Part Modeling II

Using Autodesk Inventor

- Features
- Options
- Properties

Inventor Features

- Extrude
- Taper

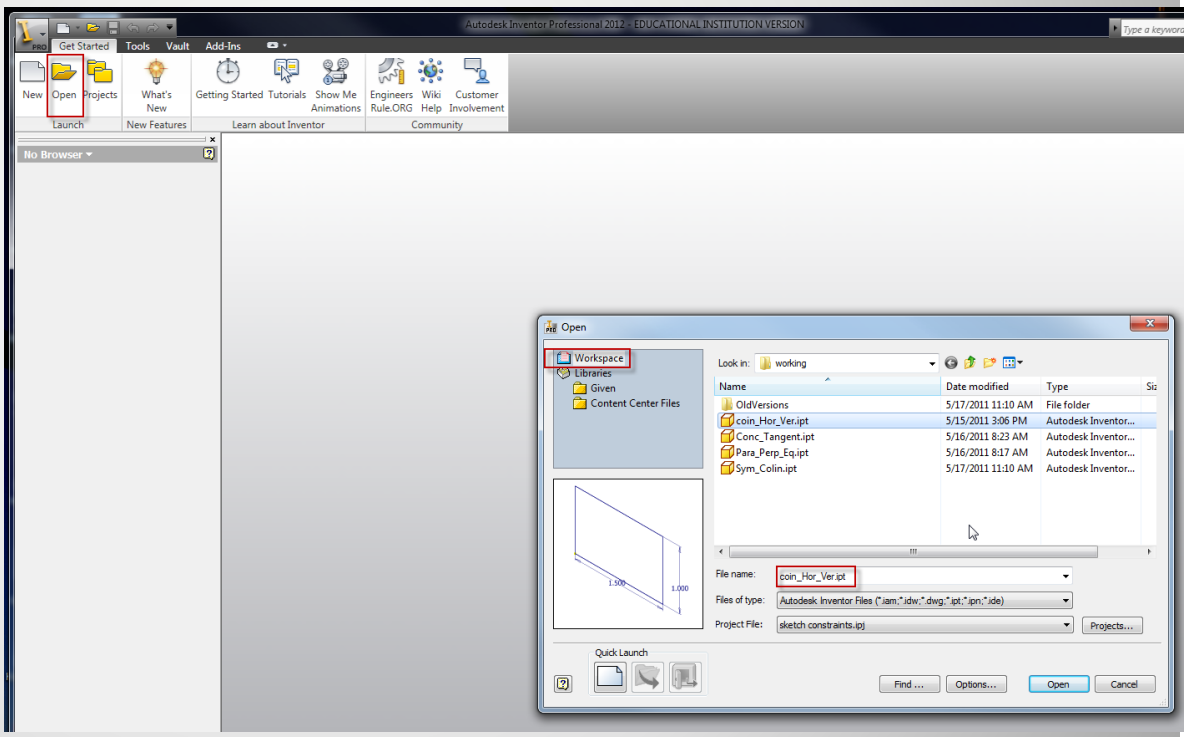
Note: Continued from Sketch Constraints I

EXAMPLE 1

- Open 

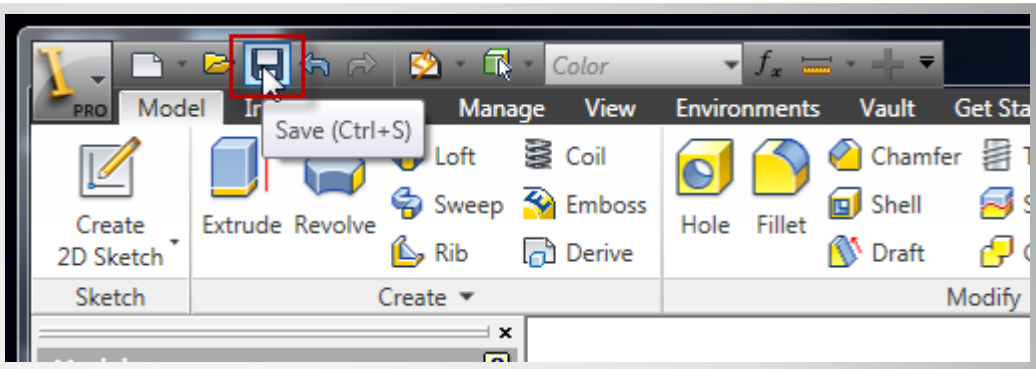
  - ☑Workspace: 

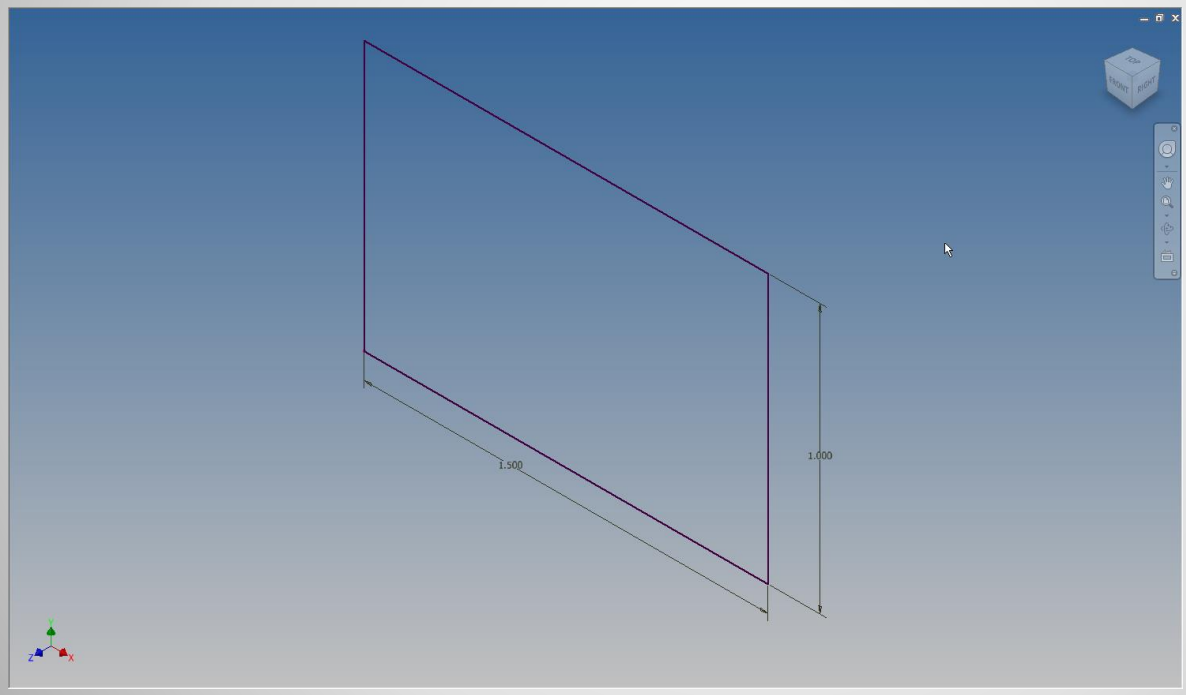
  - ☑File: From Sketch Constraints I



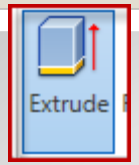
a. Open (previous file)

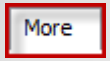
- Save: 





b. Save (frequently)

