

Lesson: Create the lamp base revolve

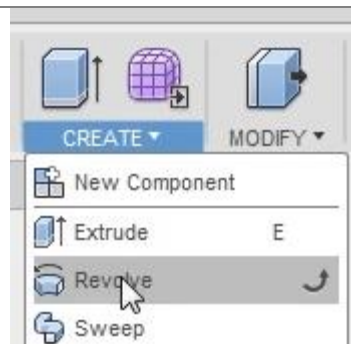
In this lesson, you will use several features to create the lamp base.

Learning Objectives:

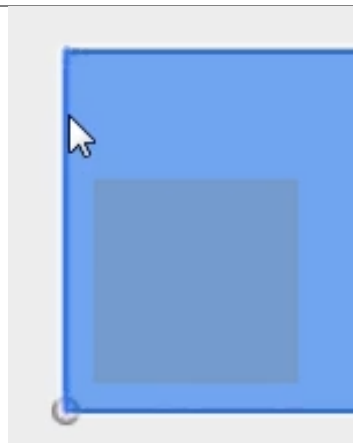
- Use a Revolve.
- Add a fillet.
- Use Shell.
- Create an extrude cut.

Step 1: Create the lamp base

1. Carry on with the file from the previous example. Select Create> Revolve to display the Revolve properties.



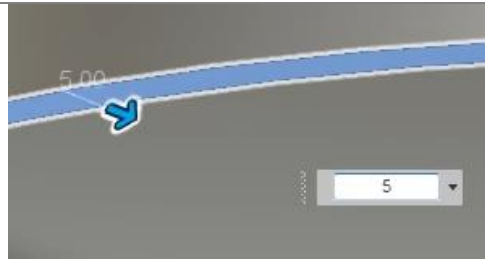
2. Select the inside of the rectangle as the profile and the vertical line from the Canvas origin as the axis.



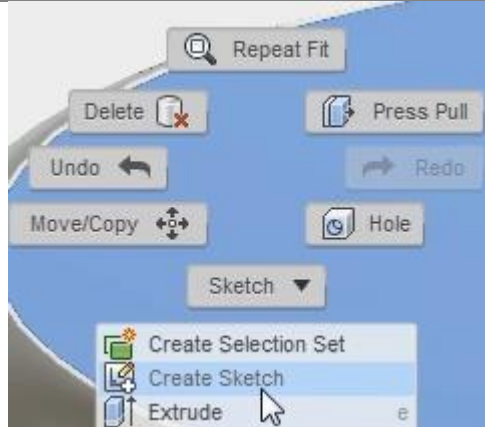
3. Select Modify> Fillet to add a fillet. Select the upper edge of the cylinder and specify a 15mm fillet to be added to that geometry.



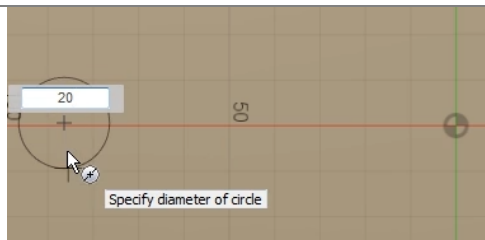
4. Select Modify> Shell. Choose the bottom face of the lamp base and specify a 5mm thickness for the shell feature. Save the file as User Saved.



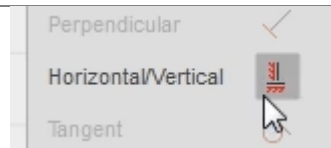
5. Left click on the top face of the lamp base. Right click and choose Create Sketch from the marking menu.



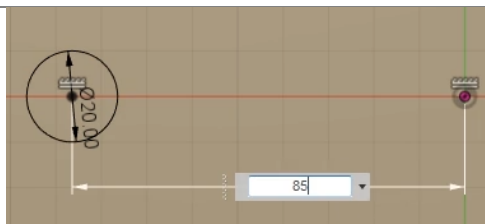
6. Select Sketch> Circle> Center Diameter Circle to draw a 20mm diameter circle to the left of the origin.



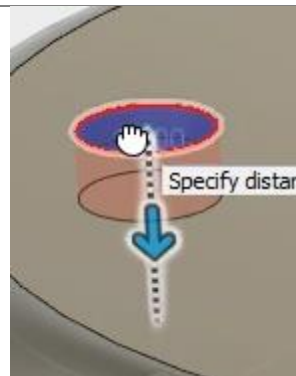
7. Select the center of the circle and hold CTRL while you click on the origin; then click Horizontal/Vertical constraint to add a horizontal constraint.



8. Press D on the keyboard to add a dimension. Select the center of the circle and the origin to add an 85mm dimension between the two points. Press the ESC key to exit the Dimension function. Select Stop Sketch.



9. Select Create> Extrude and pull downwards through the lamp base to create an Extrude Cut feature. Press OK in the Extrude properties box.



10. Save the file.

