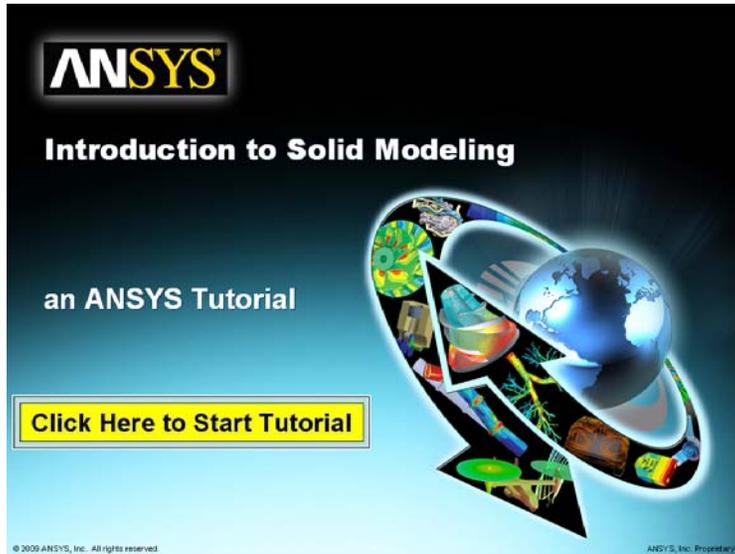


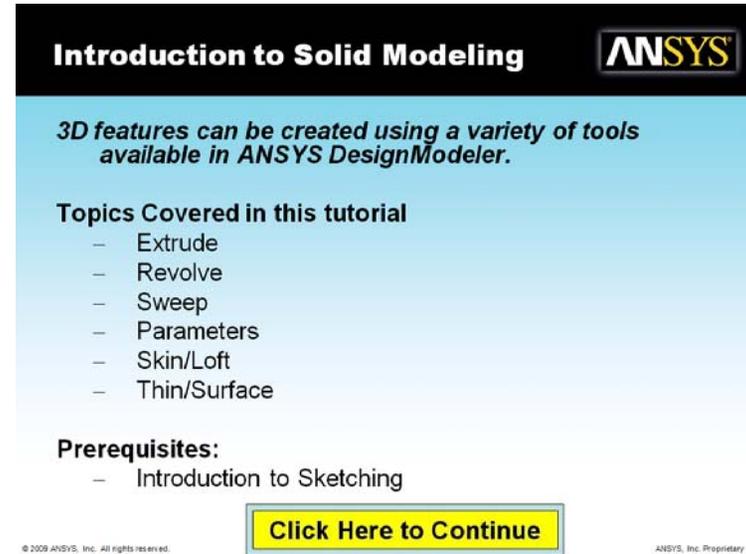
Design Modeler - 3D Bodies



ANSYS
Introduction to Solid Modeling
an ANSYS Tutorial

[Click Here to Start Tutorial](#)

© 2009 ANSYS, Inc. All rights reserved. ANSYS, Inc. Proprietary



Introduction to Solid Modeling **ANSYS**

3D features can be created using a variety of tools available in ANSYS DesignModeler.

Topics Covered in this tutorial

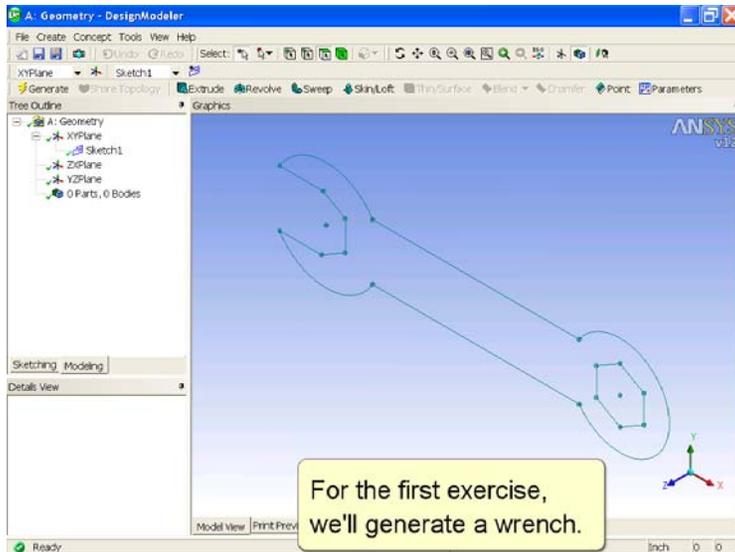
- Extrude
- Revolve
- Sweep
- Parameters
- Skin/Loft
- Thin/Surface

Prerequisites:

- Introduction to Sketching

[Click Here to Continue](#)

© 2009 ANSYS, Inc. All rights reserved. ANSYS, Inc. Proprietary



Geometry - DesignModeler

File Create Concept Tools View Help

XYPlane Sketch1

Generate Share Topology Extrude Revolve Sweep Skin/Loft Thin/Surface Blend Chamfer Point Parameters

Tree Outline

- A: Geometry
 - XYPlane
 - Sketch1
 - ZPlane
 - VZPlane
 - 0 Parts, 0 Bodies

Sketching Modeling

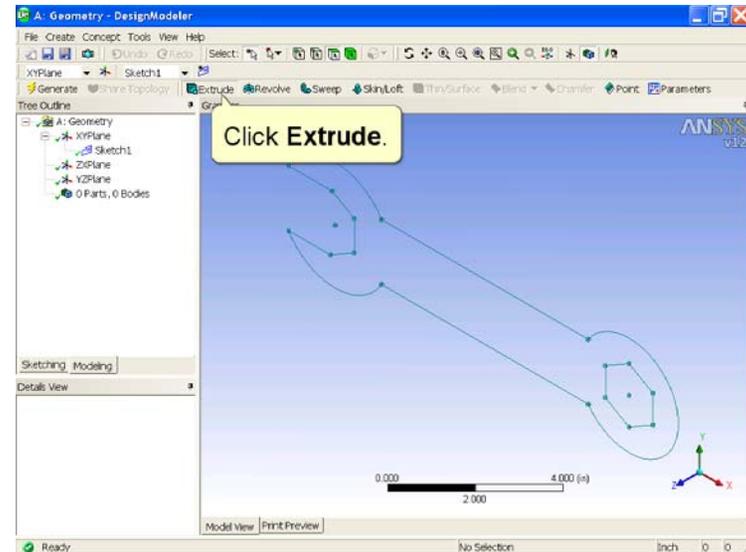
Details View

Model View Print Preview

Ready

Inch 0 0

For the first exercise, we'll generate a wrench.



Geometry - DesignModeler

File Create Concept Tools View Help

XYPlane Sketch1

Generate Share Topology Extrude Revolve Sweep Skin/Loft Thin/Surface Blend Chamfer Point Parameters

Tree Outline

- A: Geometry
 - XYPlane
 - Sketch1
 - ZPlane
 - VZPlane
 - 0 Parts, 0 Bodies

Sketching Modeling

Details View

Model View Print Preview

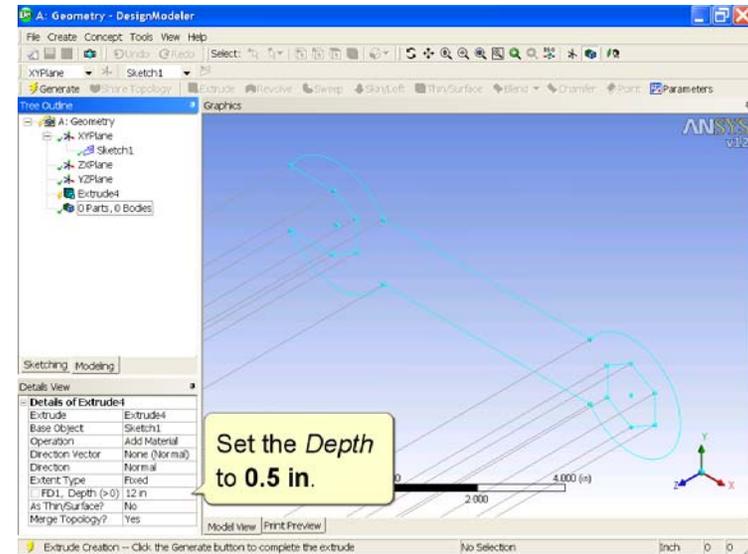
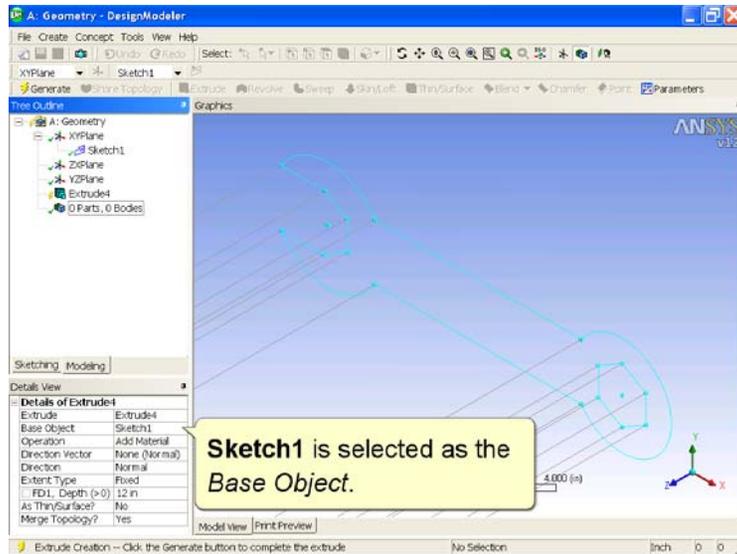
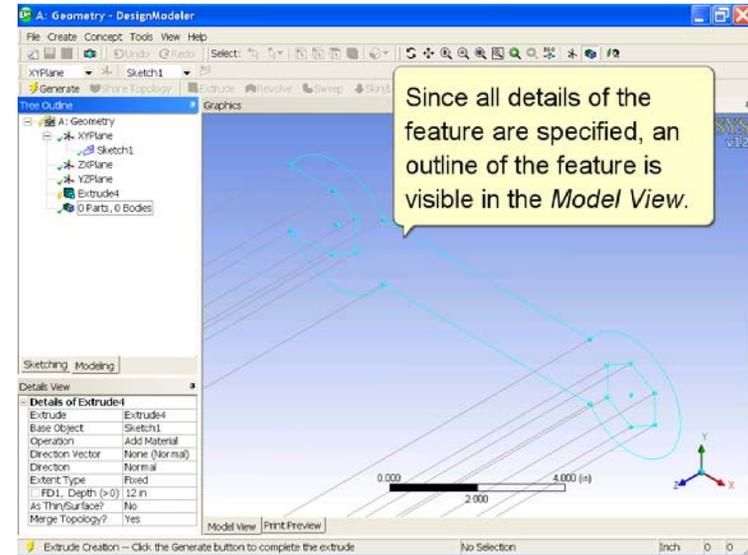
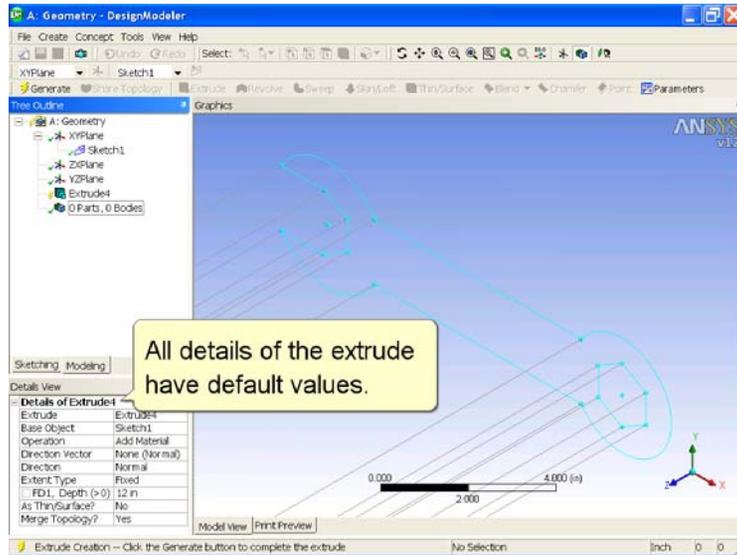
Ready

