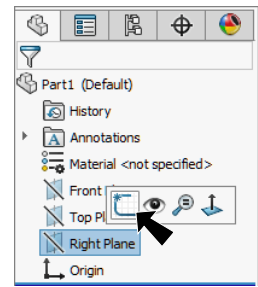


**A. Washer.**

Step 1. Click File Menu > New, click **Part Metric** and OK.

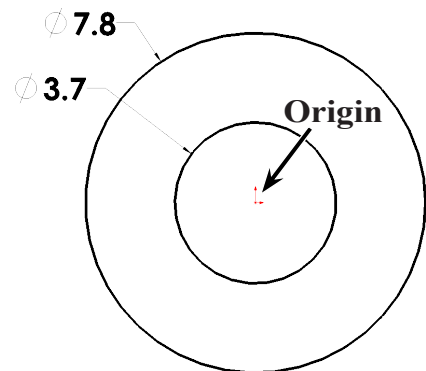
Step 2. Click **Right Plane** in the Feature Manager and click **Sketch** on the context toolbar, **Fig. 1**.



**Fig. 1**

Step 3. Click **Circle** (S) on the Sketch toolbar.

Step 4. Draw two circles starting at the Origin, **Fig. 2**.



**Fig. 2**

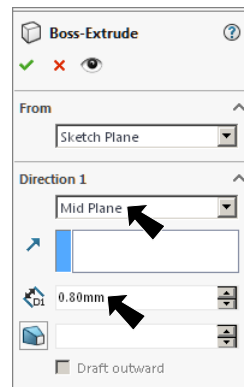
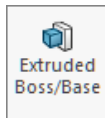
Step 5. Click **Smart Dimension** (S) on the Sketch toolbar.

Step 6. Dimension the circles, **Fig. 2**.

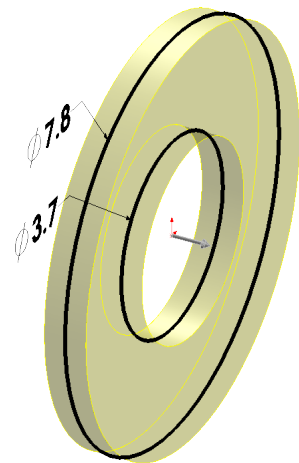
Step 7. Click **Features** on the Command Manager toolbar.

Step 8. Click **Extruded Boss/Base** on the Features toolbar.

Step 9. In the Property Manager set:  
 under Direction 1, **Fig. 3**  
 End Condition **Mid Plane**  
**Depth** .8  
 click OK.



**Fig. 3**



**Fig. 4**

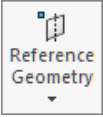
**B. Save as "WASHER".**

Step 1. Click File Menu > Save As.

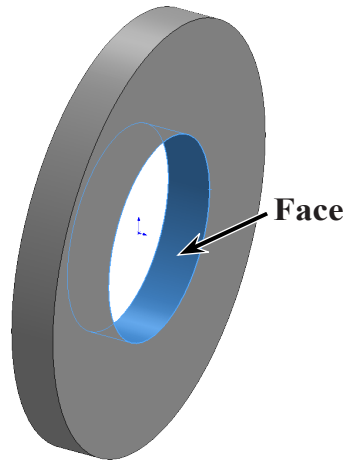
Step 2. Key-in **WASHER** for the filename and press ENTER.

### C. Mate Reference.

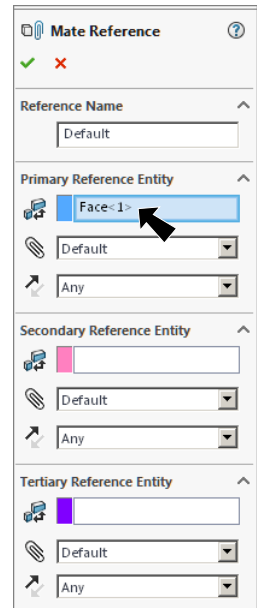
Step 1. Click a **cylindrical face** to select it, **Fig. 5**.

Step 2. Click **Reference Geometry**  on the Features toolbar and **Mate Reference** from the menu.

Step 3. In the Mate Reference Property Manager click OK , **Fig. 6**.



**Fig. 5**



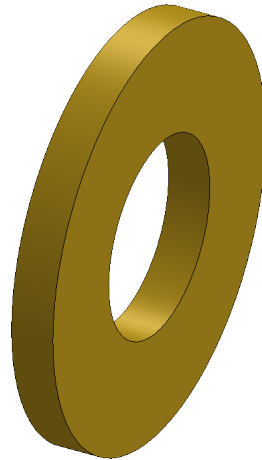
**Fig. 6**

### D. Material Brass.

Step 1. **Right click Material**  in the Feature Manager and click **Edit Material**.

Step 2. Expand **Copper Alloys** in the material tree and select **Brass**. Click **Apply** and **Close**.

Step 3. Save. Use **Ctrl-S**.



**Fig. 7**