



3DXpert

CAD Exercise - 1

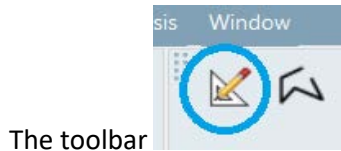
Create Sketch

Tutorial_V1 - Updated: 13,0200,1474,1051(SP2)

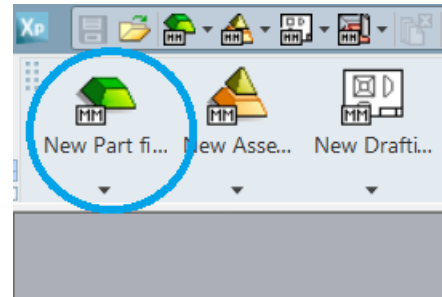
In this exercise, we will discuss 3DXpert CAD environment, specifically - the Sketcher.

We will create a simple sketch.

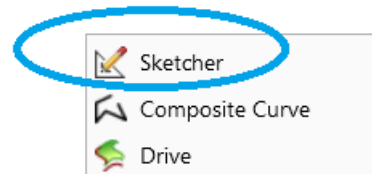
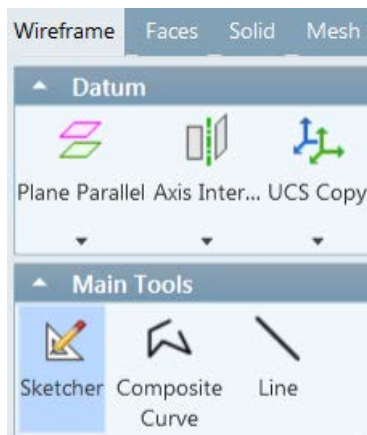
1. Launch 3DXpert and create a new Part file.
2. Enter the Sketcher by click the icon from either:



The toolbar



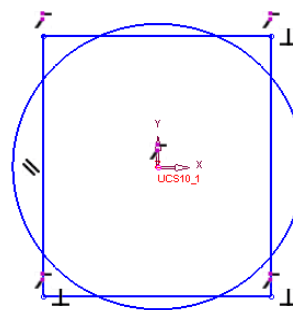
The Wireframe Menu:



Or right mouse click the display area to invoke the

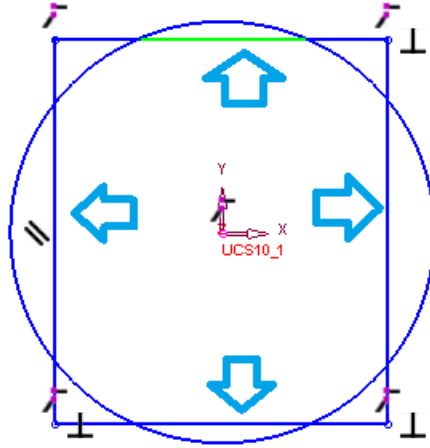
Press the middle mouse button to approve. This will set the default sketch plane (on the XY plane) and the vertical Sketcher tool bar will load.

3. Create a circle and then a rectangle.
Press the Circle icon, pick the UCS origin and drag the mouse, set any size by clicking the left mouse button. Press the Rectangle icon, click on screen to start at one corner and drag so the result will look as in the following image.

