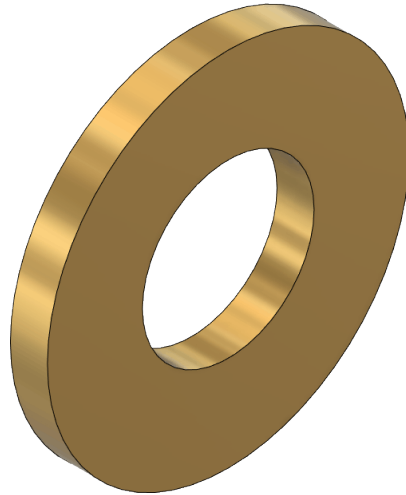
Step 2. In the Save dialog box:  
Key-in **WASHER** for filename.  
click Save.

## D. Material Brass.

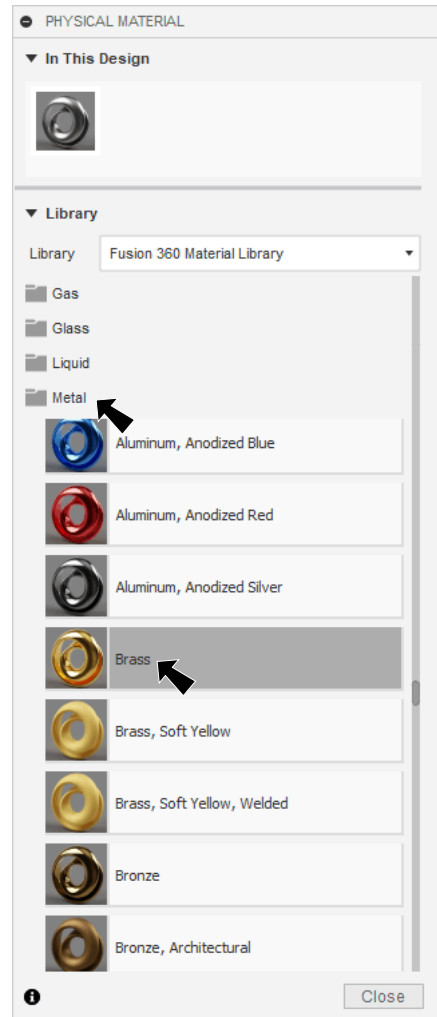
Step 1. On the Solid tab **SOLID** click Modify Menu > Physical Material.

Step 2. In the Physical Material Panel:  
under Library, **Fig. 5**.  
expand **Metal**  
drag **Brass** onto the body, **Fig. 6**.  
Close panel.

Step 3. Save. **Ctrl-S** and press **ENTER**.



**Fig. 6**



**Fig. 5**