Inch 0 0

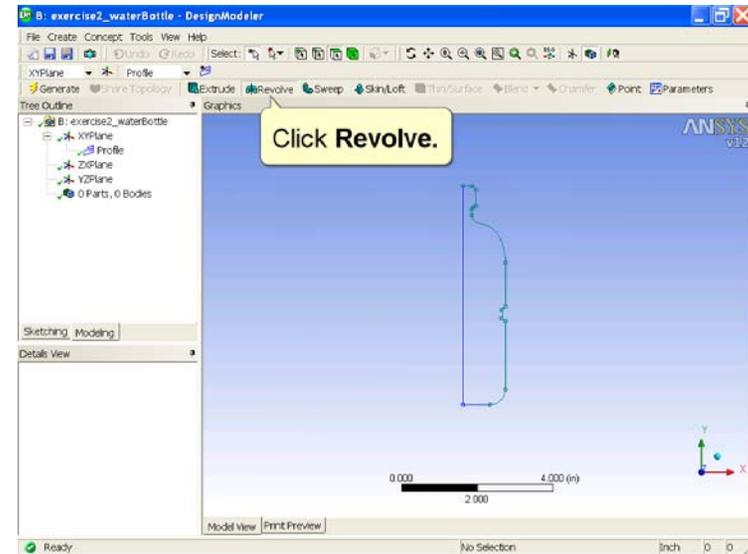
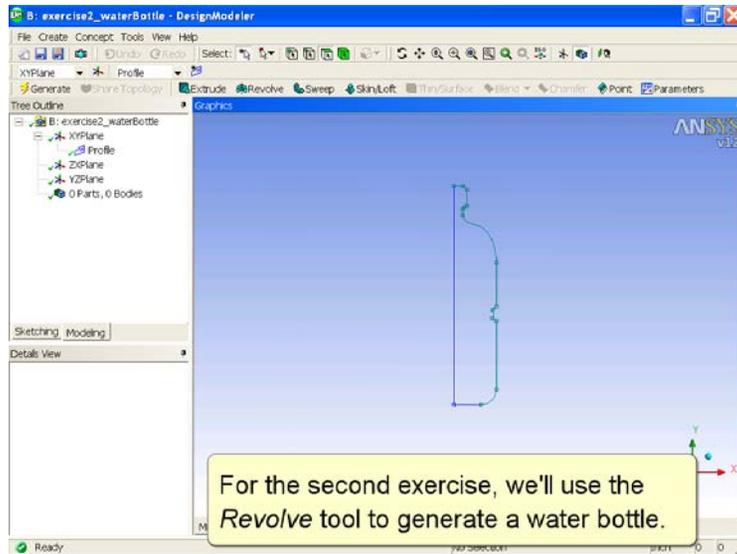
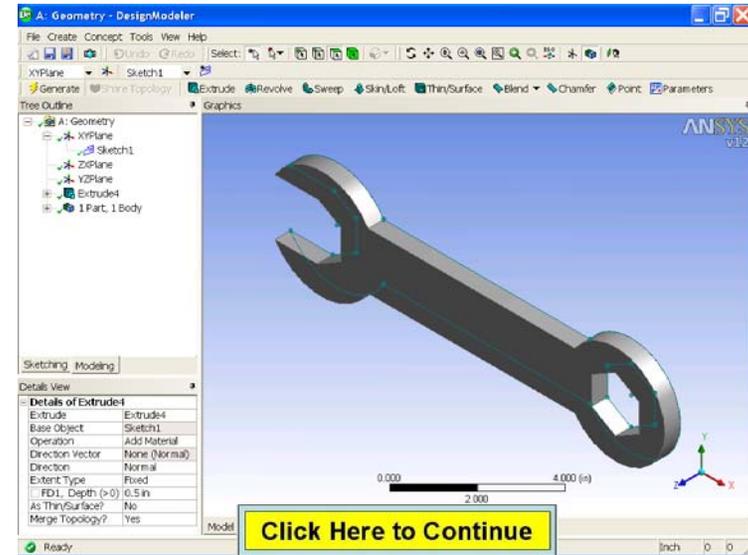
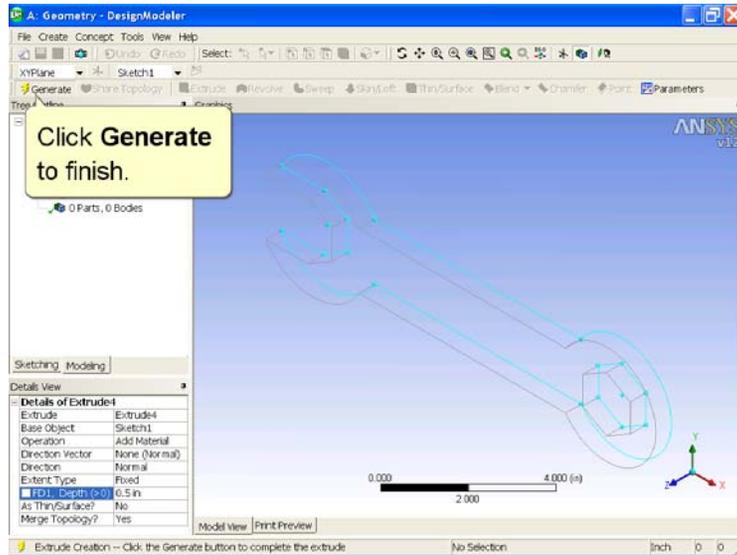
Click Extrude.

0.000 4.000 (in) 2.000

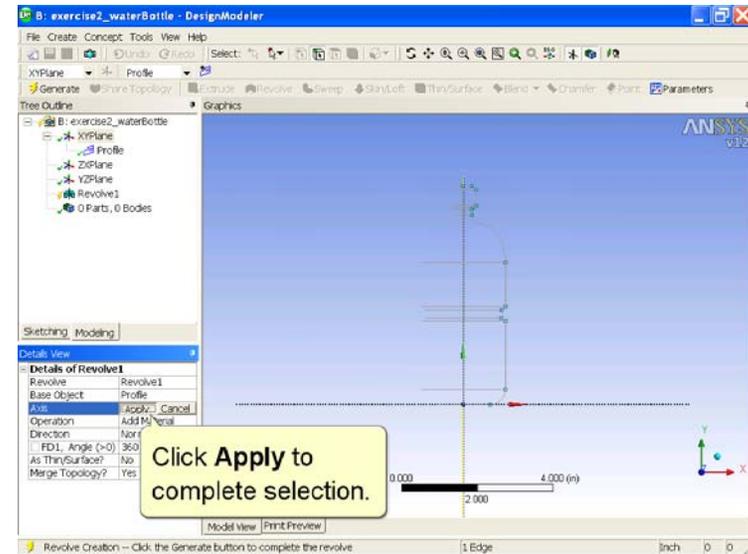
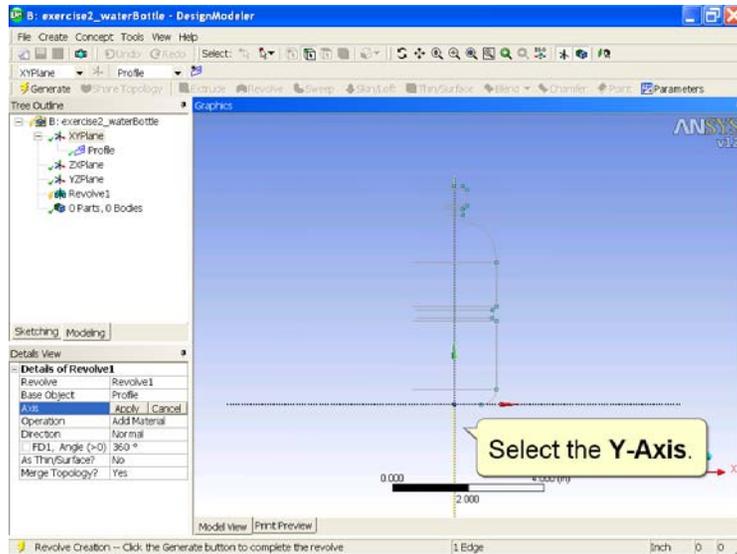
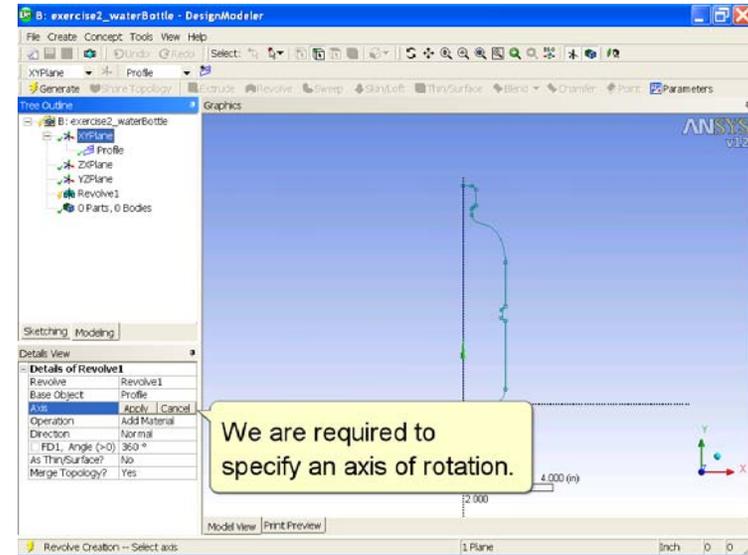
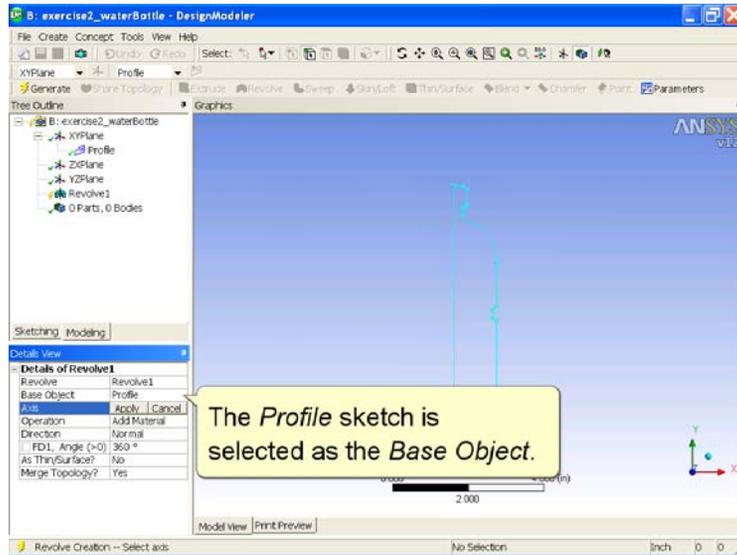
Design Modeler - 3D Bodies