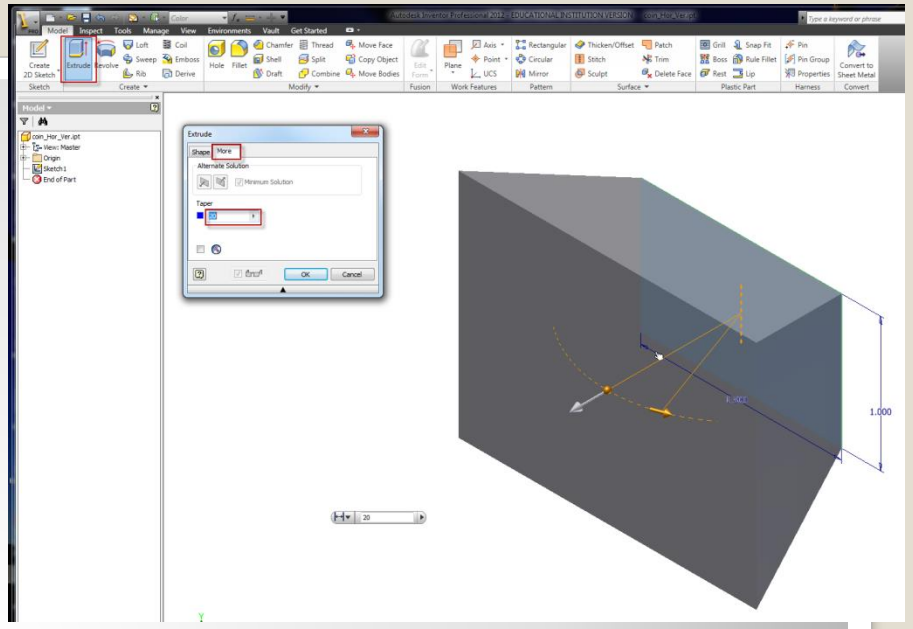
- ☑ Extrude 

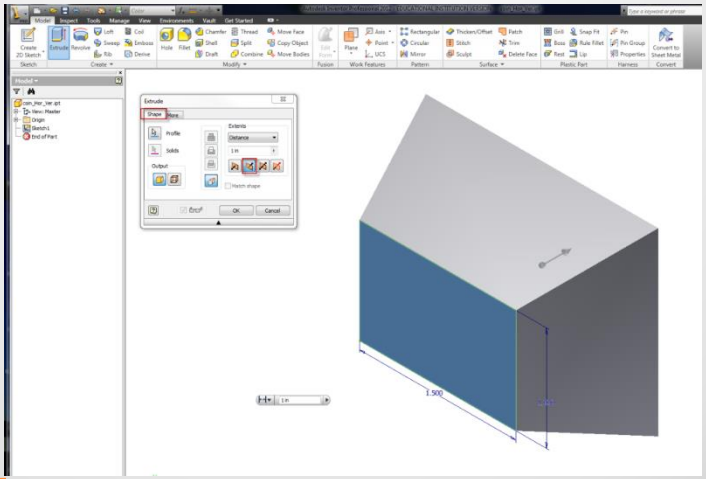
  - ☑Distance: 1 in.
  - ☑More 

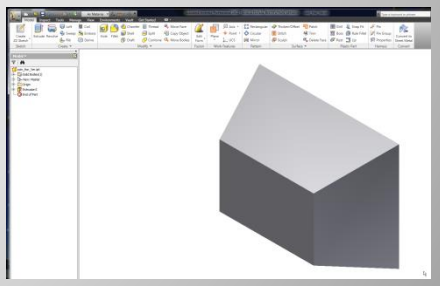
    - ☑Taper: 

  - ☑Shape 

    - ☑Direction 
- Verify:

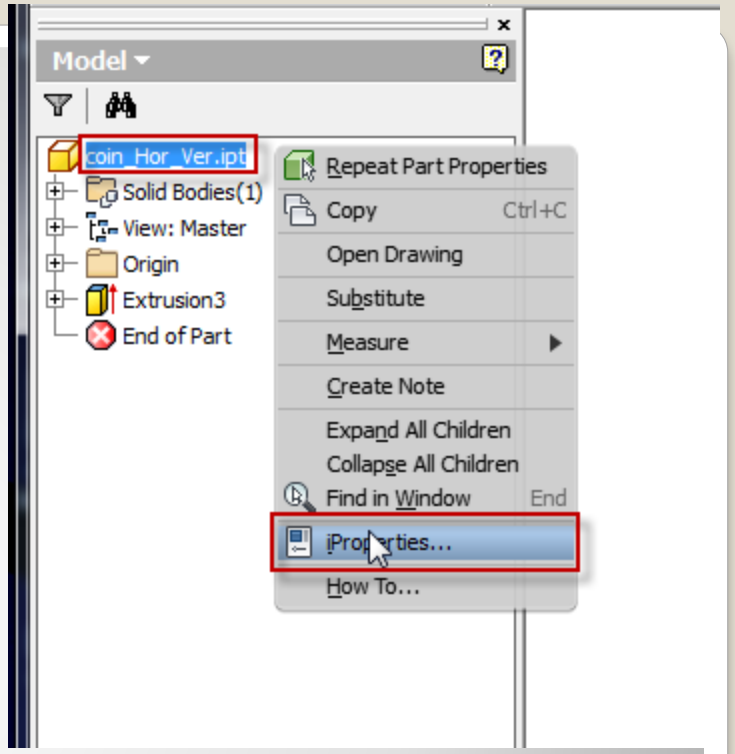


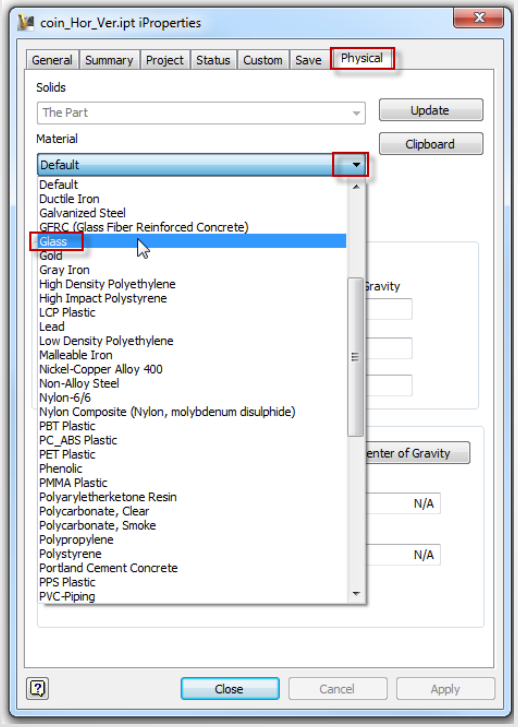




c. Extrude – taper

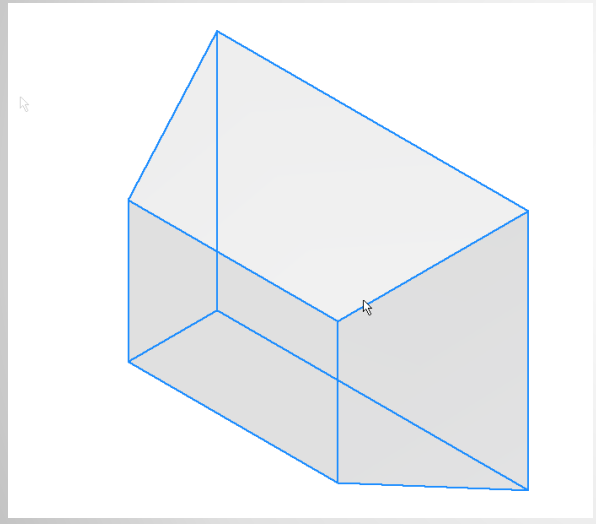
- Pick:
  - ☑ coin_Hor_Ver.ipt
  - ☑ iProperties... <rmb>
  - ☑ Physical
  - Glass



