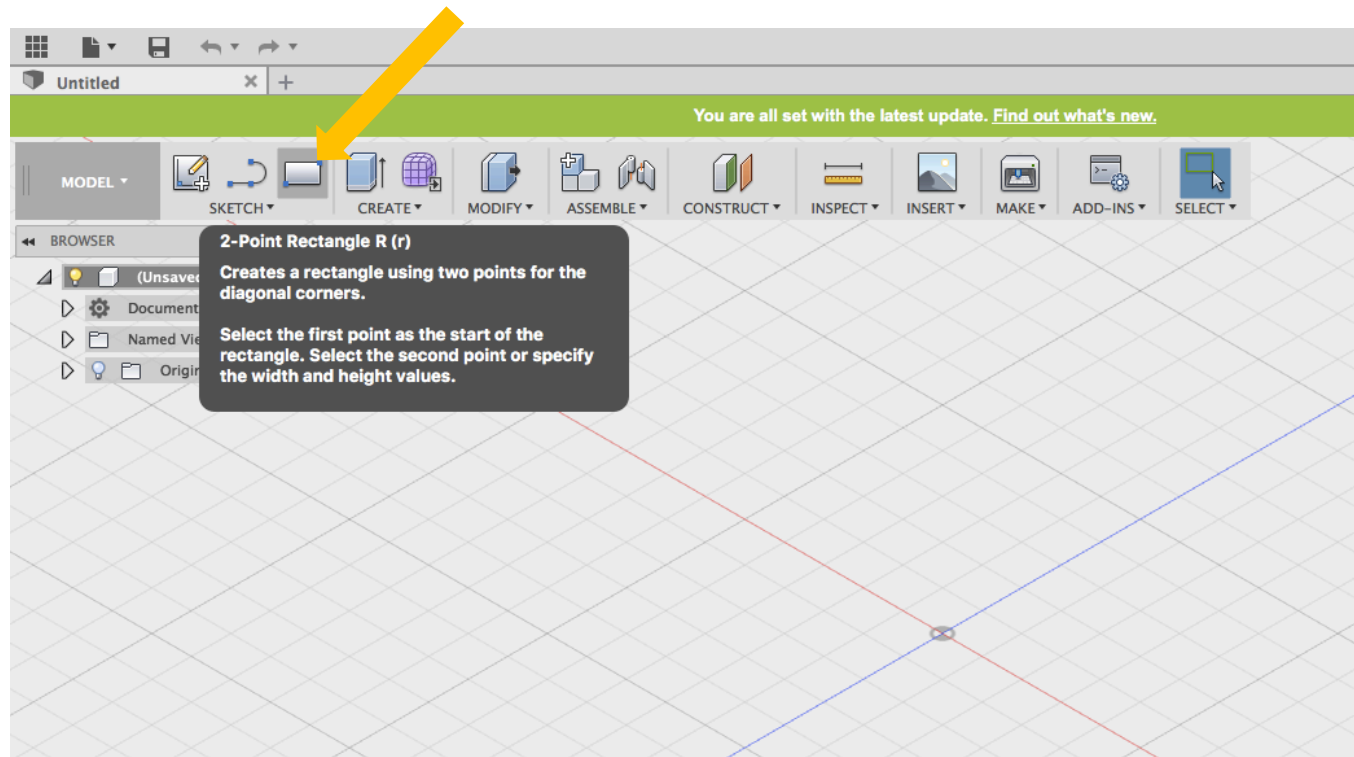




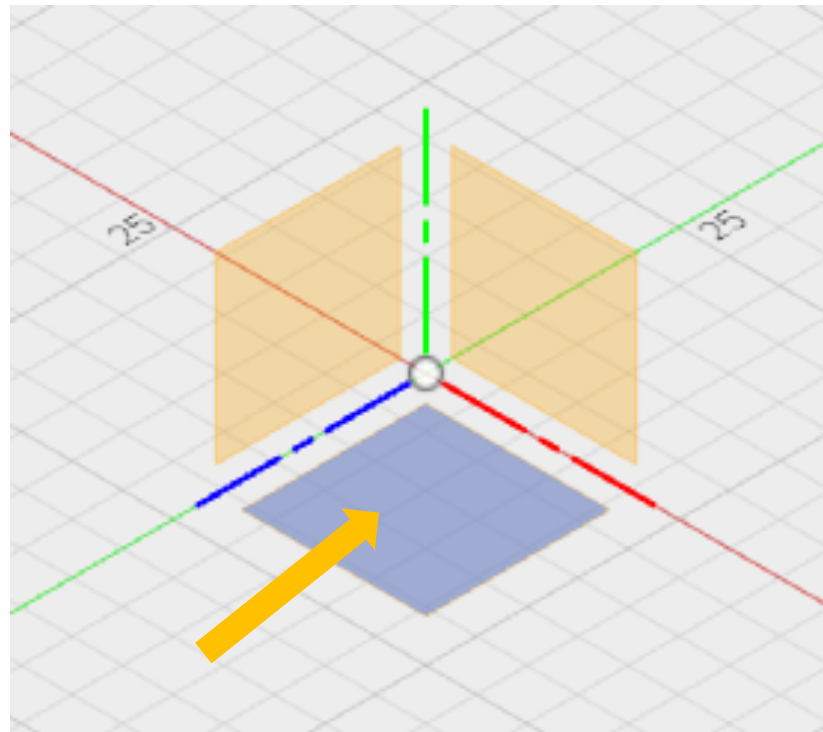
Lesson 6

Extended Interconnector