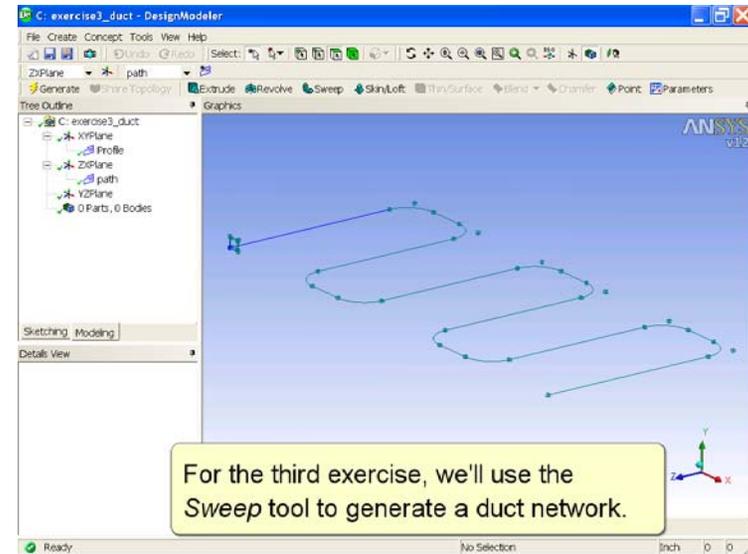
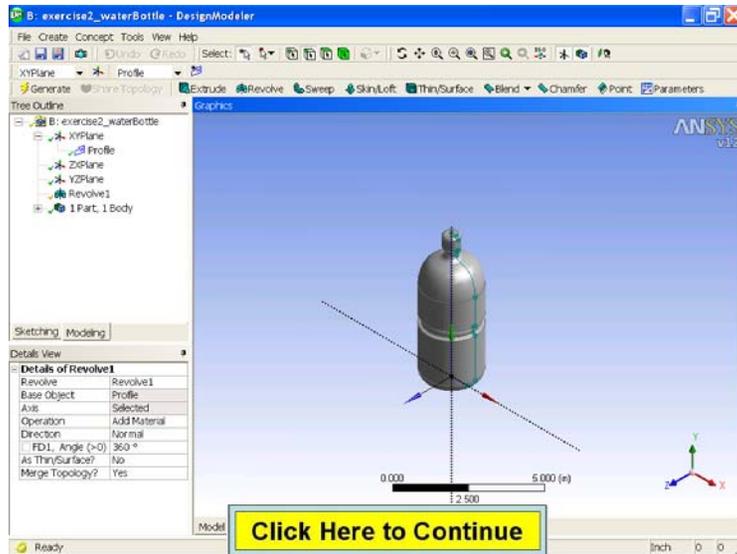
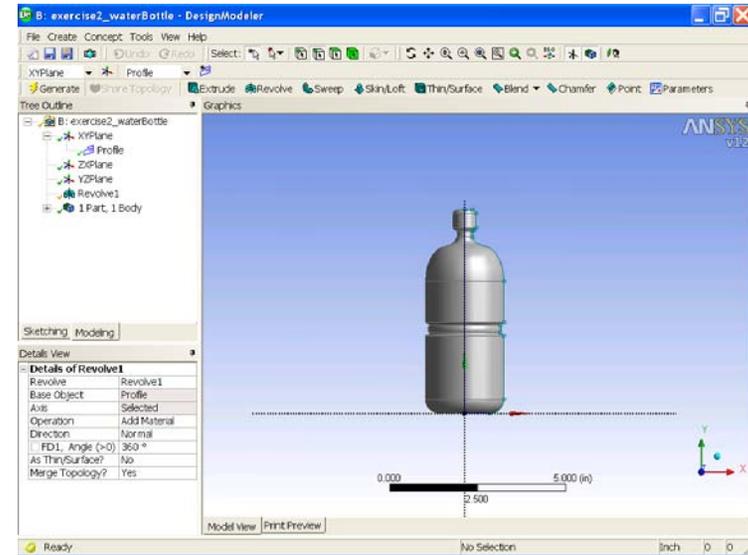
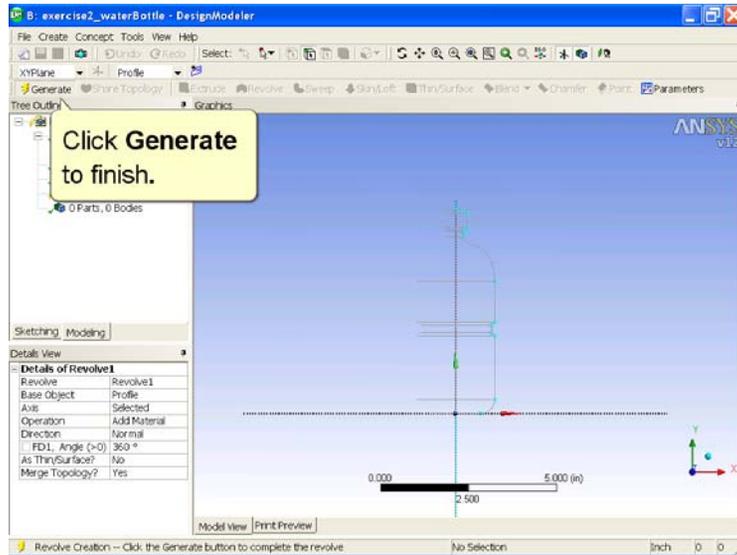
Design Modeler - 3D Bodies



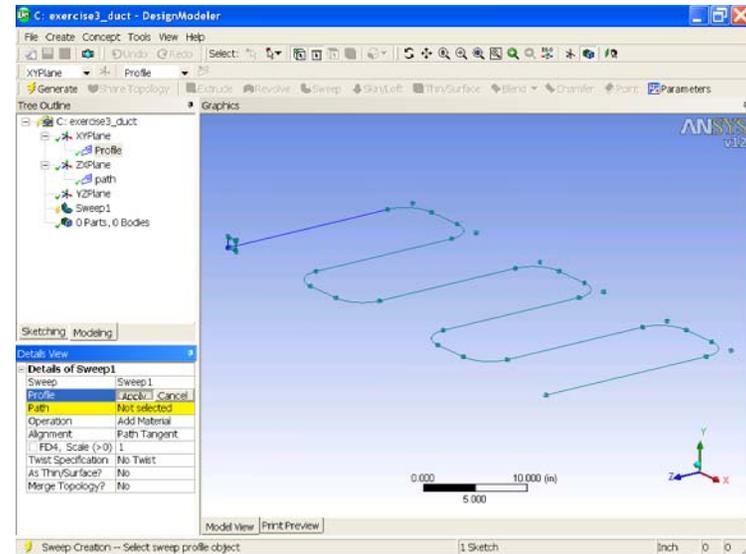
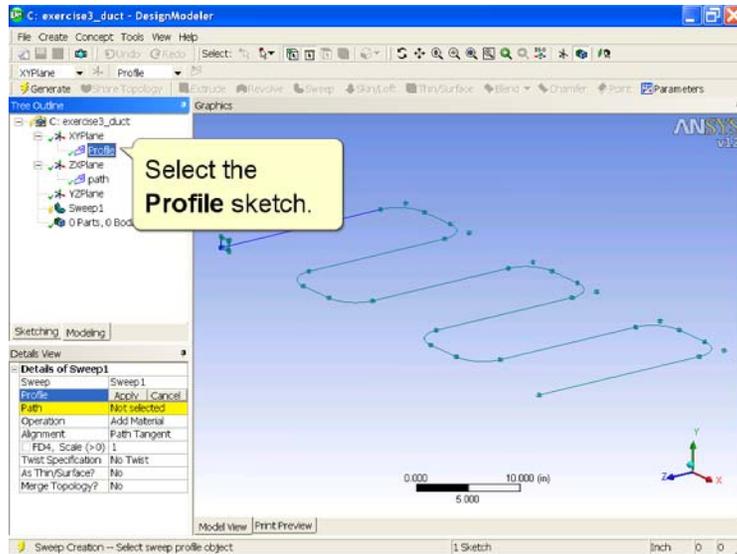
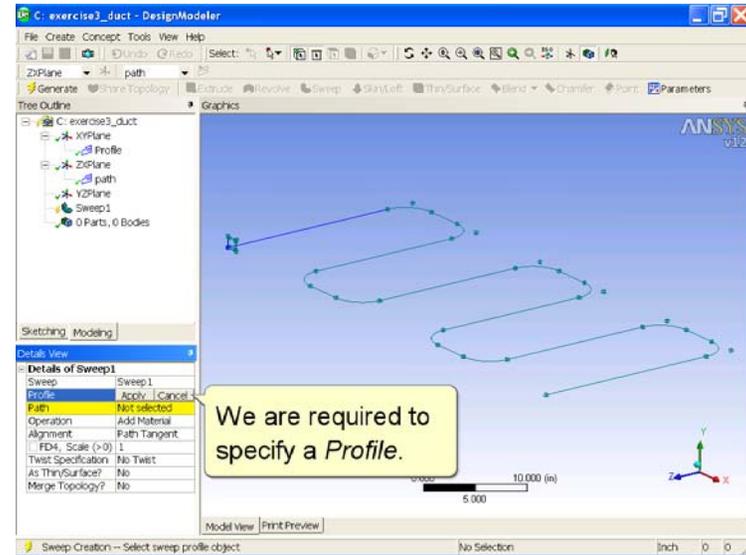
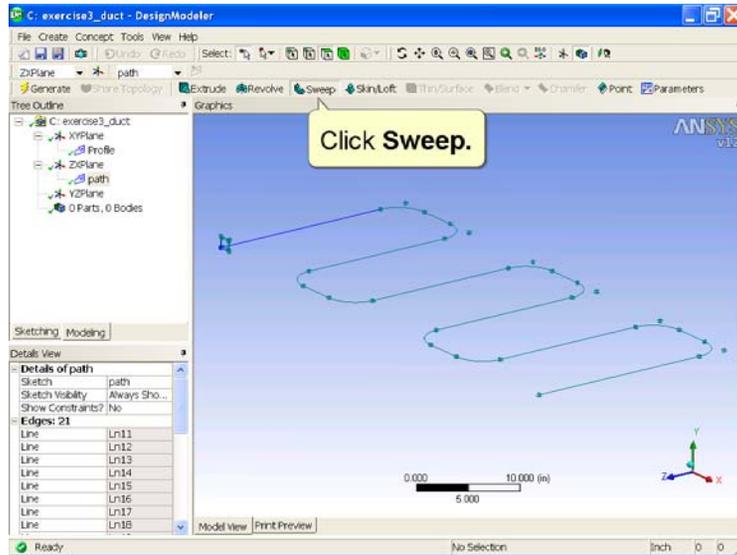
Design Modeler - 3D Bodies



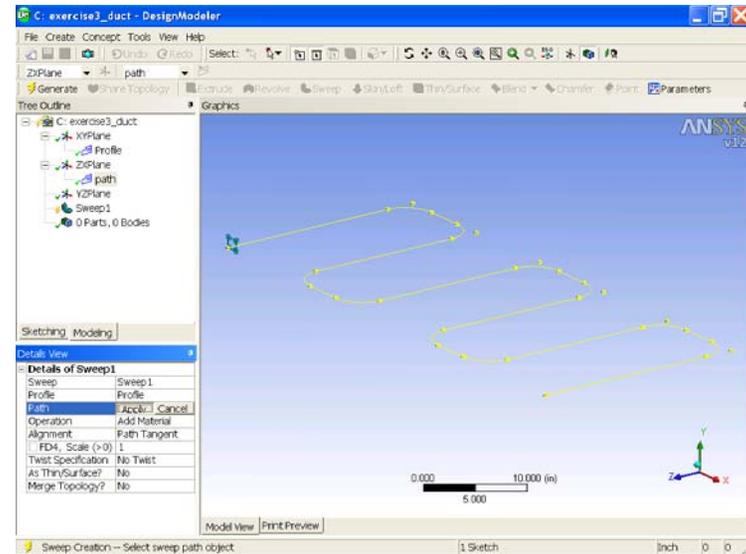
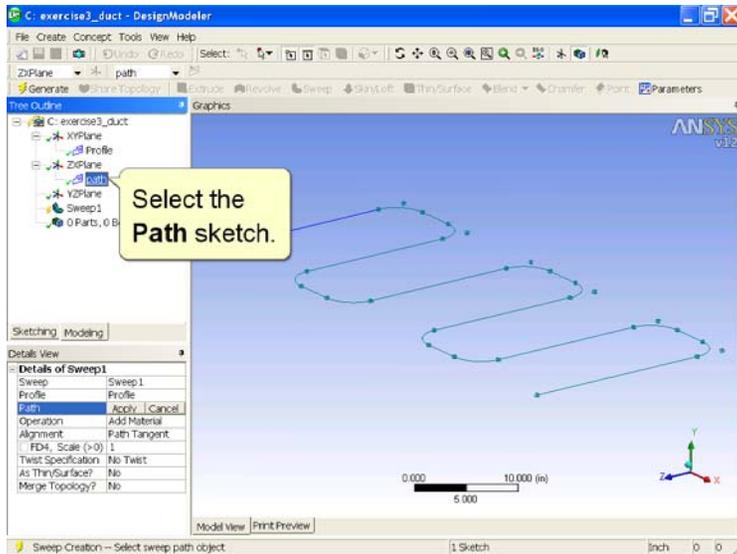
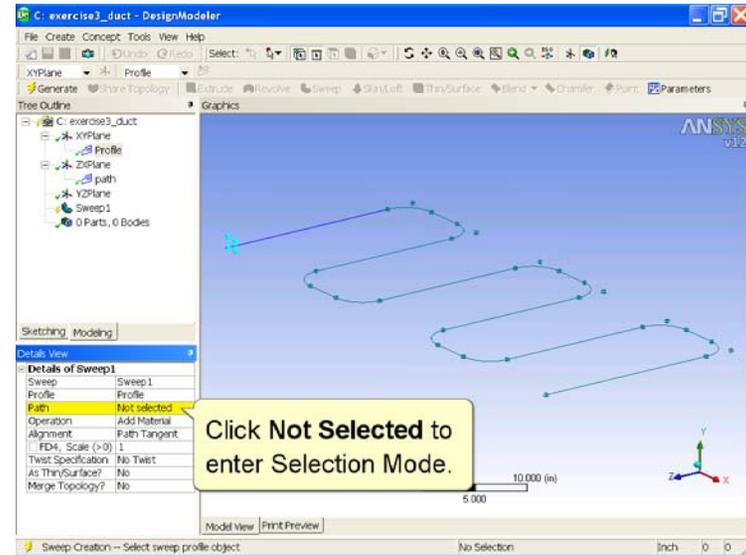
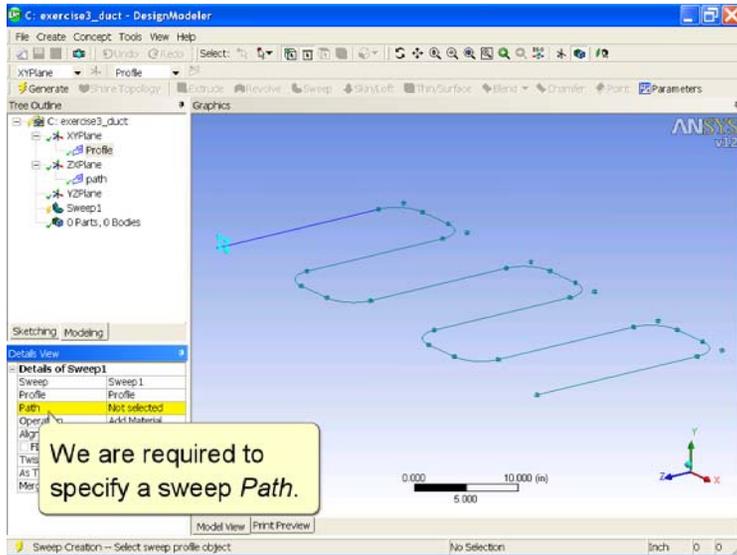
Design Modeler - 3D Bodies



