

A. Extrude.

Step 1. Click **New**  on the Standard toolbar, click **Part Metric**  and OK.

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

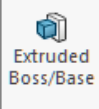
Step 3. Click **Circle**  (S) on the Sketch toolbar.

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

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

Step 6. Dimension circle **diameters 6.5 and 3.5**, **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 Boss-Extrude Property Manager set:
under Direction 1, **Fig. 3**
End Condition **Blind**
Depth  **.5**
click OK .

B. Save as "WASHER".

Step 1. Click File Menu > Save As.

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

Tip: Create a **Solar Train folder** in your My Document folder to save the your Solar Train project files. At cudacountry we go a step further, and create a Tech Ed [school year] folder and in that folder we create the Solar Train folder.
Documents\Tech Ed 26-27\Solar Train.

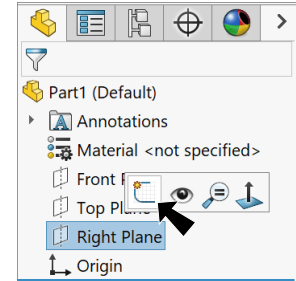


Fig. 1

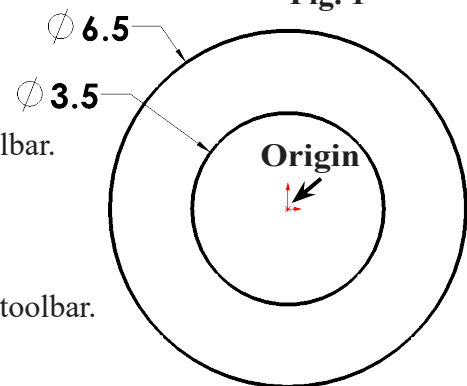


Fig. 2

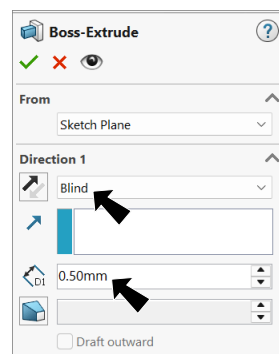


Fig. 3

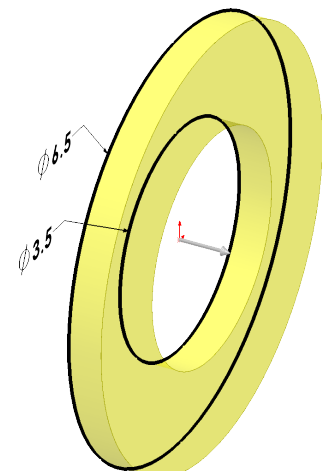
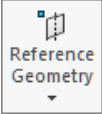


Fig. 4

C. Mate Reference.

Step 1. Click **Reference Geometry**  on the Features toolbar and **Mate Reference**  from the menu.

Step 2. In the Mate Reference Manager set:
under **Primary** Reference Entity
click a **cylindrical face**, **Fig. 6**
click OK .

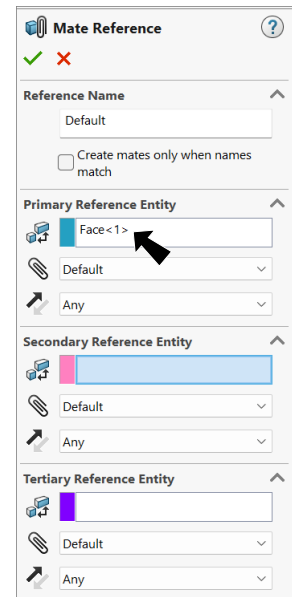
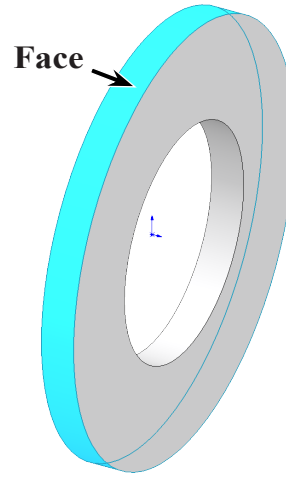


Fig. 5

D. Appearance: Brass.

Step 1. Click part, click **Appearance Callout**  on the context toolbar and click **WASHER** , **Fig. 7**.

Click part 

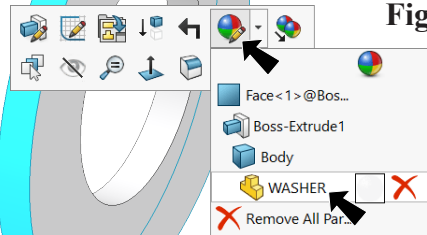


Fig. 6

Step 2. In the Appearances Task pane, expand **Metal**, click **Brass** and in the lower pane select **polished brass**, **Fig. 8**.

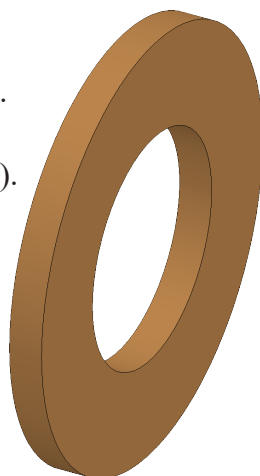


Fig. 10

Step 3. In Appearances Property Manager set:
under **Color**, **Fig. 9**
set **RGB values**
R 176
G 125
B 72
click OK .

Step 4. Save  (**Ctrl-S**).

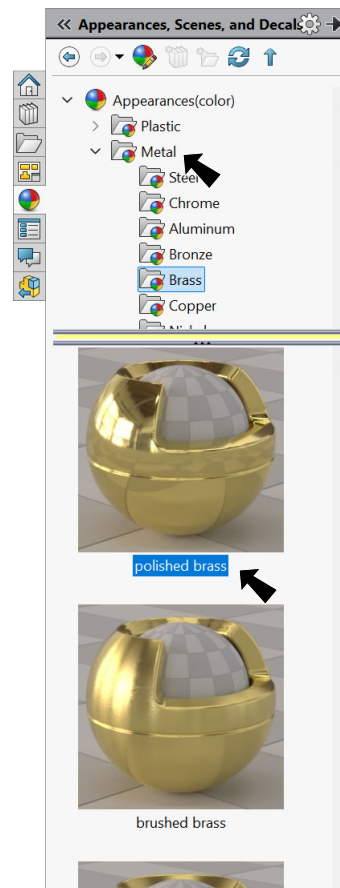


Fig. 8

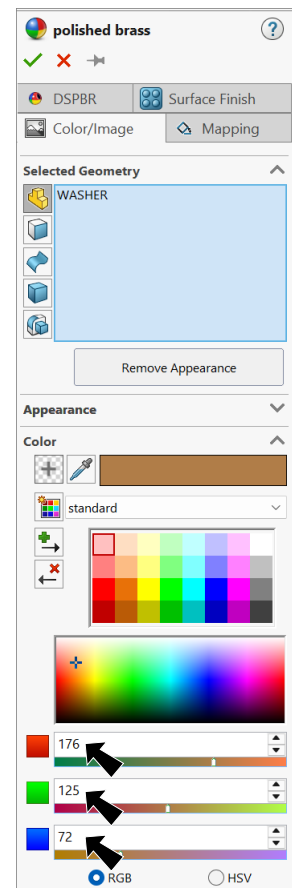


Fig. 9