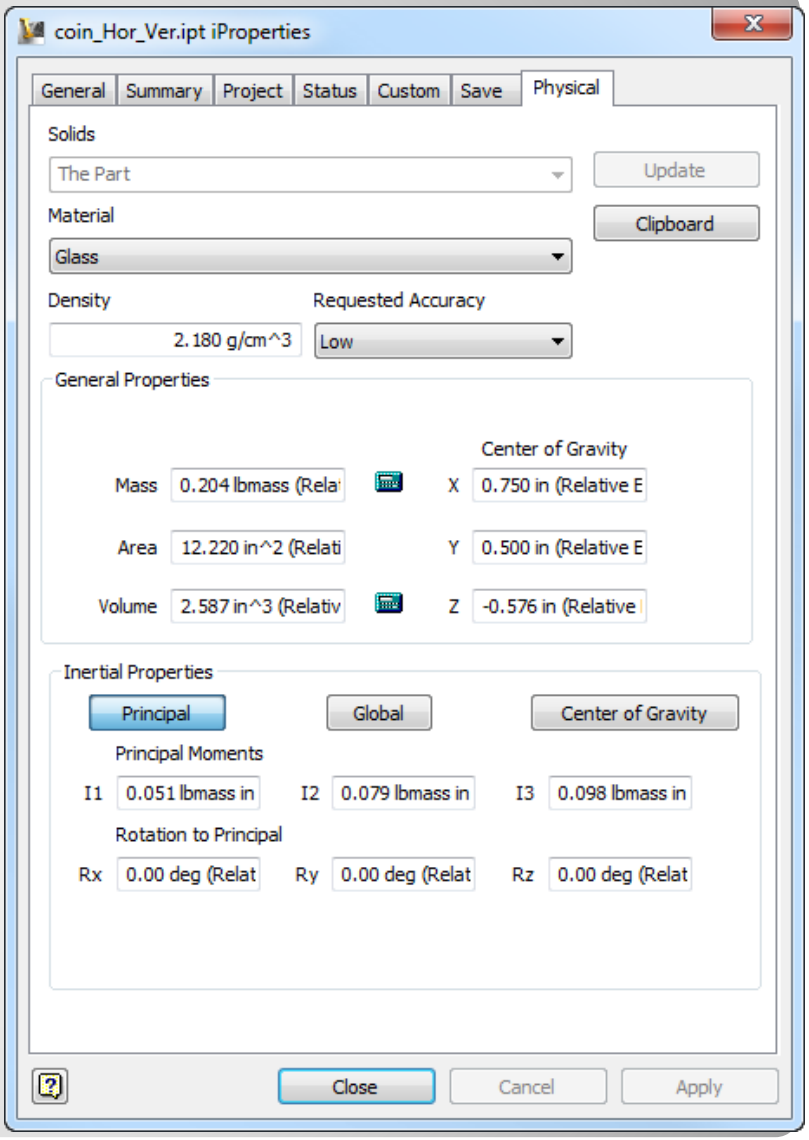


d. Specify Material

- Density
- General Properities
- Inertial properties:



e. Properties



EXAMPLE 2

Inventor Features

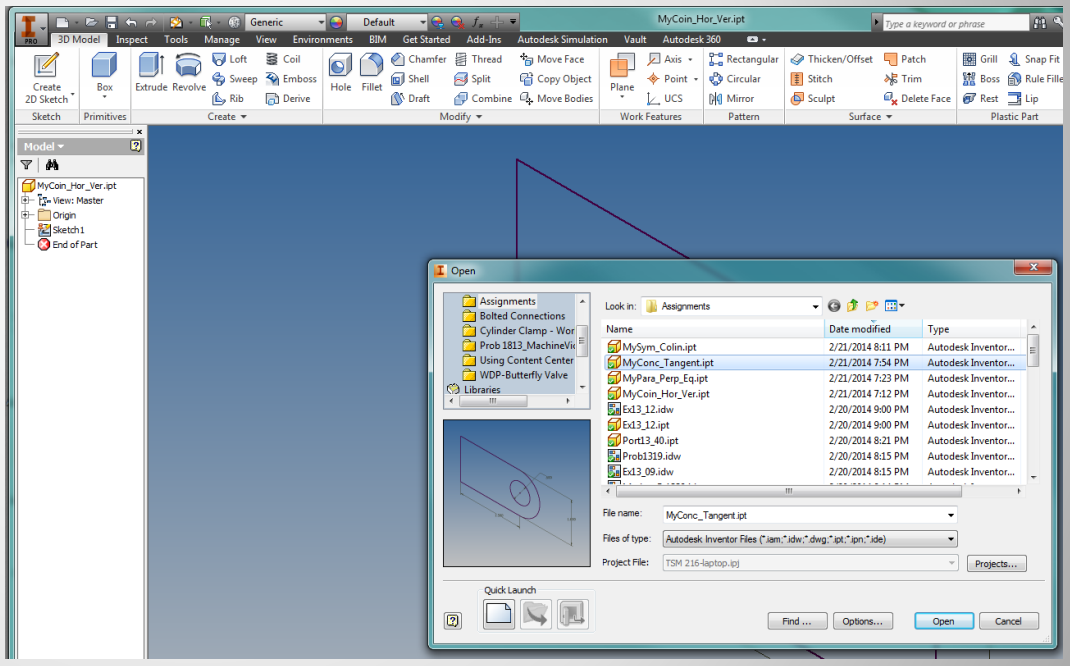
- Revolve
  - Angle
  - Direction

Note: Continued from Sketch Constraint II

- Open 

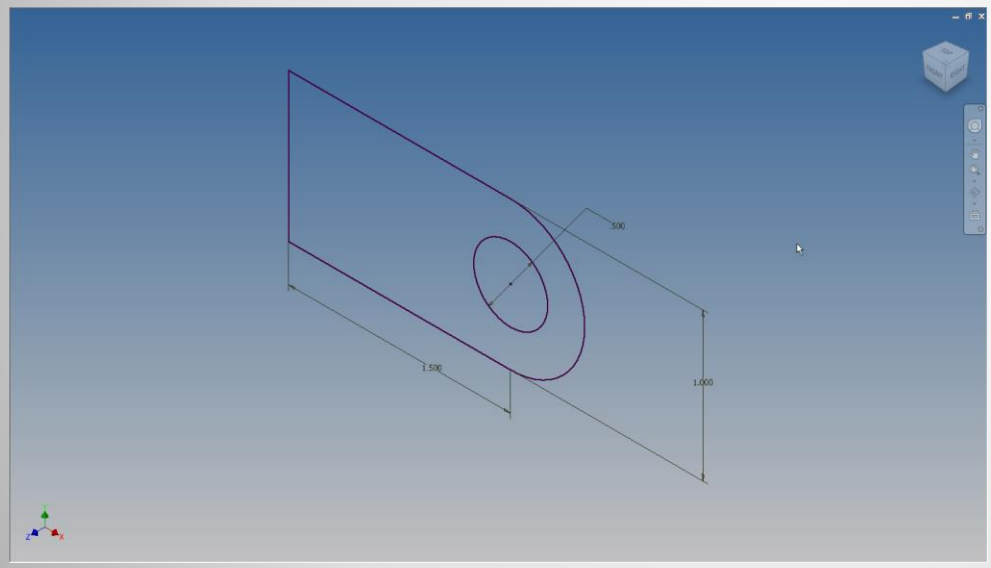
  - ☑Workspace: 

  - ☑File From Sketch Constraint II:



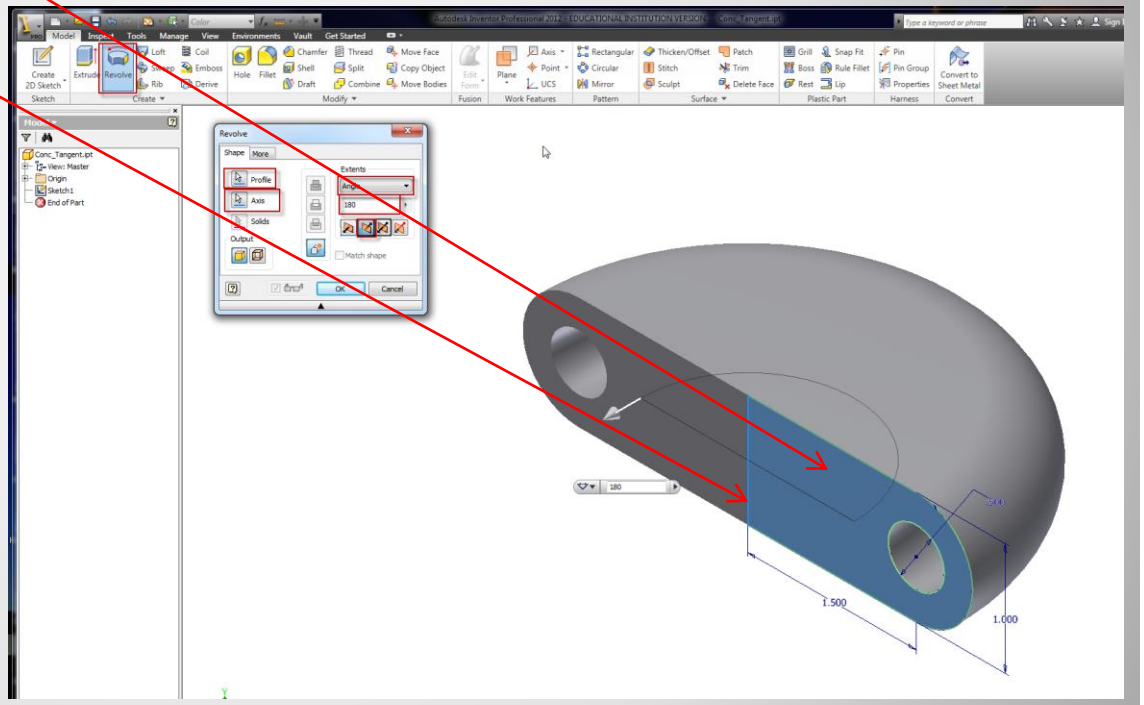
a. Open (previous file)