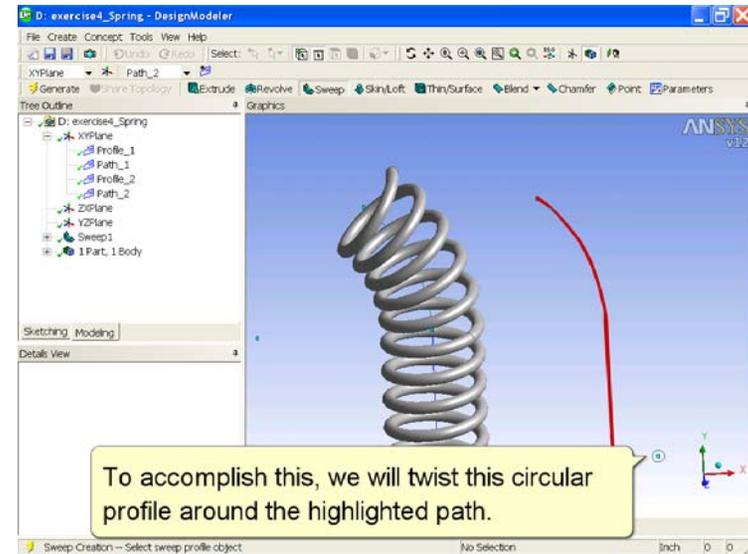
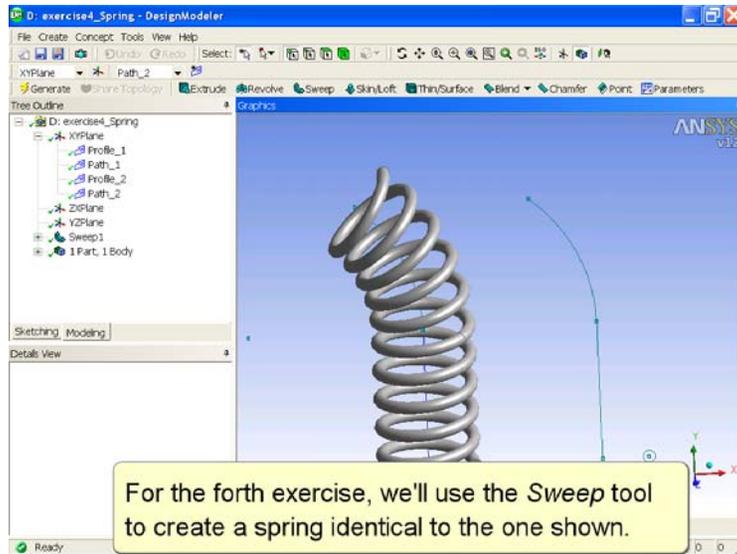
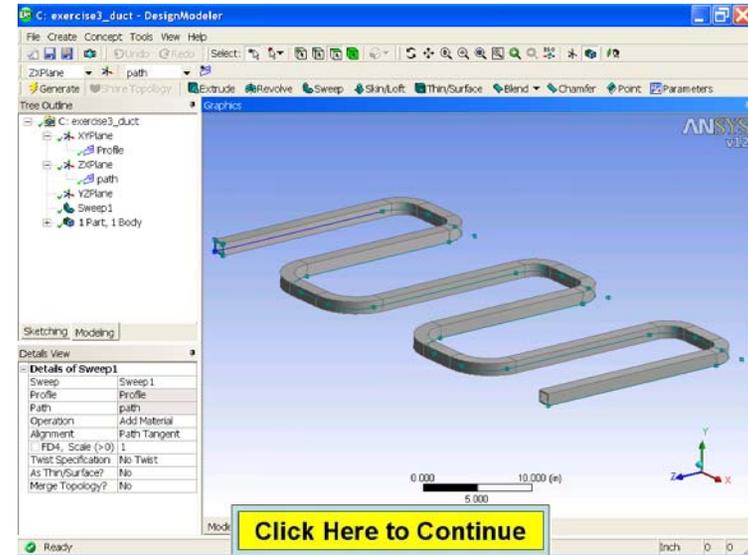
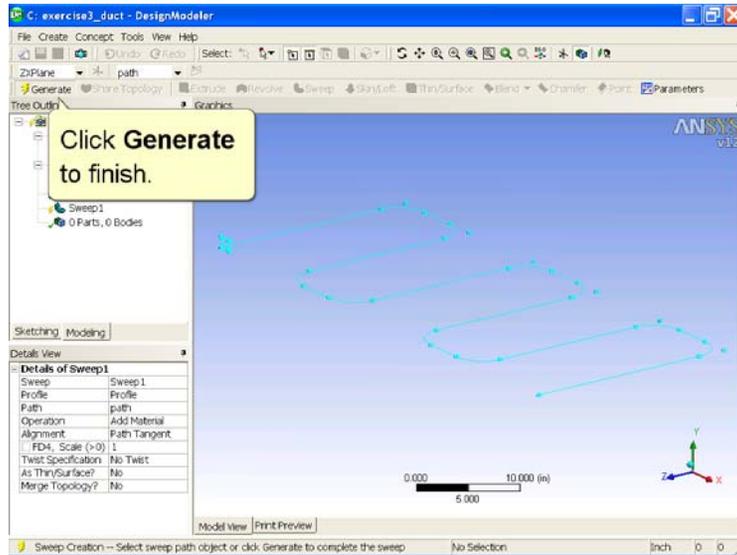
Design Modeler - 3D Bodies



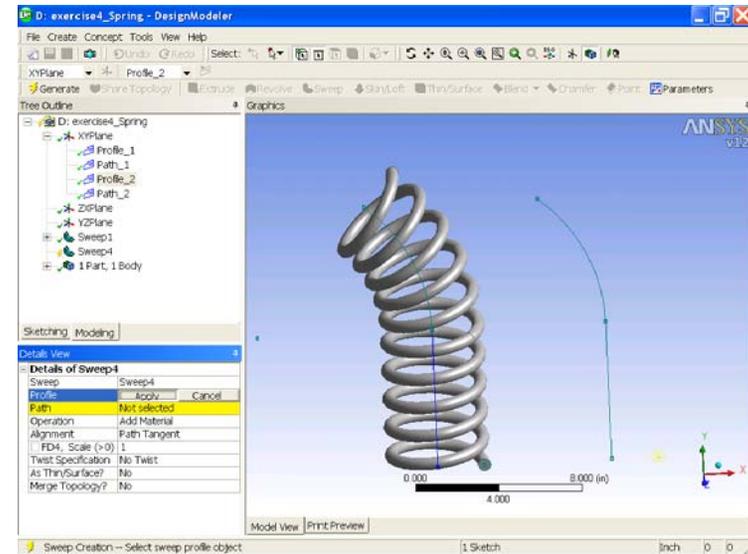
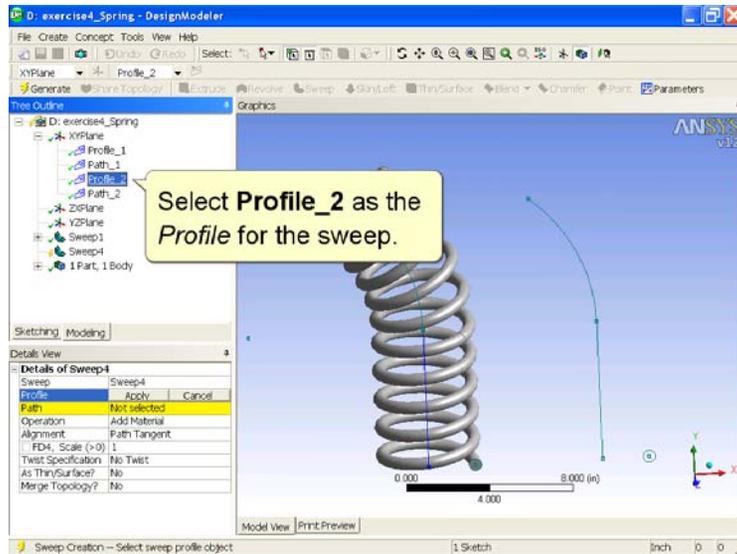
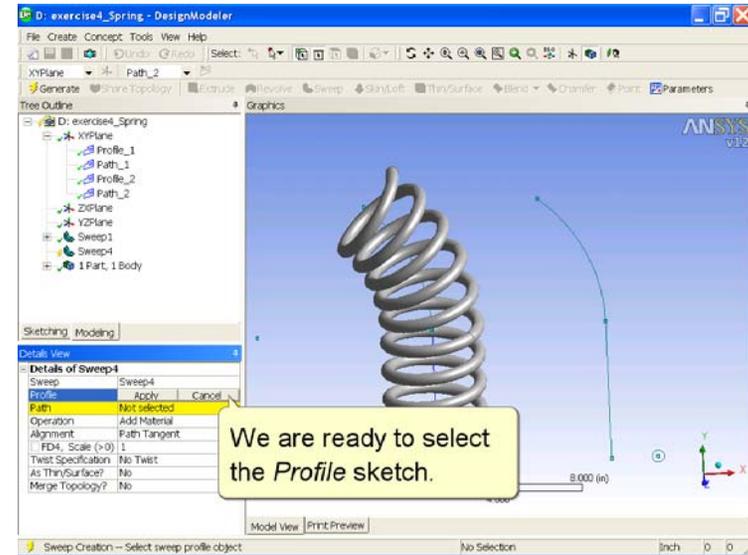
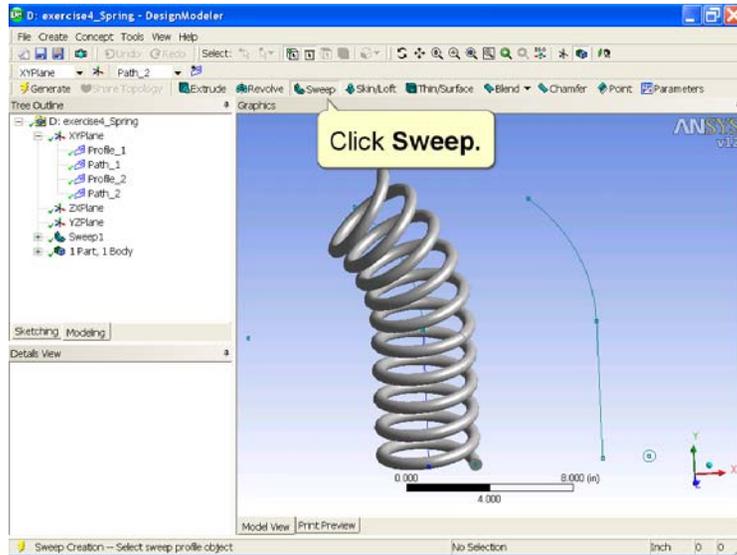
Design Modeler - 3D Bodies