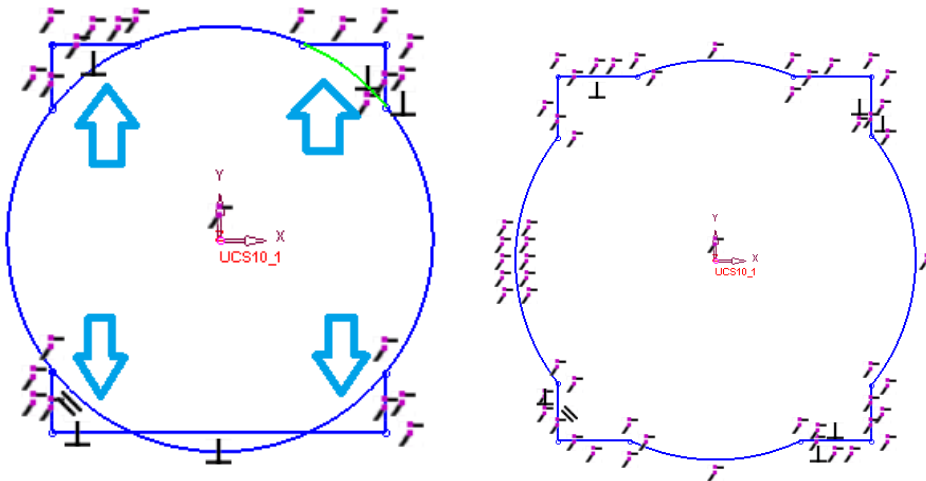




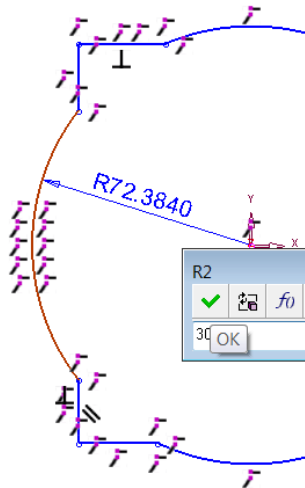
4. From the Sketcher Guide, press Dynamic Trim
5. Click the sections of the rectangle, which are inside the circle



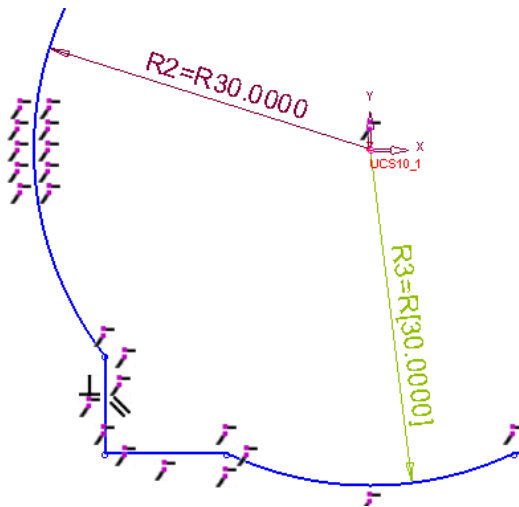
Next, remove the arc which are inside the rectangle



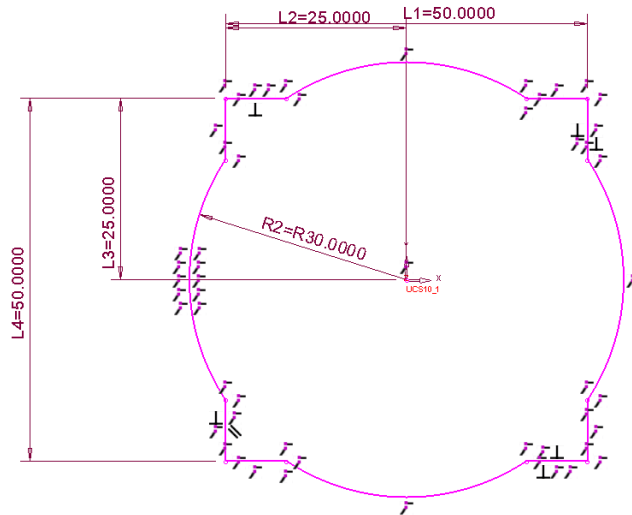
6. Add dimensions to the sketch. Press the Dimension icon and pick an arc, then pick on screen the position of the dimension. Set the dimension as 30 and press OK



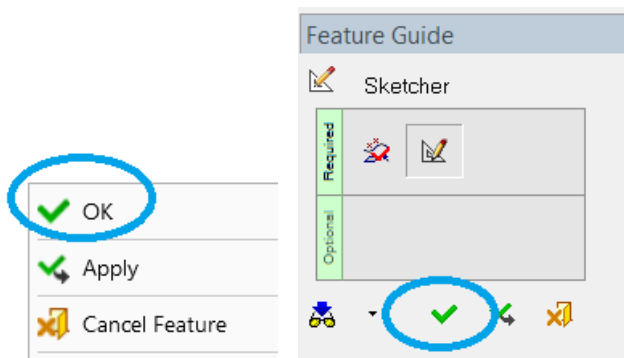
7. Add a second dimension to the second arc. Notice that this dimension is shown in light green – as this dimension is redundant. You can Undo it. Press the left and middle mouse buttons.



