



A. Extrude.

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**.

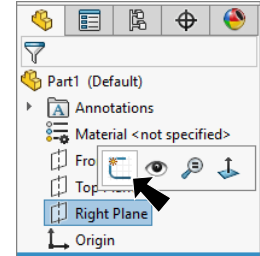


Fig. 1

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

Step 4. Sketch **circle** starting at the Origin , **Fig. 2**.

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

Step 6. Dimension **diameter 7.2**, **Fig. 2**.

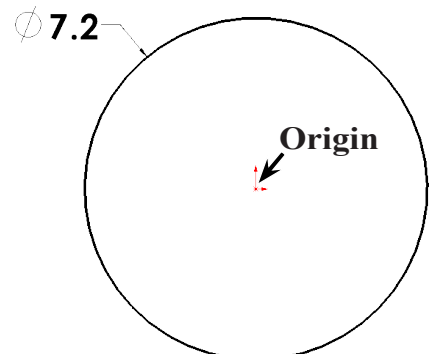





Fig. 2

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  **46**
 click OK .

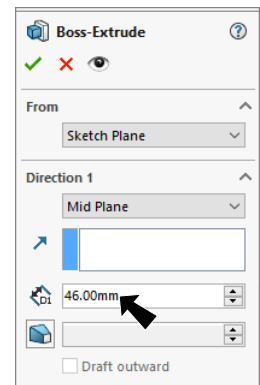


Fig. 3

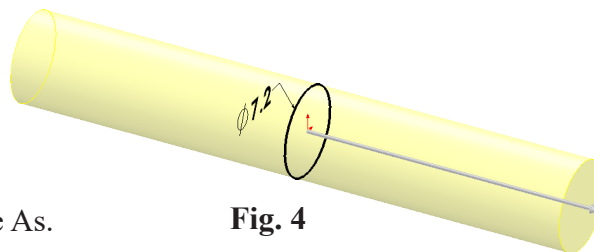


Fig. 4

B. Save as "IDLER".

Step 1. Click File Menu > Save As.

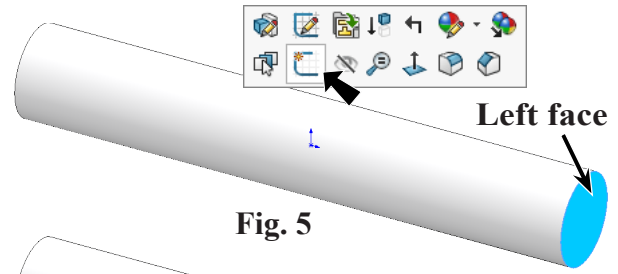
Step 2. Key-in **IDLER** for the filename and press ENTER.

C. Cut.

Step 1. Click the **left side face** and click **Sketch**

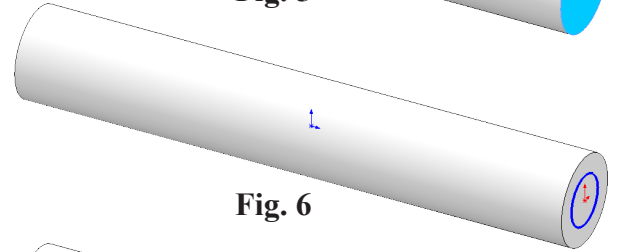


on the context toolbar, **Fig. 5**.



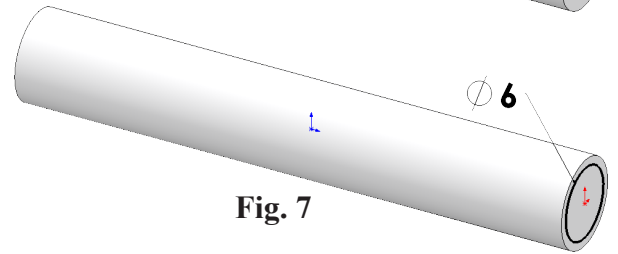
Step 2. Click **Circle**  (S) on the Sketch toolbar.

Step 3. Sketch **circle** starting at the Origin , **Fig. 6**.



Step 4. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 5. Dimension **diameter 6**, **Fig. 7**.



Step 6. Click **Features**  on the Command Manager toolbar.

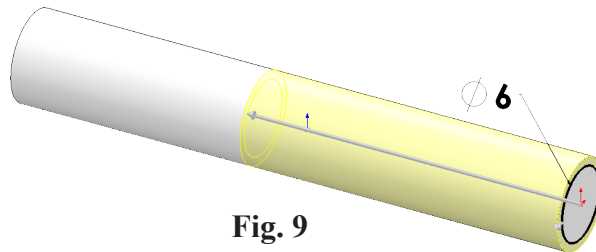
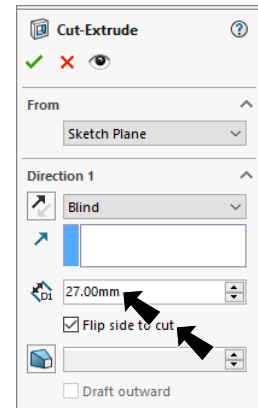
Step 7. Click **Extruded Cut**  on the Features toolbar.