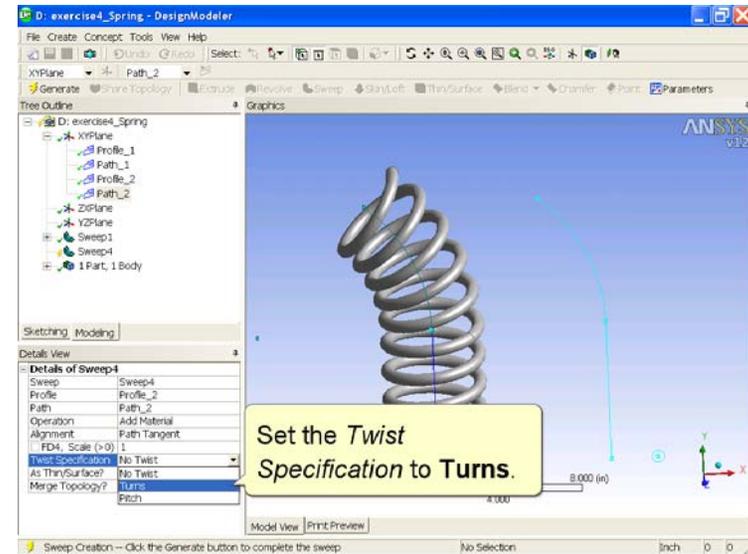
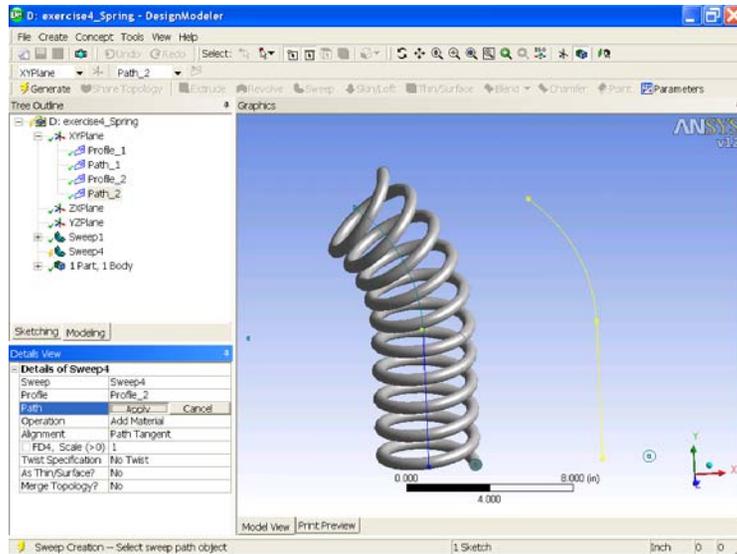
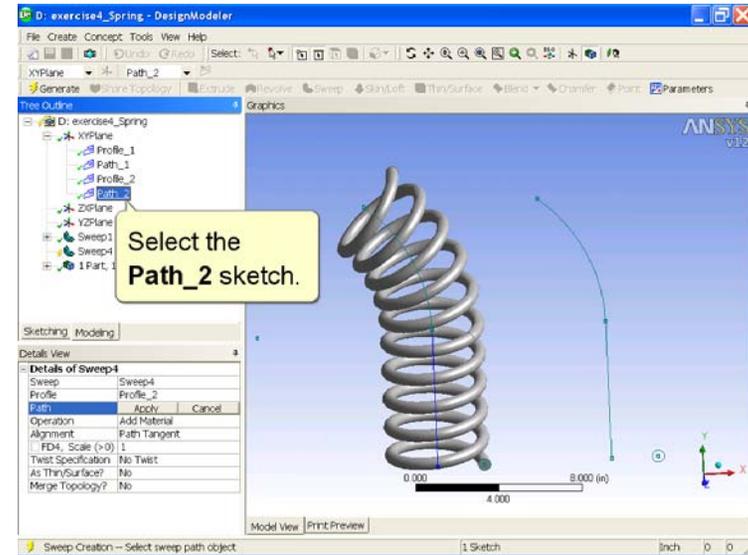
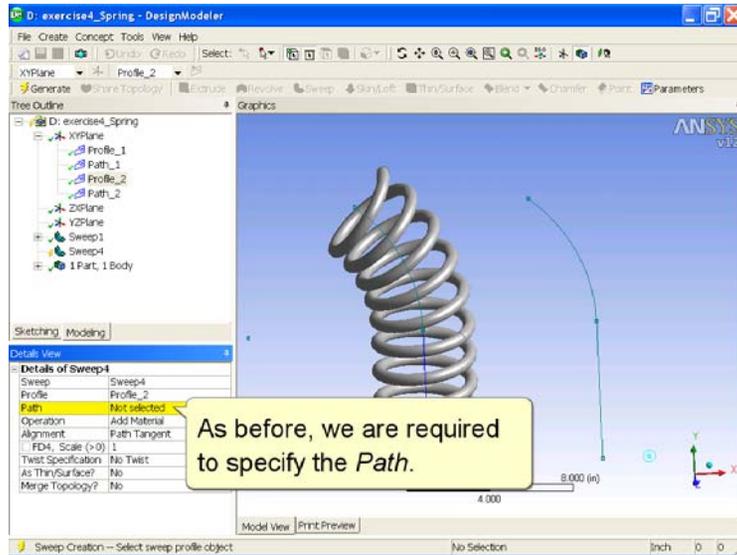
Design Modeler - 3D Bodies



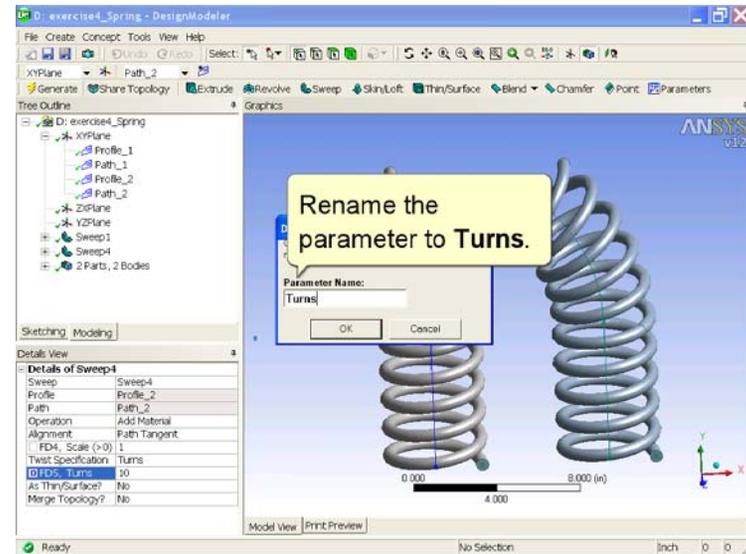
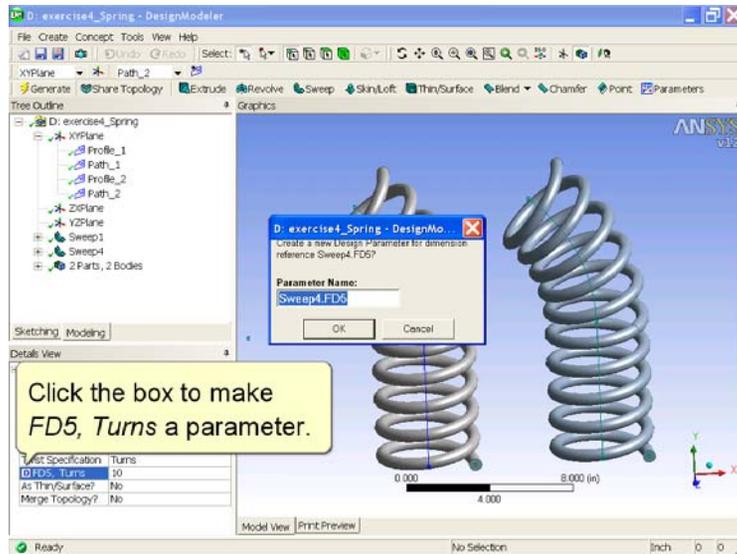
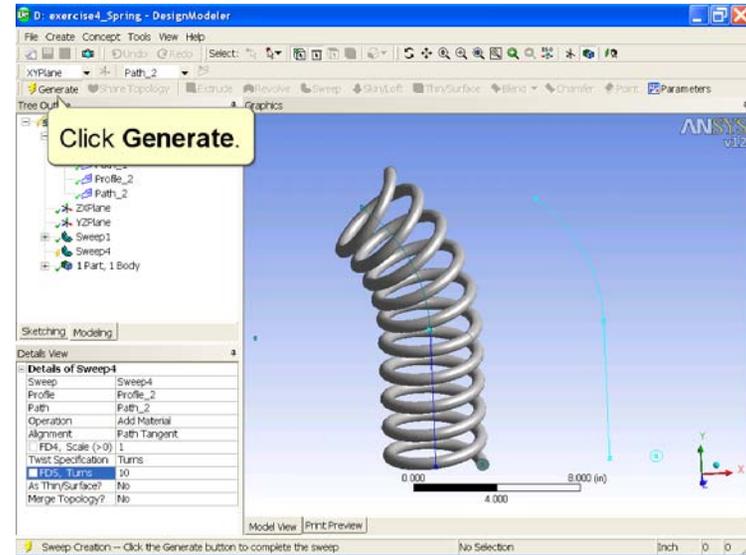
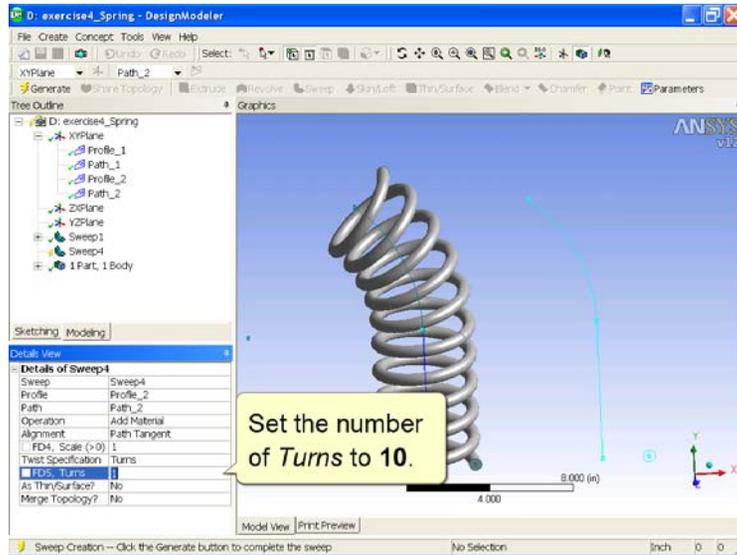
Design Modeler - 3D Bodies