- Save: 



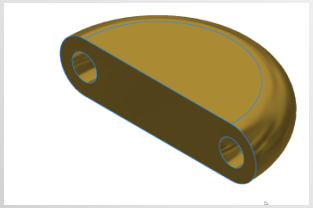
b. Save (frequently)

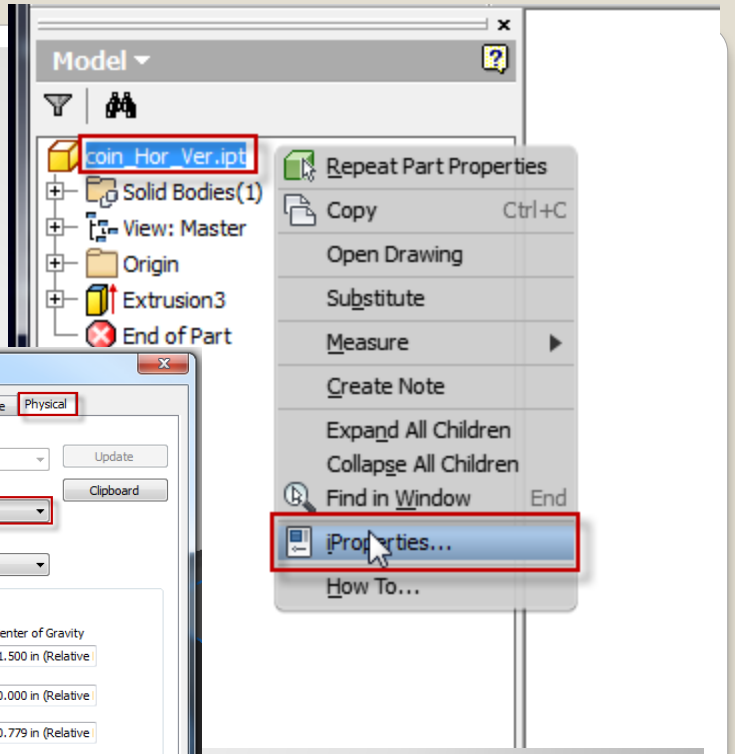
- ☑ Revolve
  - ☑Profile
  - ☑Axis
  - ☑Extents:
    - ☑ Angle
    - ☑180
  - ☑Direction 
- Verify:

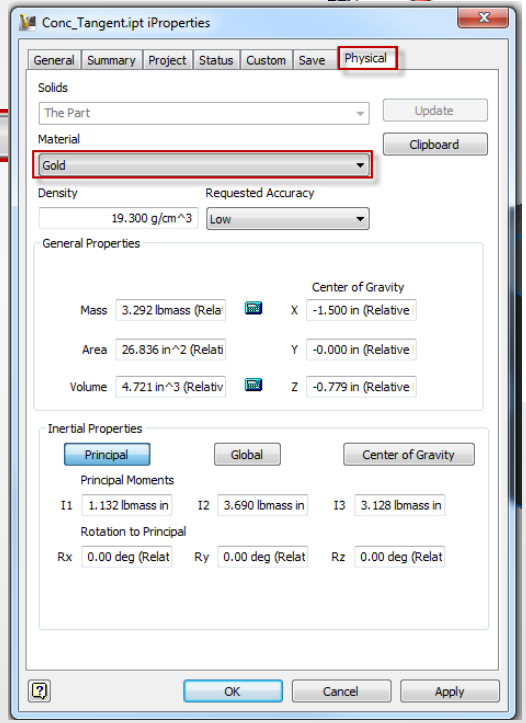


c. Revolve – angle / direction

- Pick:
  - ☑ Conc_Tangent.ipt
  - ☑ iProperties... <rmb>
  - ☑ Physical
  - ☑ Gold
- Properties
  - Density
  - General
  - Inertial







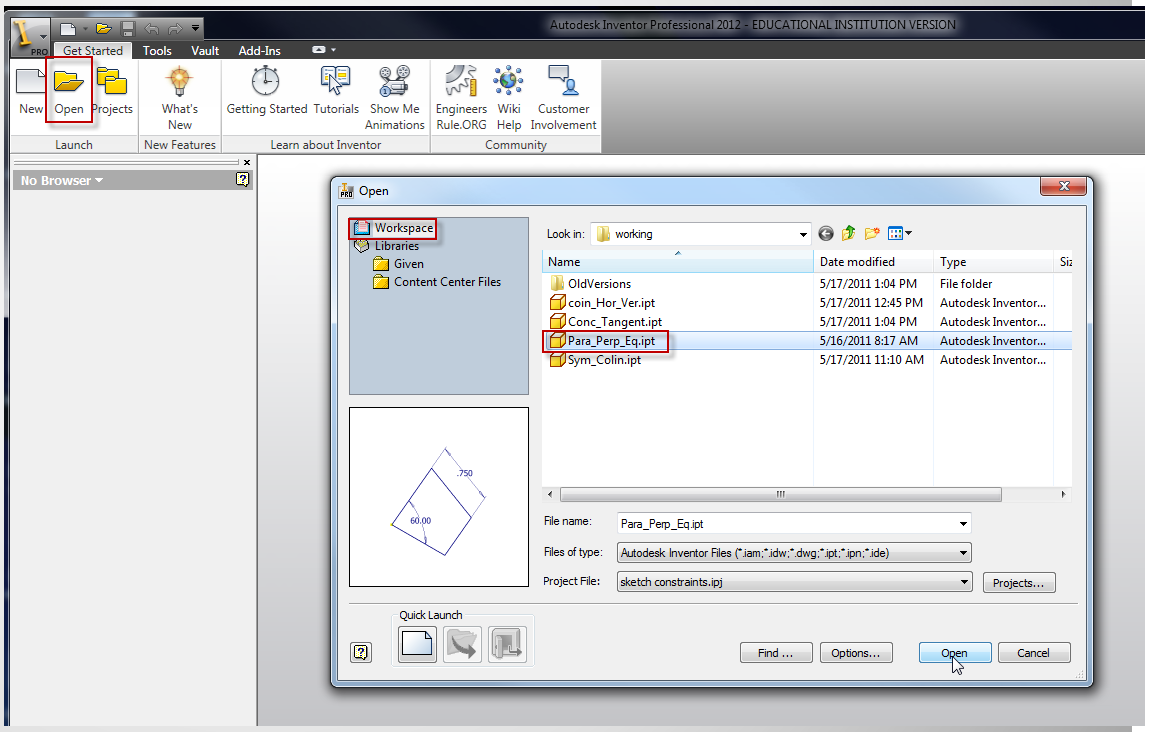
d. Material - Properties

- Continue From Sketch Constraints III
- Revolve
  - Axis
  - Angle
  - Direction

EXAMPLE 3:

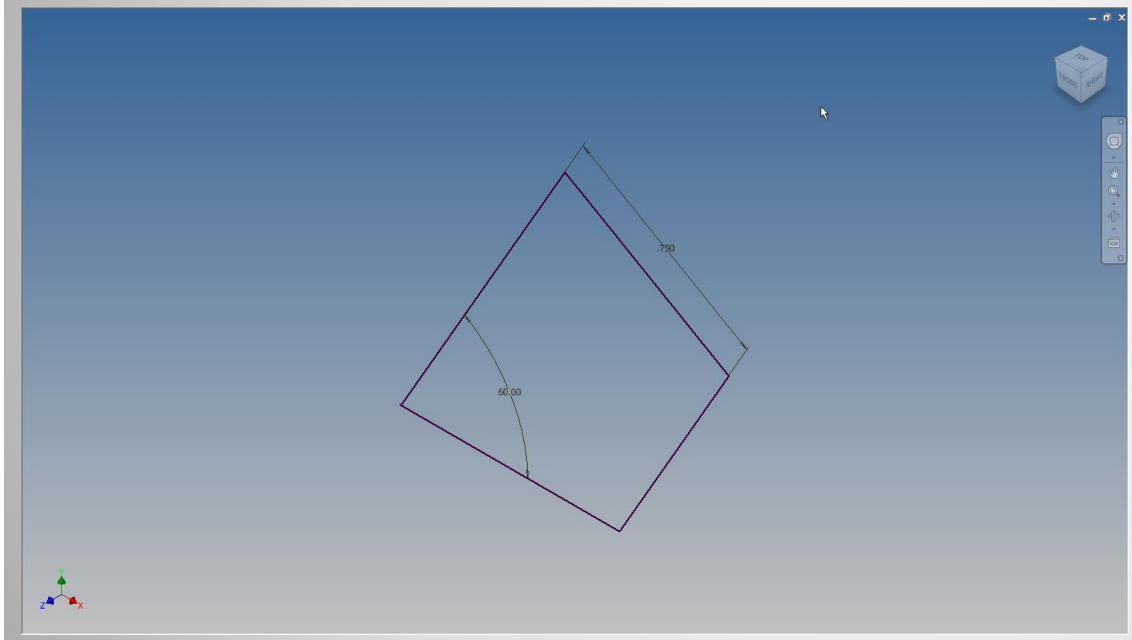
- Open 

  - ☑Workspace:
  - ☑File: From Sketch Constraints III



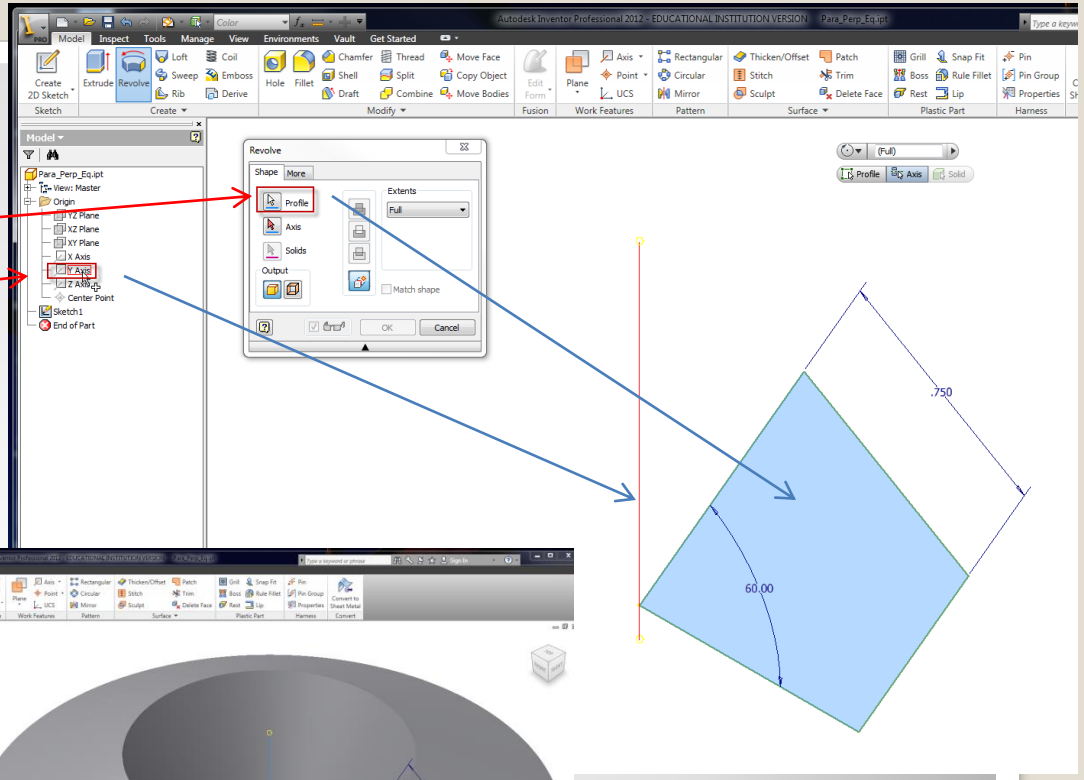
a. Open (previous file)

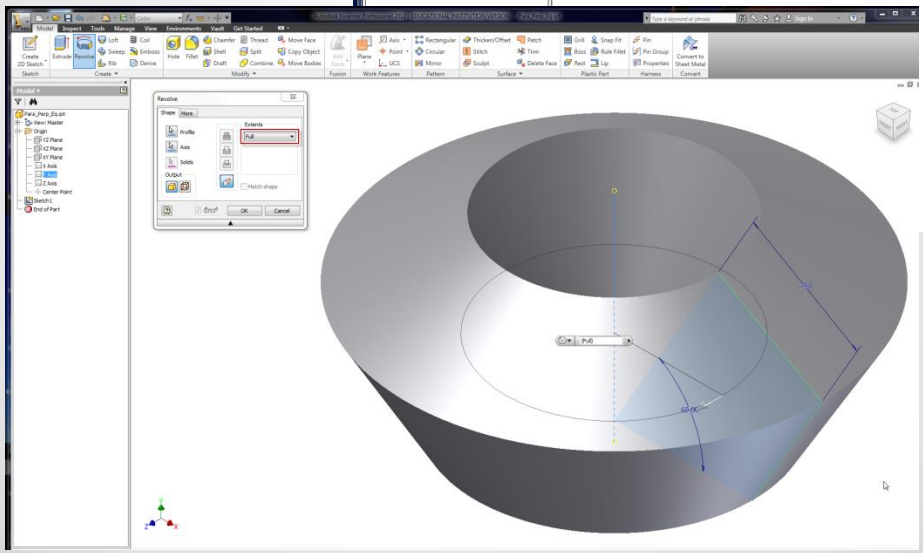
- Save: 



b. Save (frequently)

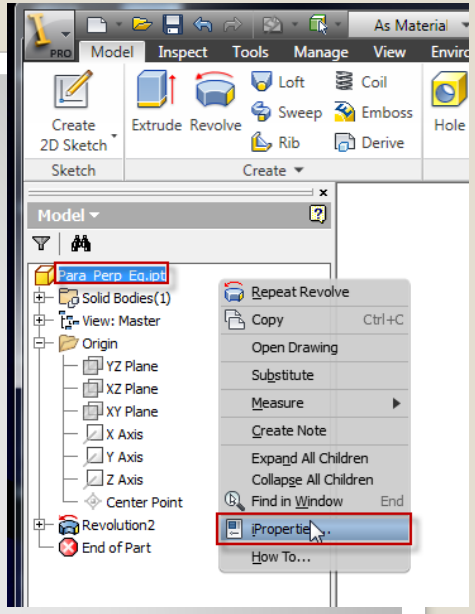
- ☑ Revolve
  - ☑Profile
  - ☑Axis
  - ☑Extents:
    - ☑ Full
- Verify:

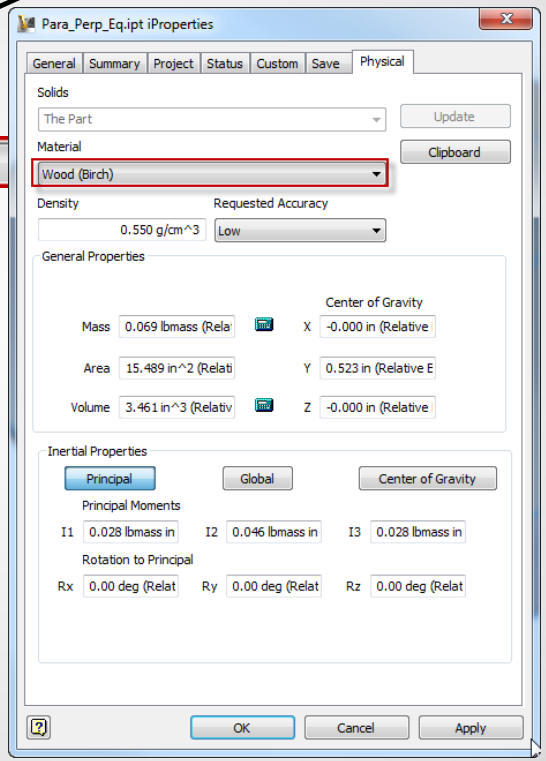


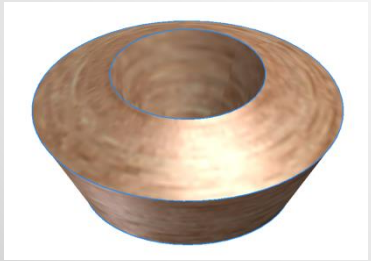


c. Revolve - axis

- Pick:
  - ☑ Para Perp Eq.ipt
  - ☑ iProperties... <rmb>
  - ☑ Physical
  - ☑ Wood (Birch)
- Properties
  - Density
  - General
  - Inertial