Step 8. In the Cut-Extrude Property Manager set:
under Direction 1, **Fig. 8**


Depth  **27**

check **Flip side to cut**

click OK .



D. Mate References.

Step 1. Click **Right Plane**  in the Feature Manager to select Plane, **Fig. 10**.

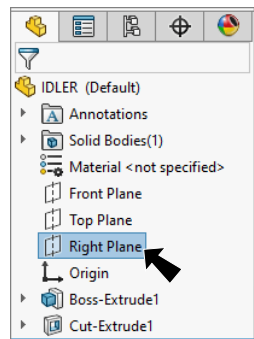


Fig. 10

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

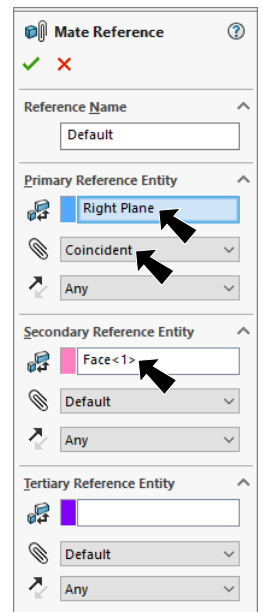




Fig. 11

Step 2. In the Mate Reference Manager:
 under Primary Reference Entity, **Fig. 11**
Right plane was preselected
Mate Reference Type  **Coincident**
 under Secondary Reference Entity

click in Entity box 
 and click a **cylindrical face**,
Fig. 12

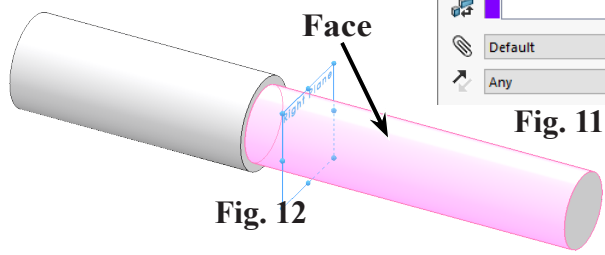



Fig. 12

click OK .

E. Appearance.

Step 1. Click part, click **Appearance Callout**  on the context toolbar and click **IDLER** , **Fig. 13**.

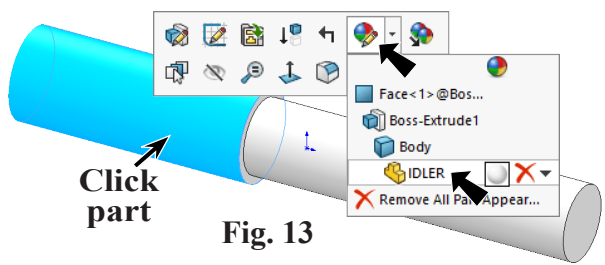


Fig. 13

Step 2. In the Appearances Task pane, expand **Plastic**, click **High Gloss** and in the lower pane select **white high gloss plastic**, **Fig. 14**.

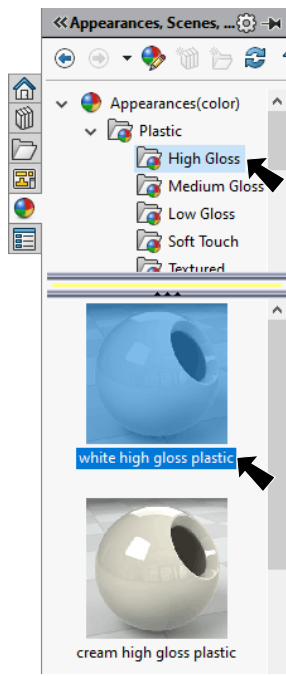


Fig. 14

Step 3. In the Appearances Property Manager set:
 under Color, **Fig. 15**
 set **RGB values**
R 188
G 173
B 217

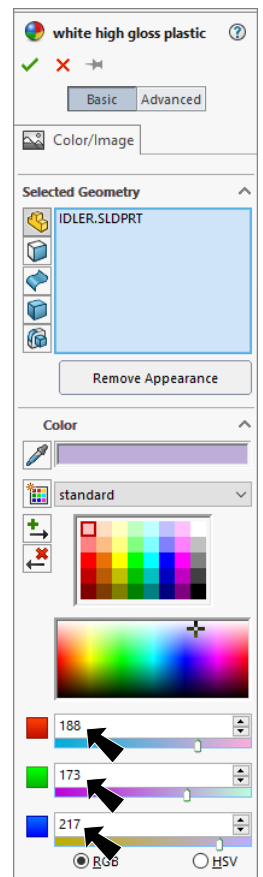


Fig. 15

click OK .

Step 4. Save  (Ctrl-S).

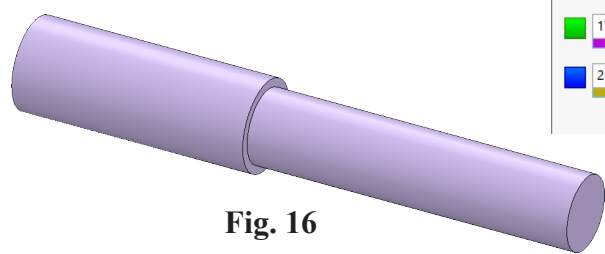


Fig. 16