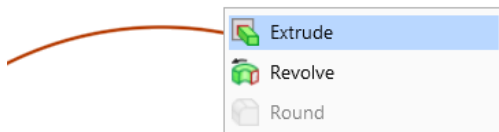
8. Add the following dimensions. Note that all the lines and arc are showing purple. The sketch is fully defined. This also appears at the bottom of the screen.



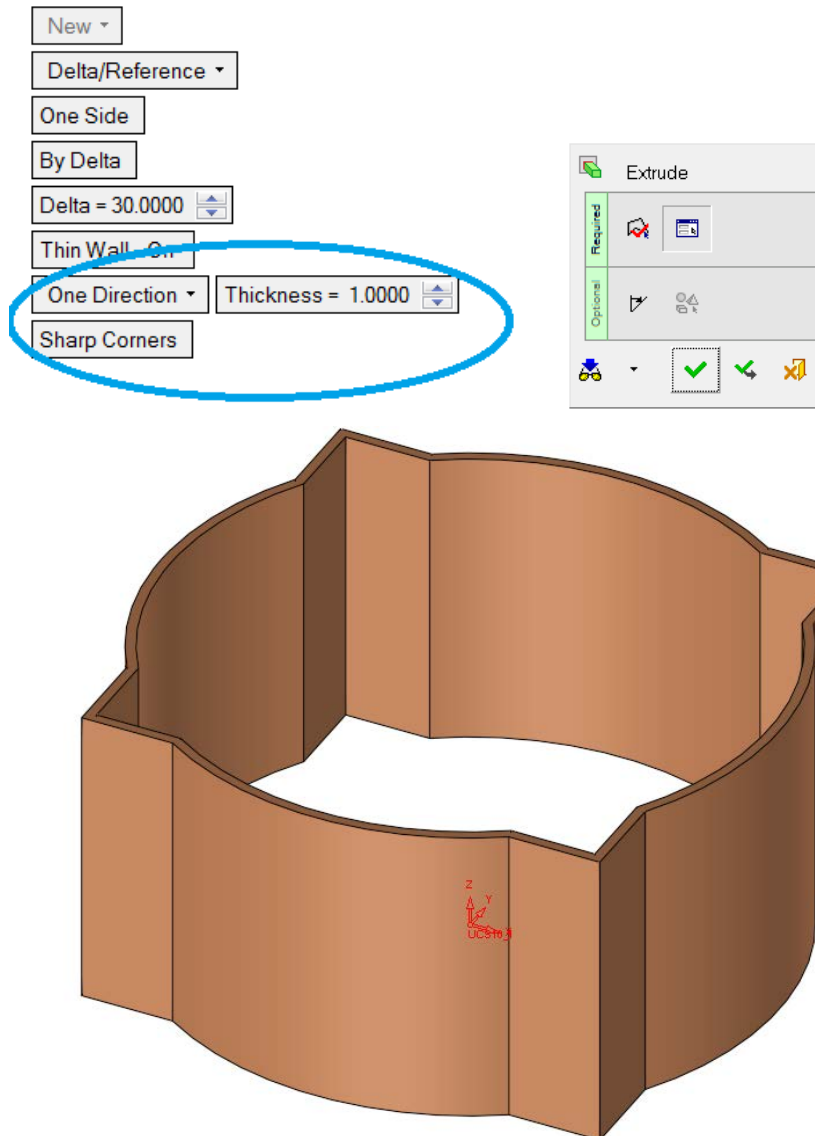
9. Exit the Sketcher by one of the following methods:



10. Right mouse click and press Extrude



Set a Delta of 30 and toggle the Thin Wall option.



End of exercise