



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**  from the Content toolbar, **Fig. 1**.

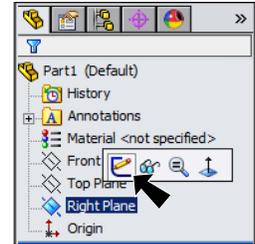


Fig. 1

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

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

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

- Step 6. Dimension circle diameters 3.7 and 7.8, **Fig. 2**.

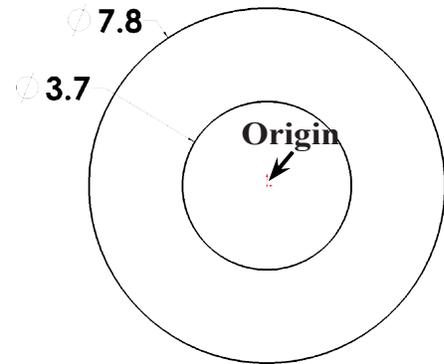
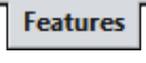
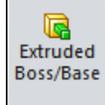


Fig. 2

- 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  D1 **.8**
 click OK .

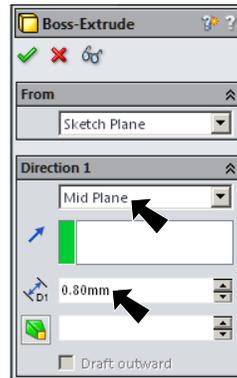


Fig. 3

- Step 10. Click **Zoom to Fit**  (F) on the View toolbar.

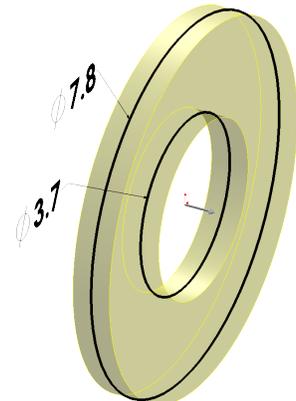


Fig. 4

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**.

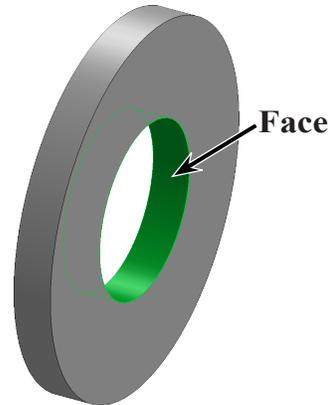


Fig. 5

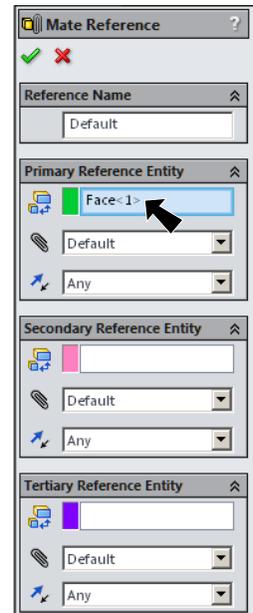


Fig. 6

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