d. Material - Properties

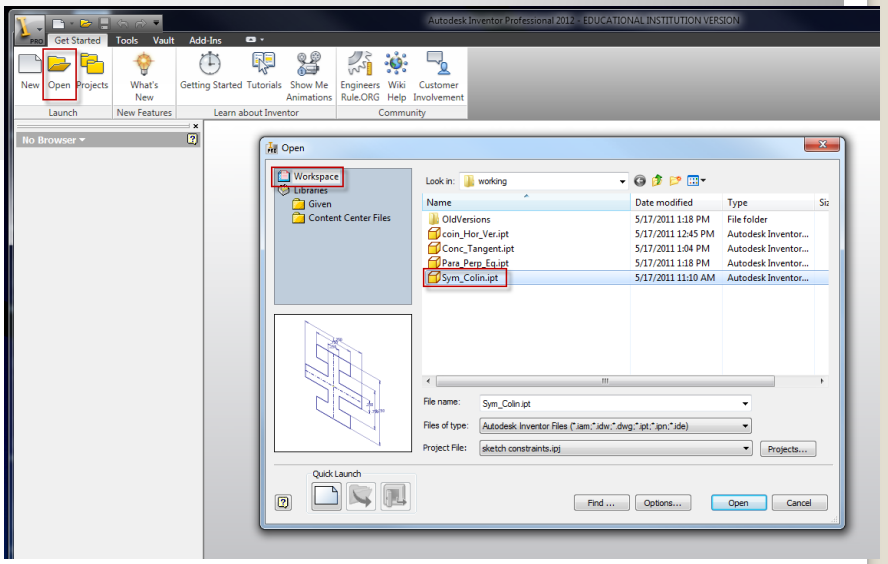
Revolve – Sketch Axis
Continued from Sketch Constraints IV

EXAMPLE 4

- Open 

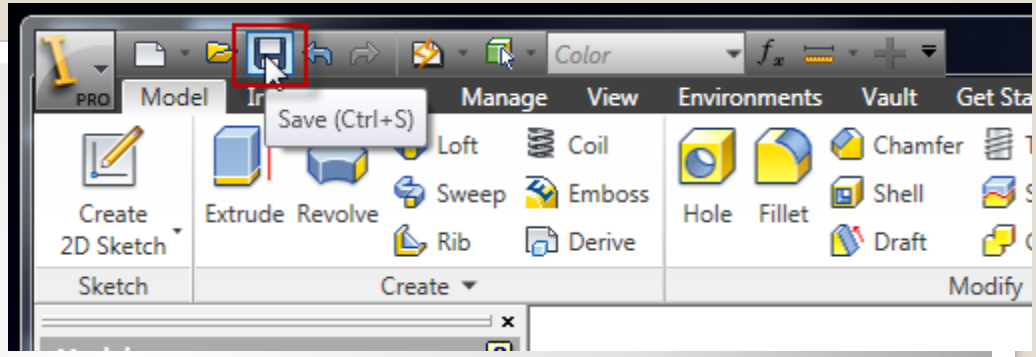
  - ☑Workspace: 

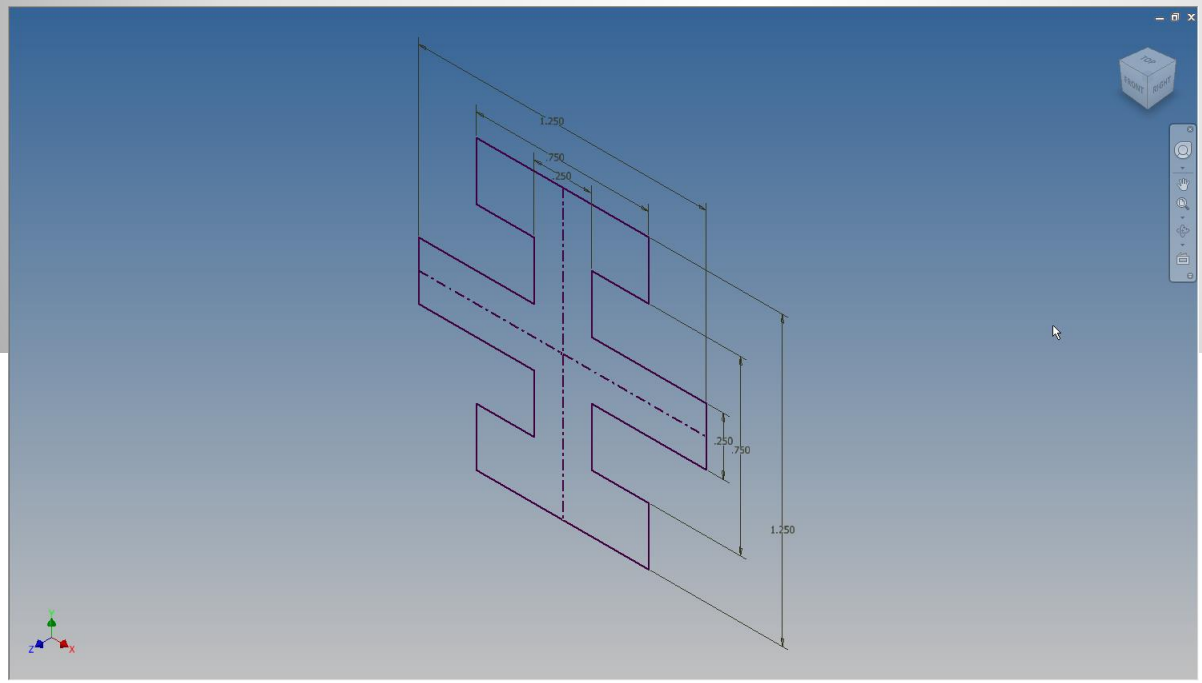
  - ☑File: From Sketch Constraints IV



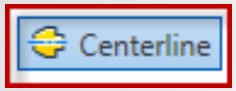
a. Open (previous file)

- Save:

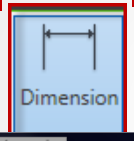




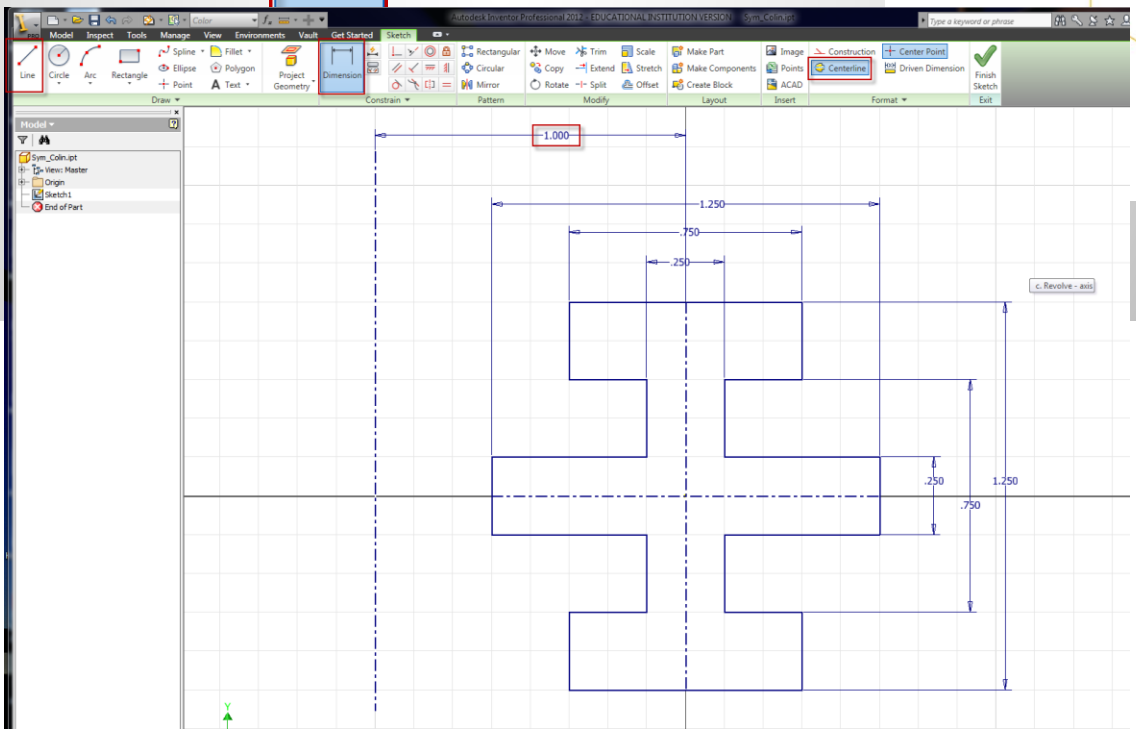
b. Save (frequently)