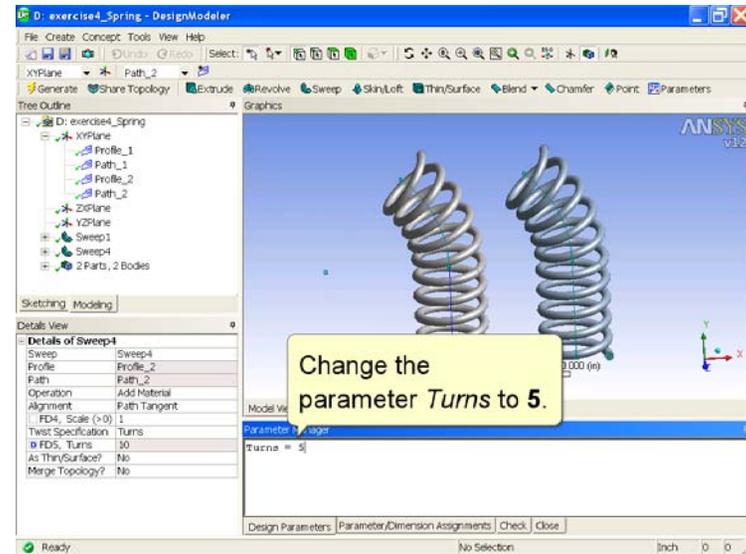
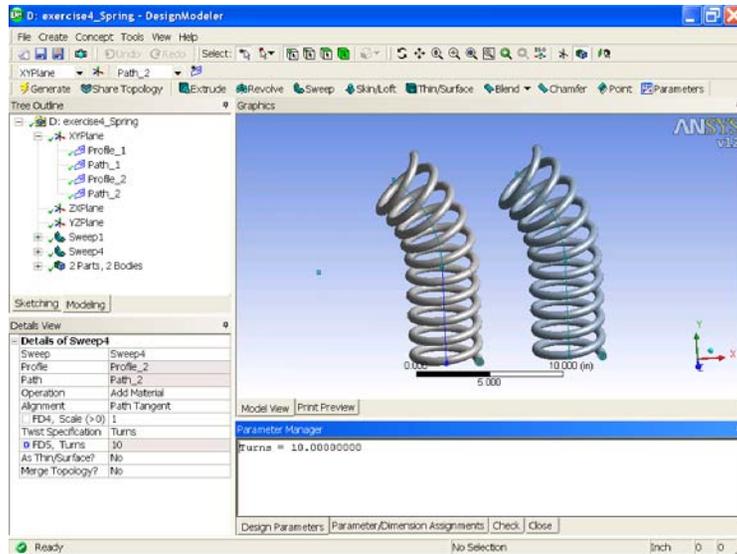
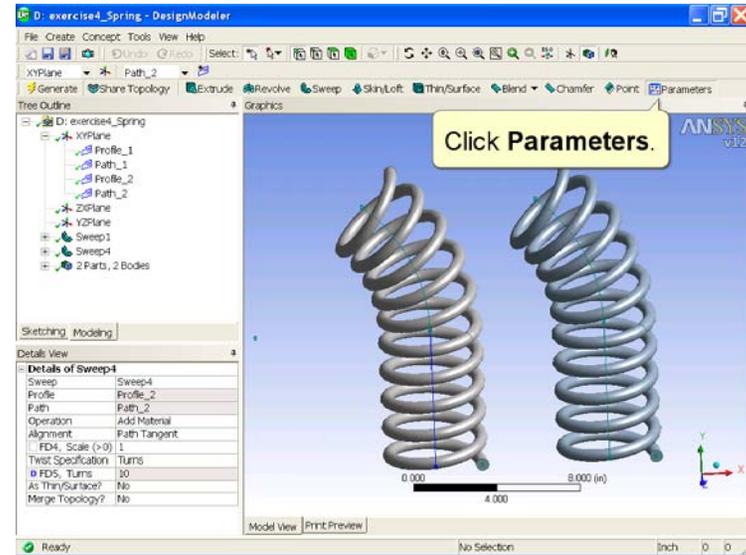
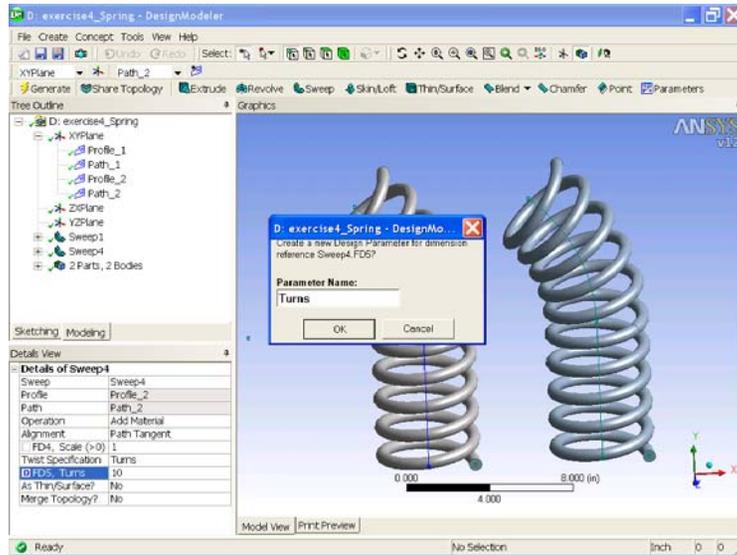
Design Modeler - 3D Bodies



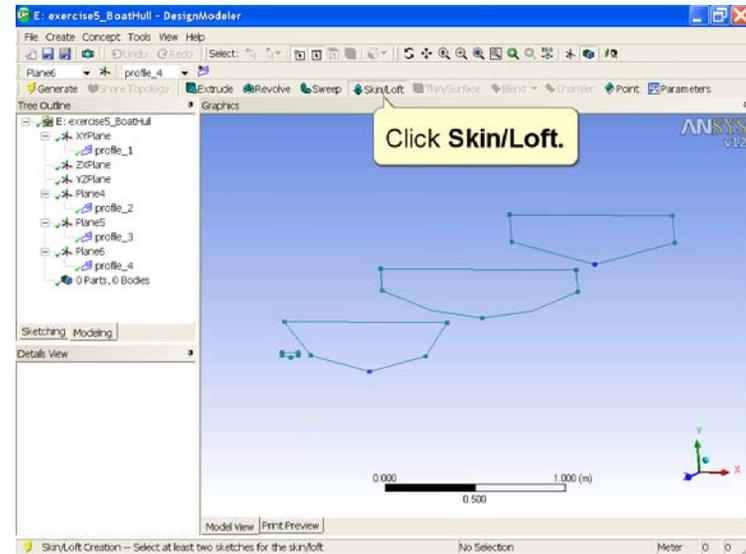
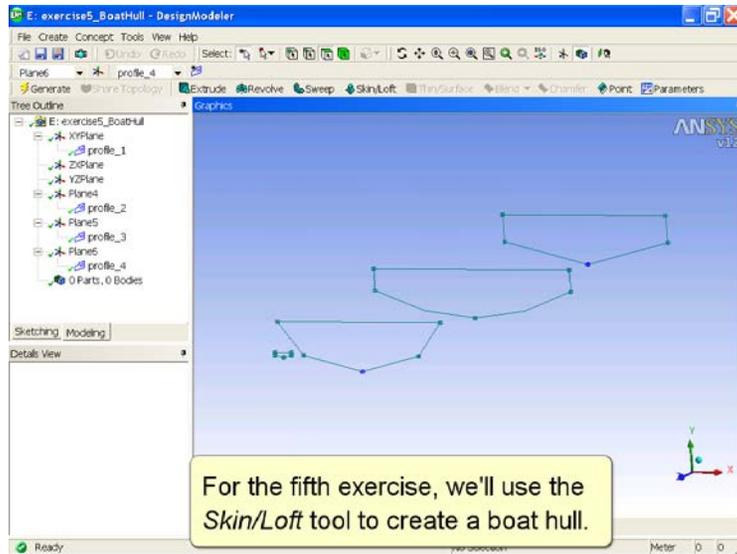
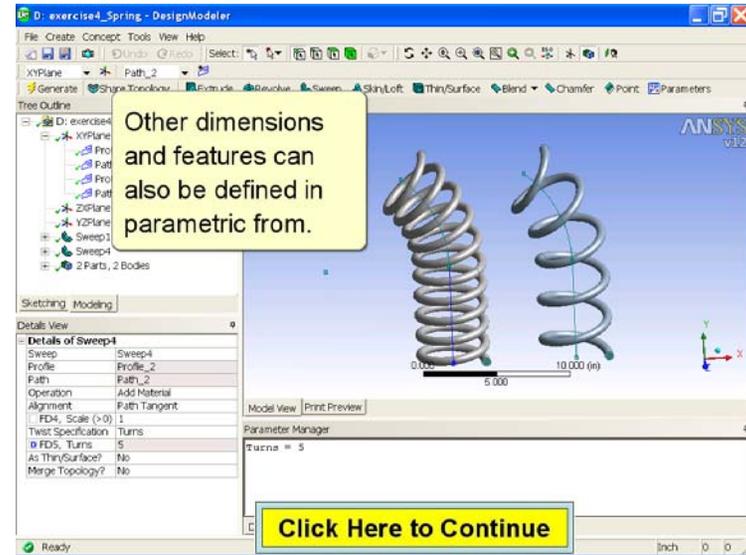
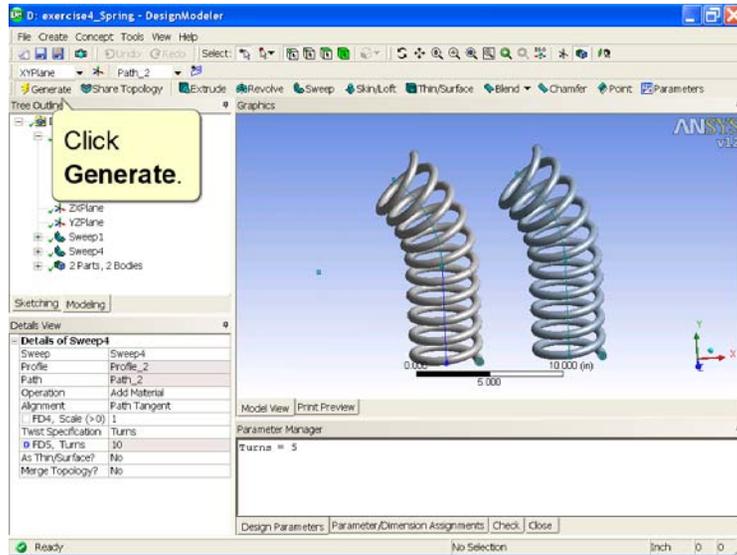
Design Modeler - 3D Bodies



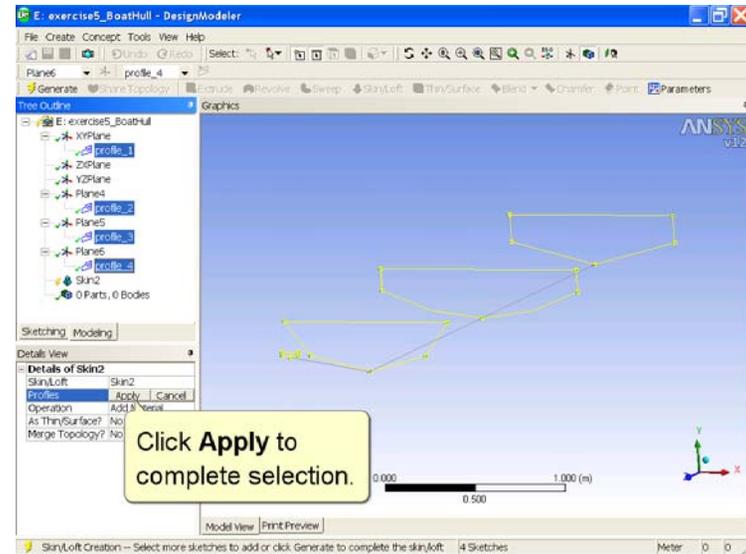
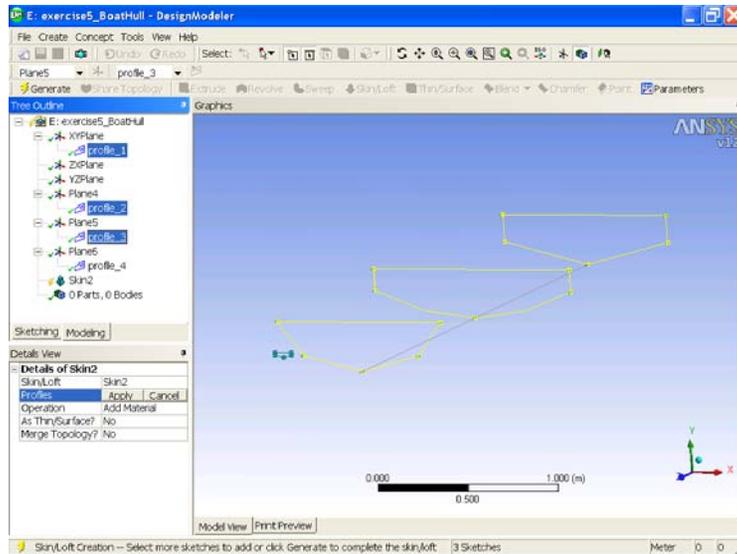
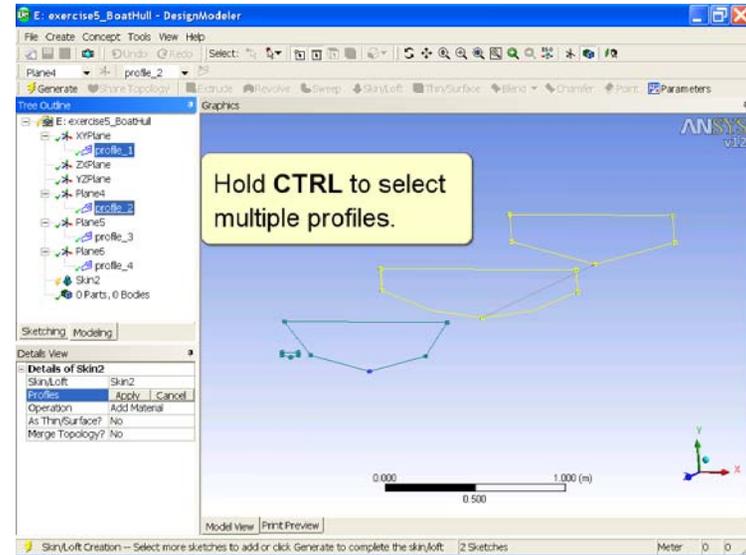
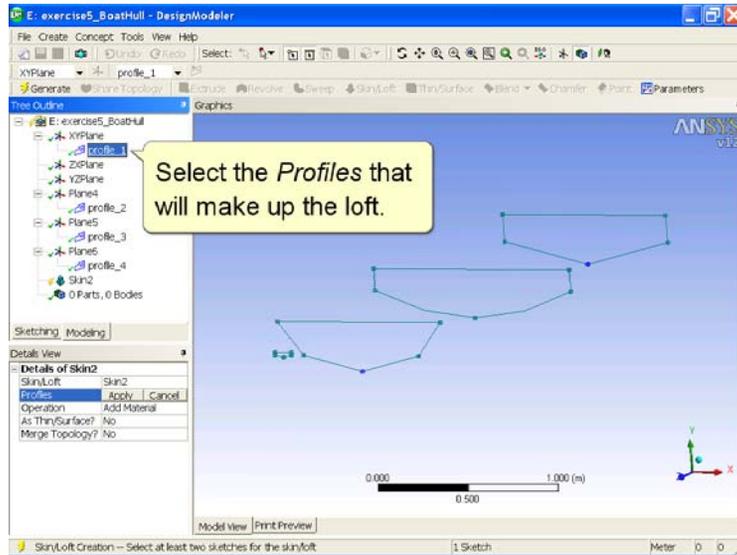
Design Modeler - 3D Bodies