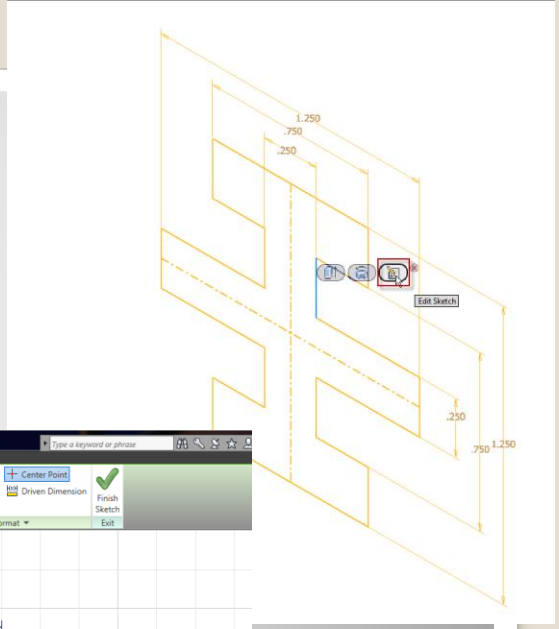
- ☑ Edit Sketch 
  - ☑Sketch 

 - 

  - ☑Dimension 

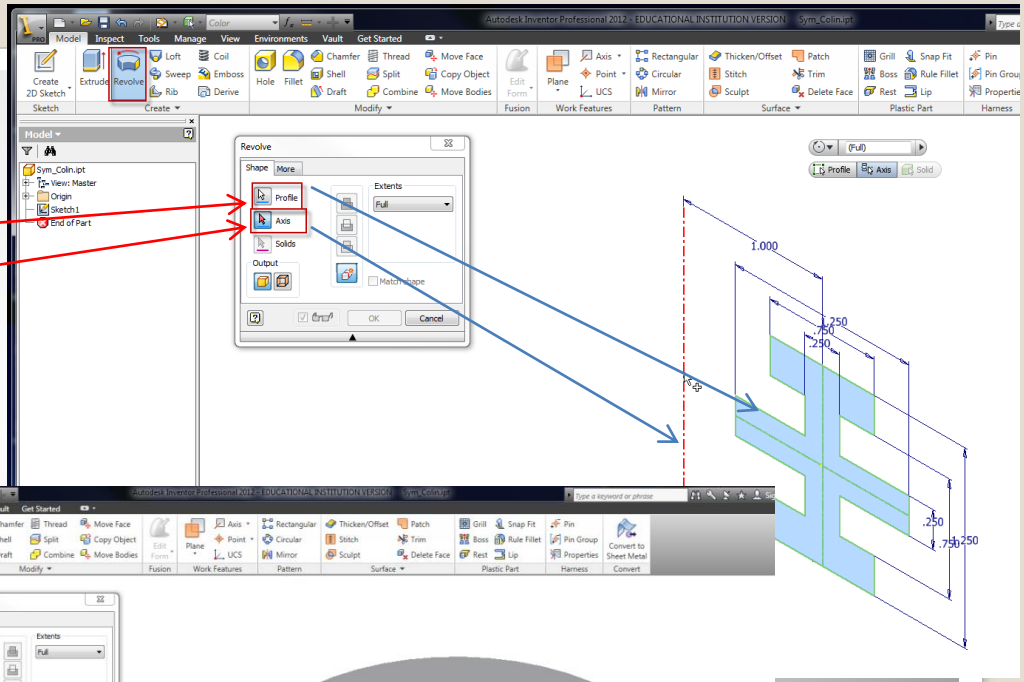
- Verify:

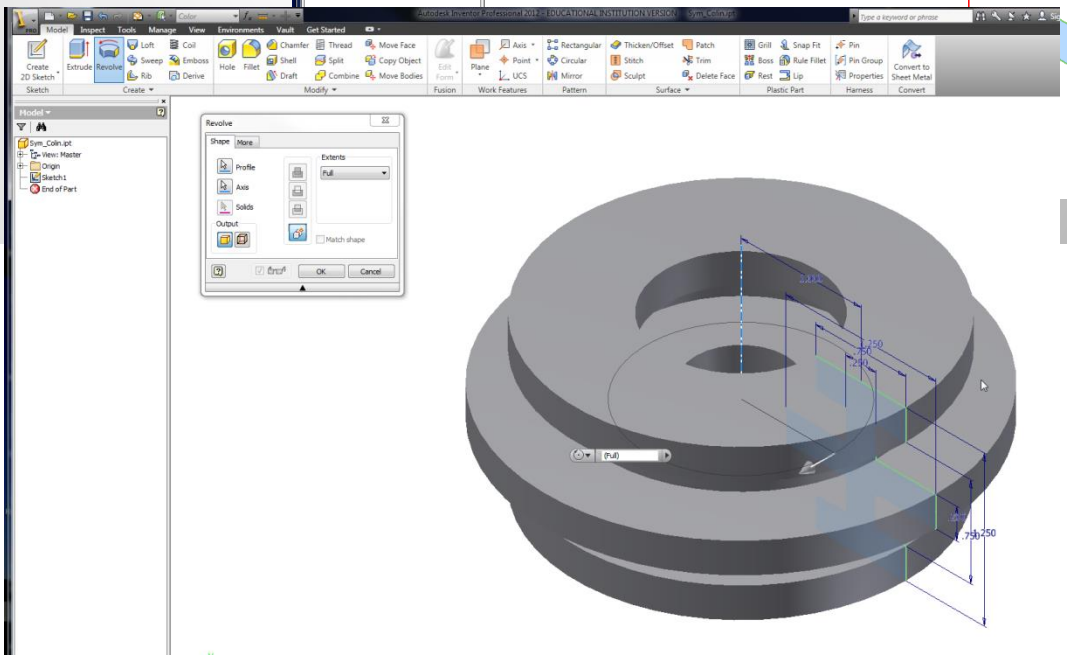




c. Sketch - axis

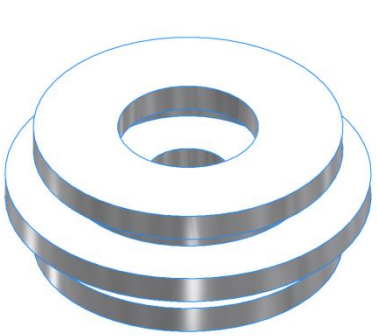
- ☑ Revolve
  - ☑ Profile
  - ☑ Axis
  - ☑ Extents:
    - ☑ Full
- Verify:

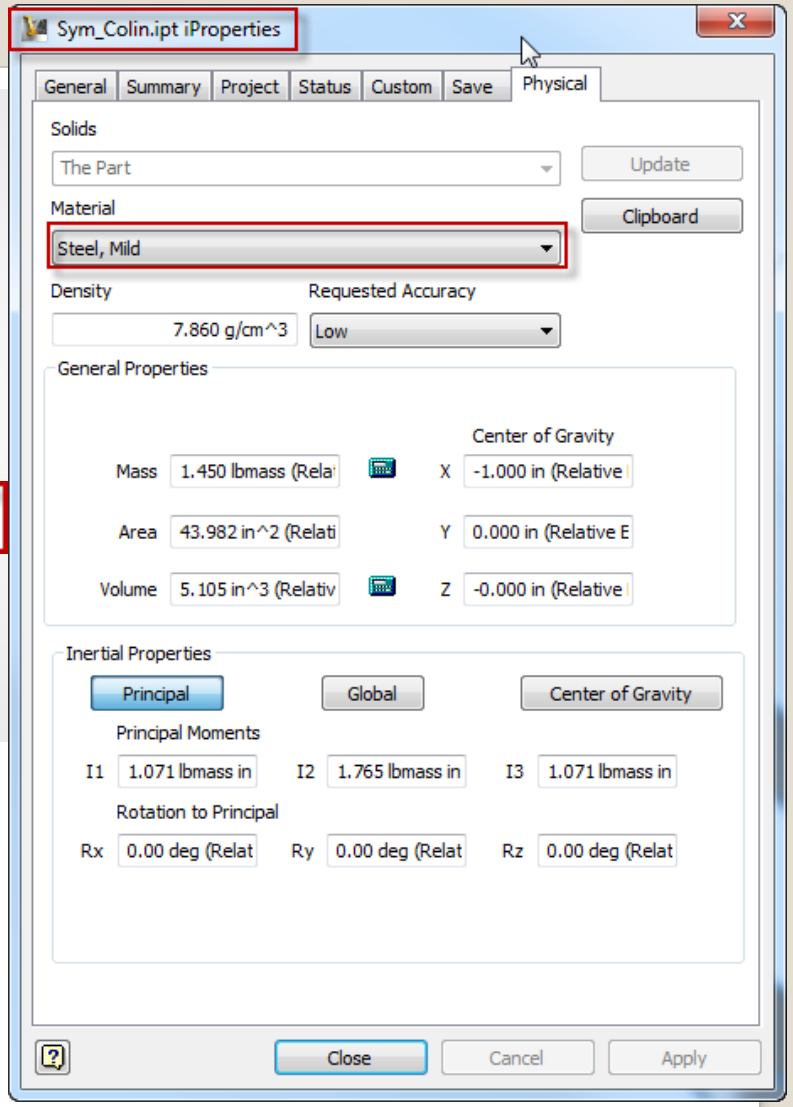




c. Revolve - axis

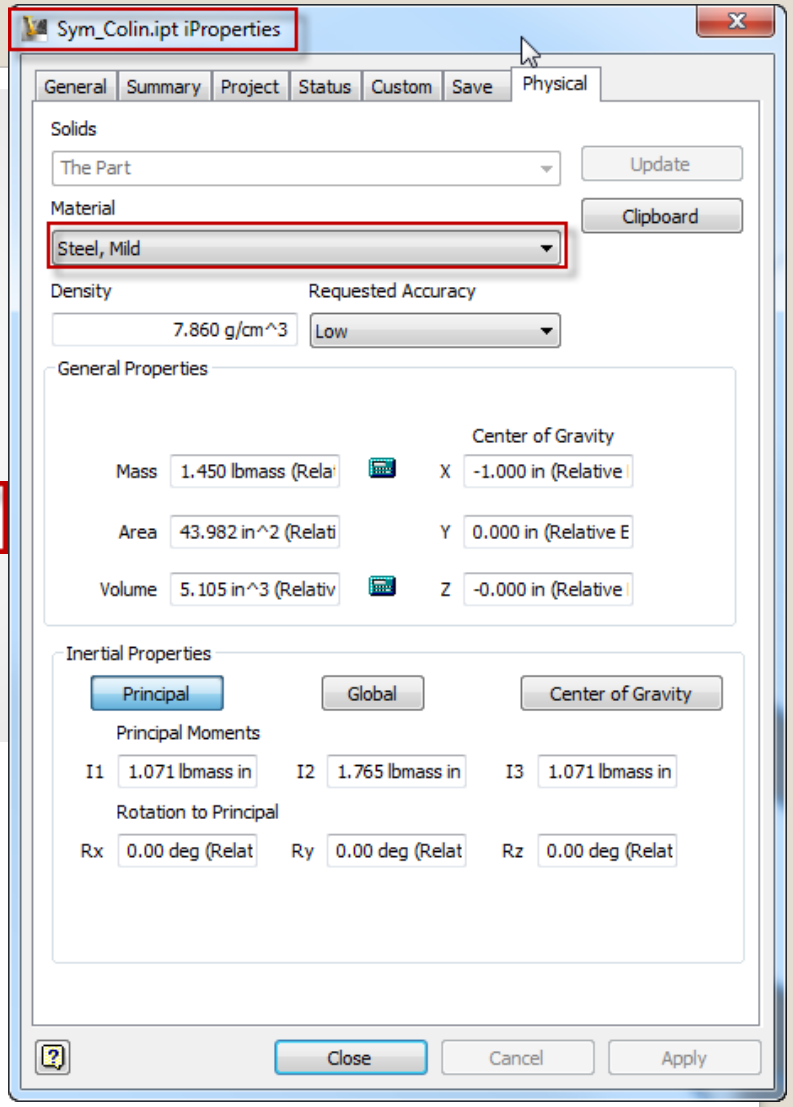
- Pick:
  - ☑ Sym_Colin.ipt iProperties
  - ☑ iProperties... <rmb>
  - ☑ Physical
  - ☑ Steel, Mild
- Properties
  - Density
  - General
  - Inertial





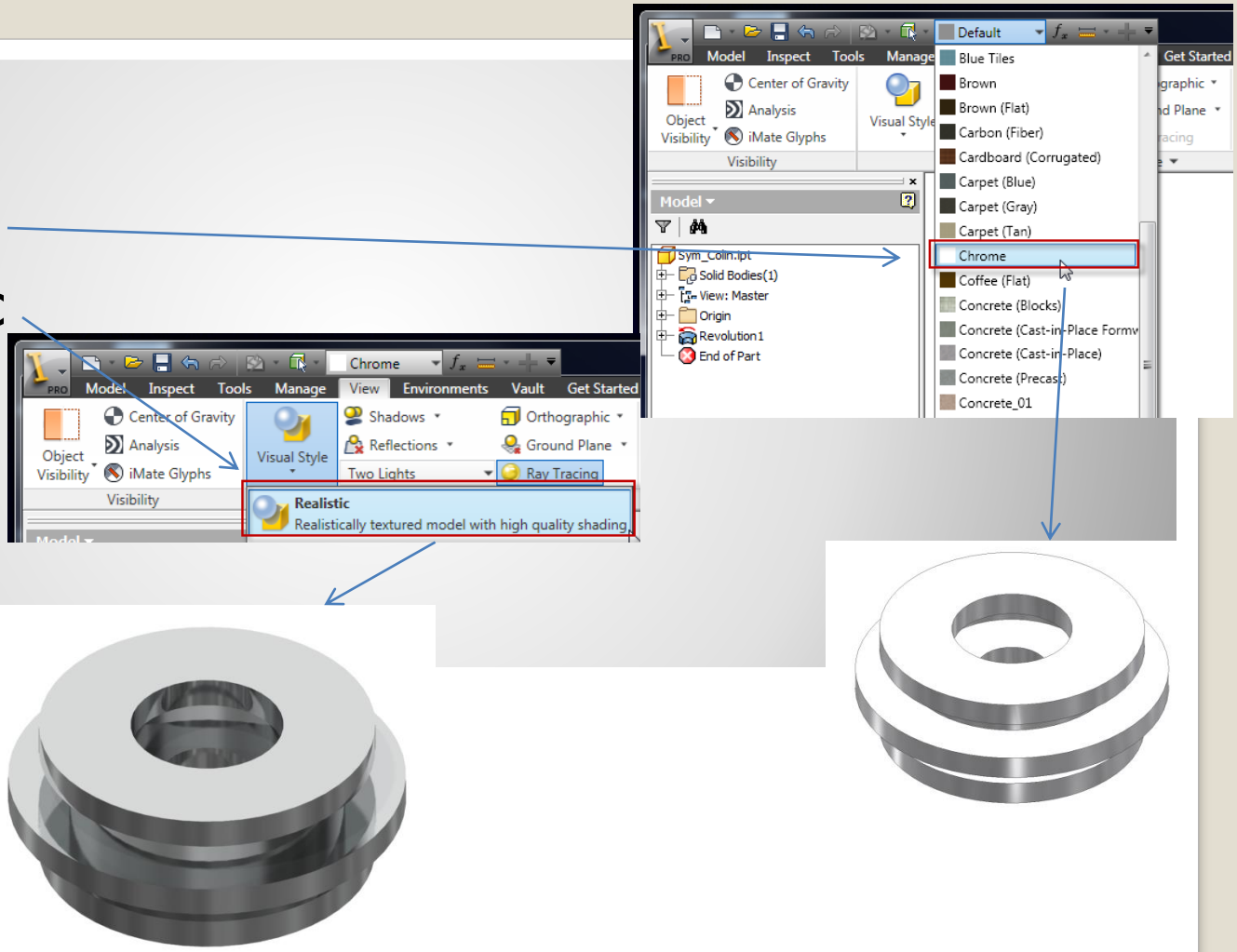
d. Material - Properties

- Pick:
  - ☑ Sym_Colin.ipt iProperties
  - ☑ iProperties... <rmb>
  - ☑ Physical
  - ☑ Steel, Mild
- Properties
  - Density
  - General
  - Inertial



d. Material - Properties

- Pick:
  - ☑ Chrome
  - ☑ Realistic



d. Appearance – Visual Style