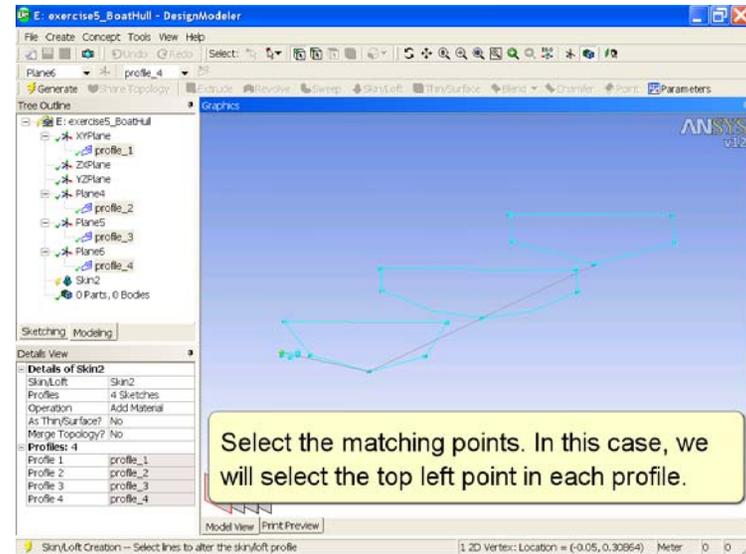
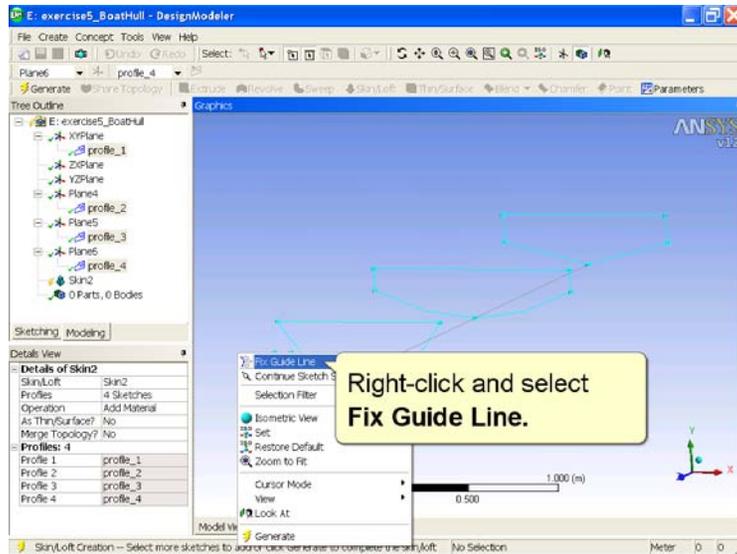
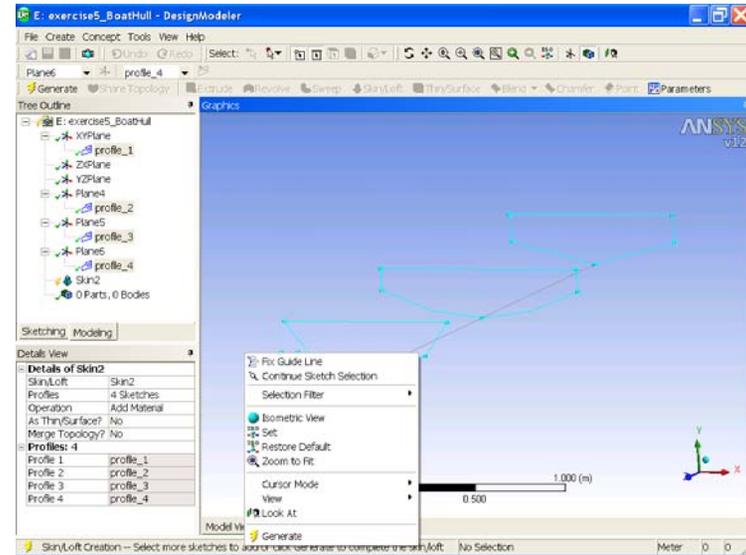
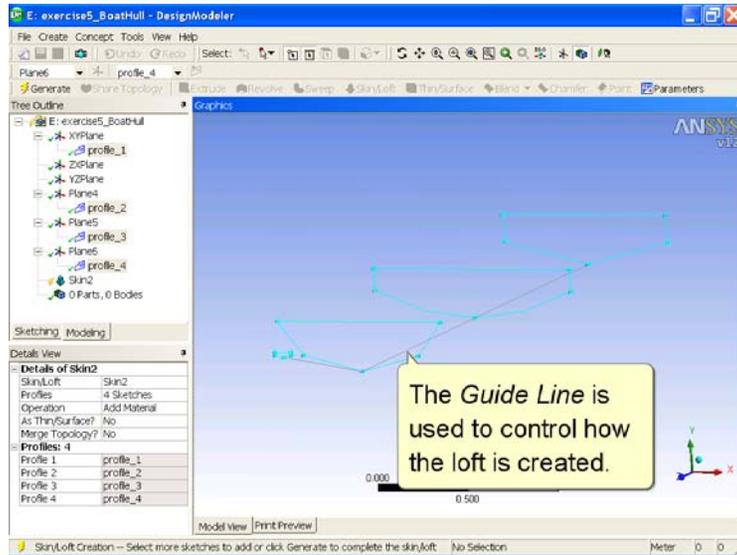
Design Modeler - 3D Bodies



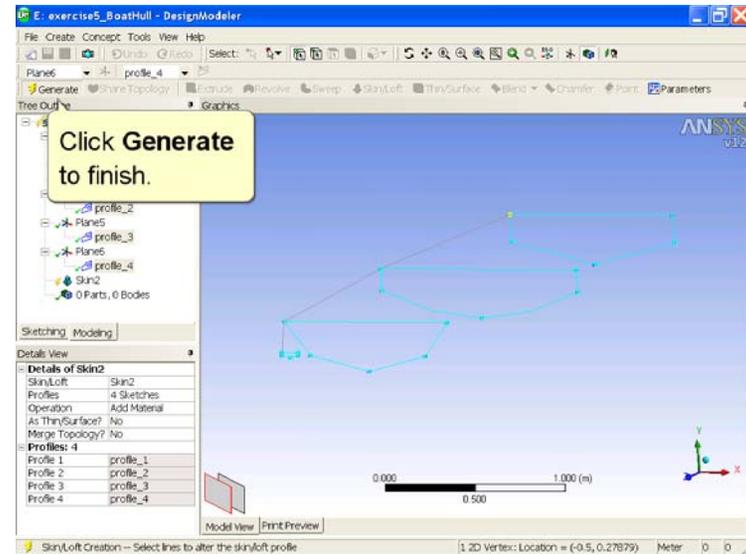
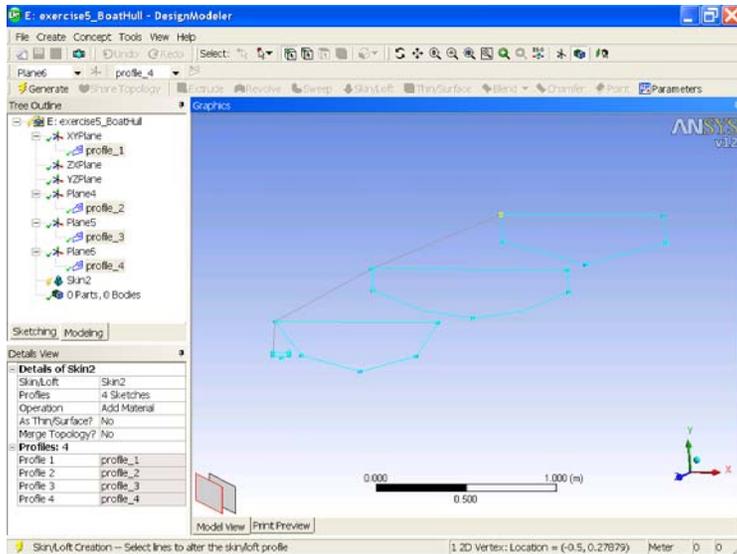
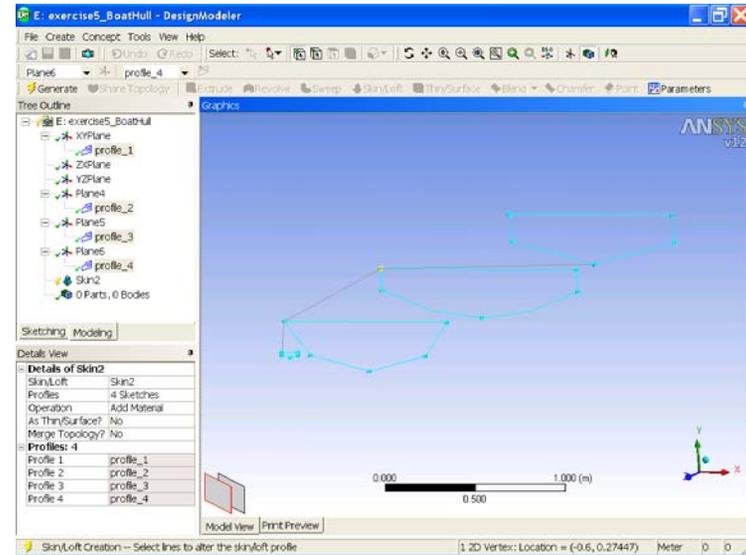
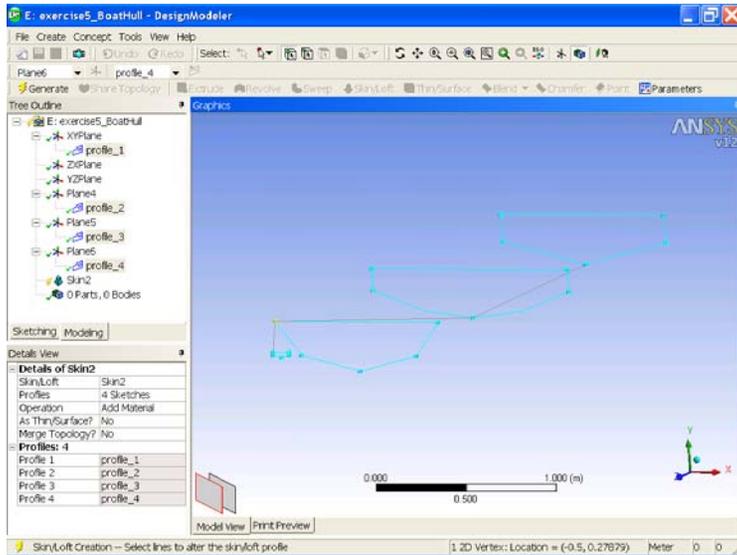
Design Modeler - 3D Bodies



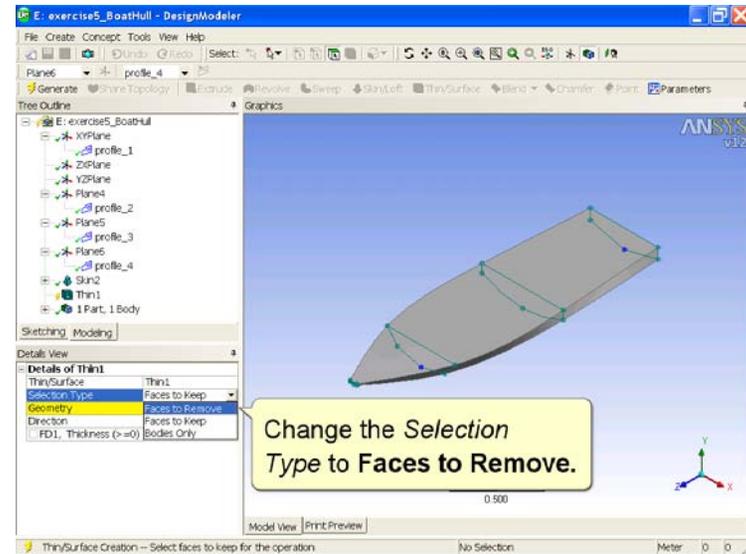
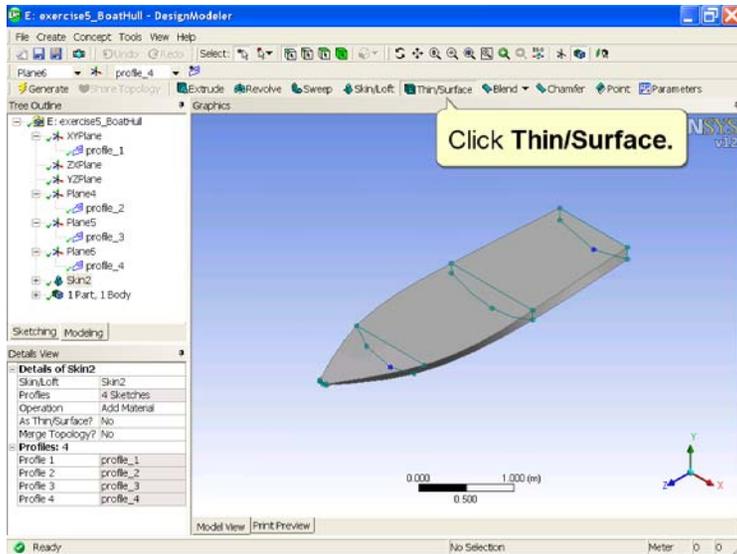
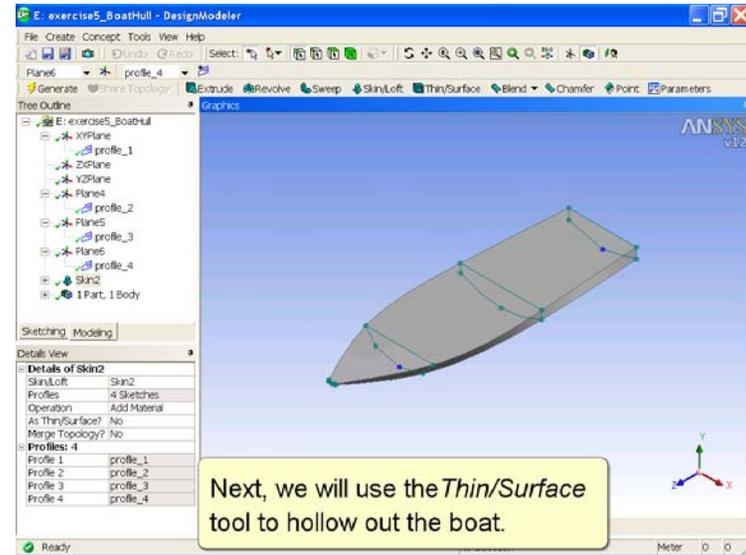
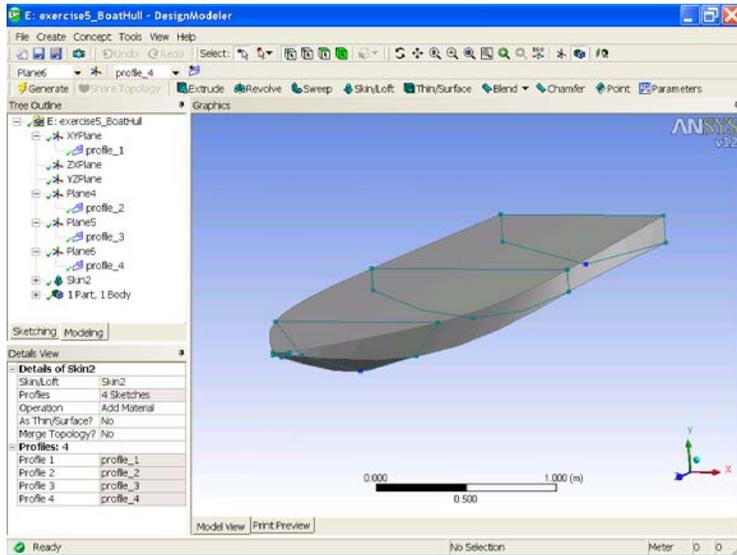
Design Modeler - 3D Bodies



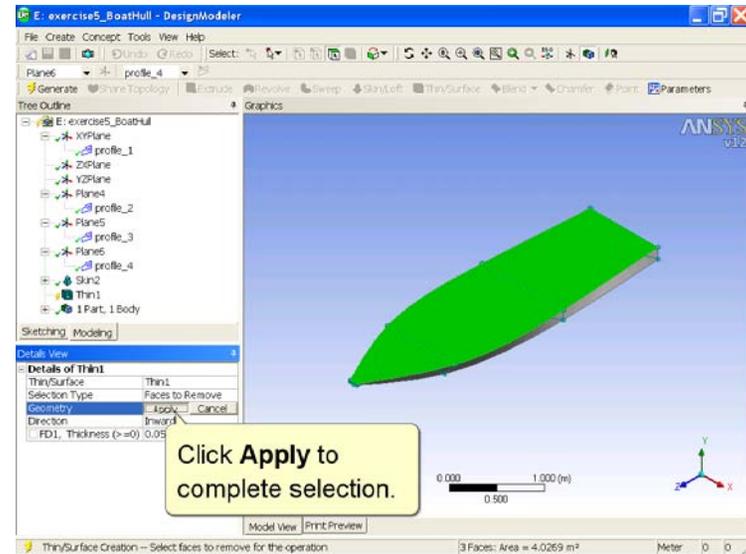
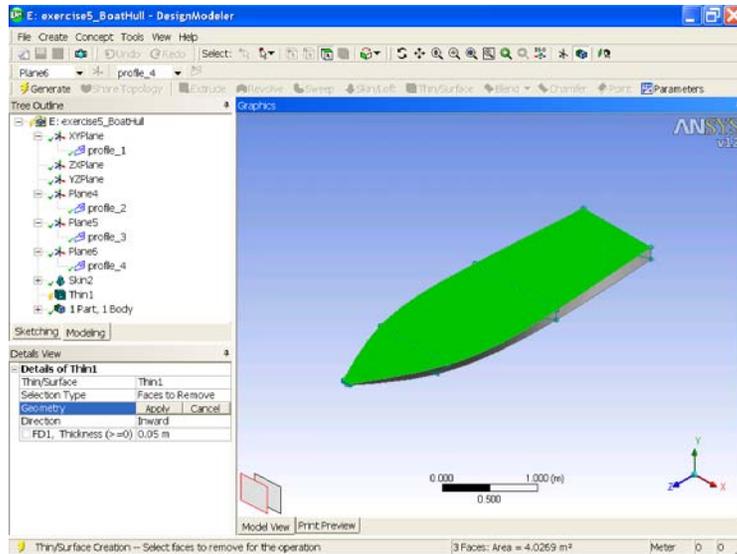
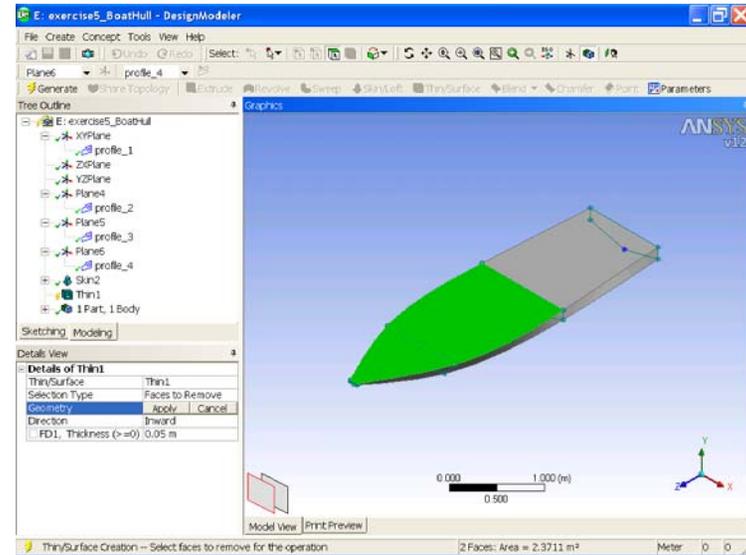
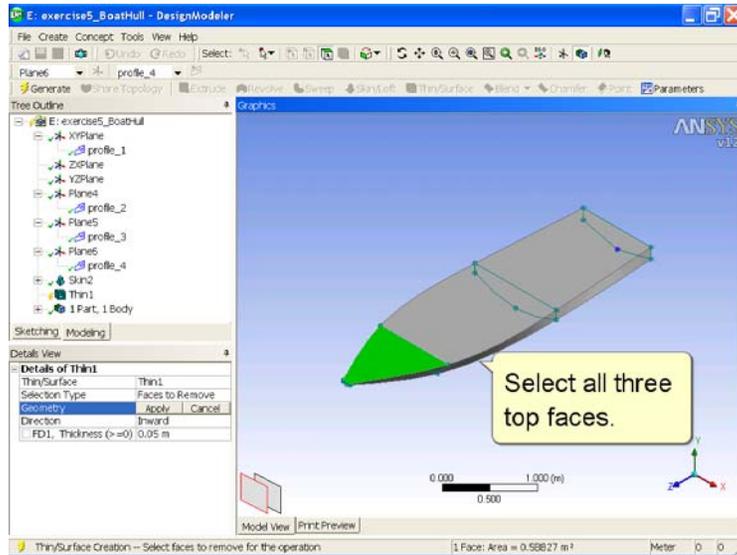
Design Modeler - 3D Bodies



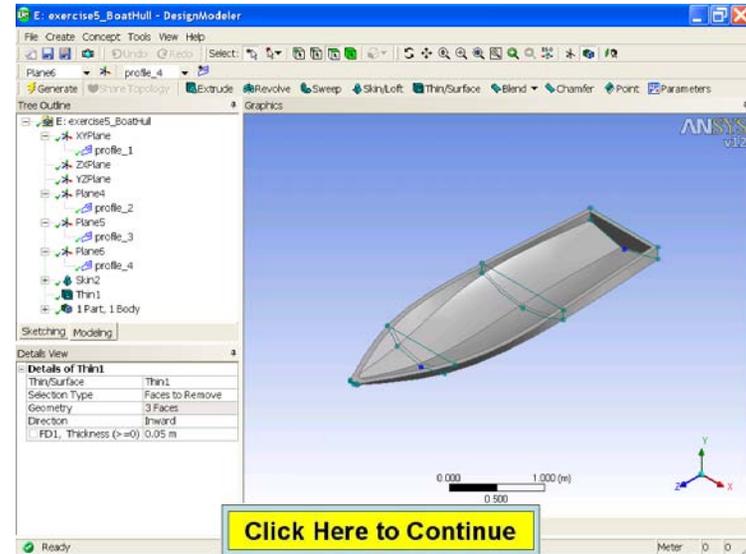
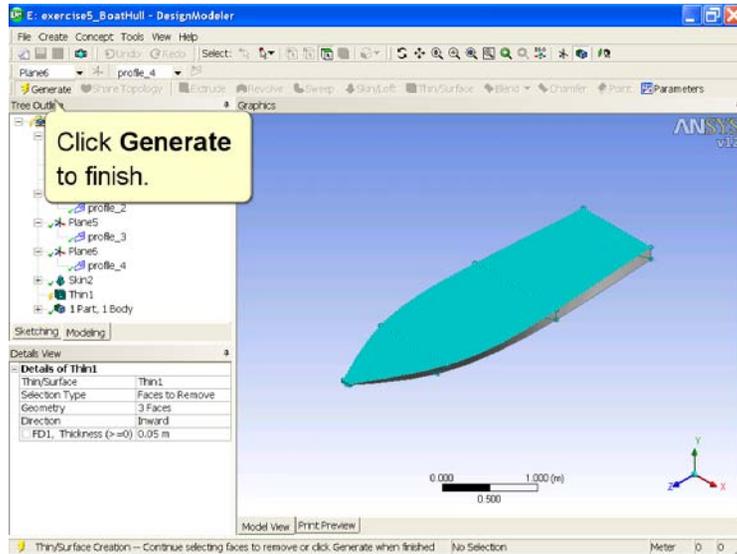
Design Modeler - 3D Bodies



Design Modeler - 3D Bodies



Design Modeler - 3D Bodies



What Have We Learned?



- How to Extrude a sketch
- How to Revolve a sketch
- How to Sweep along a path
- How to Sweep around a path
- How to set a Parameter
- How to Skin/Loft sketches
- How to Thin/Surface an object

Additional Topics of Interest

- Parameterizing DM Models