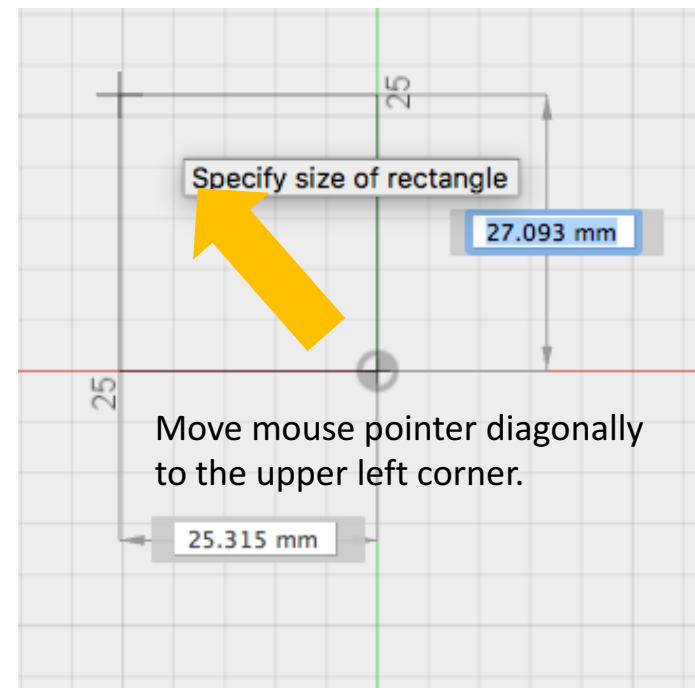
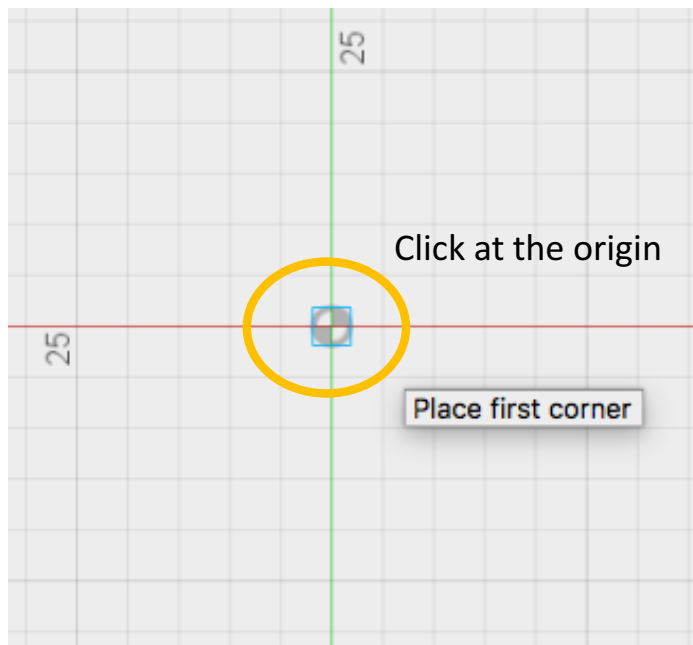
Step 1: First, select “2-Point Rectangle”.



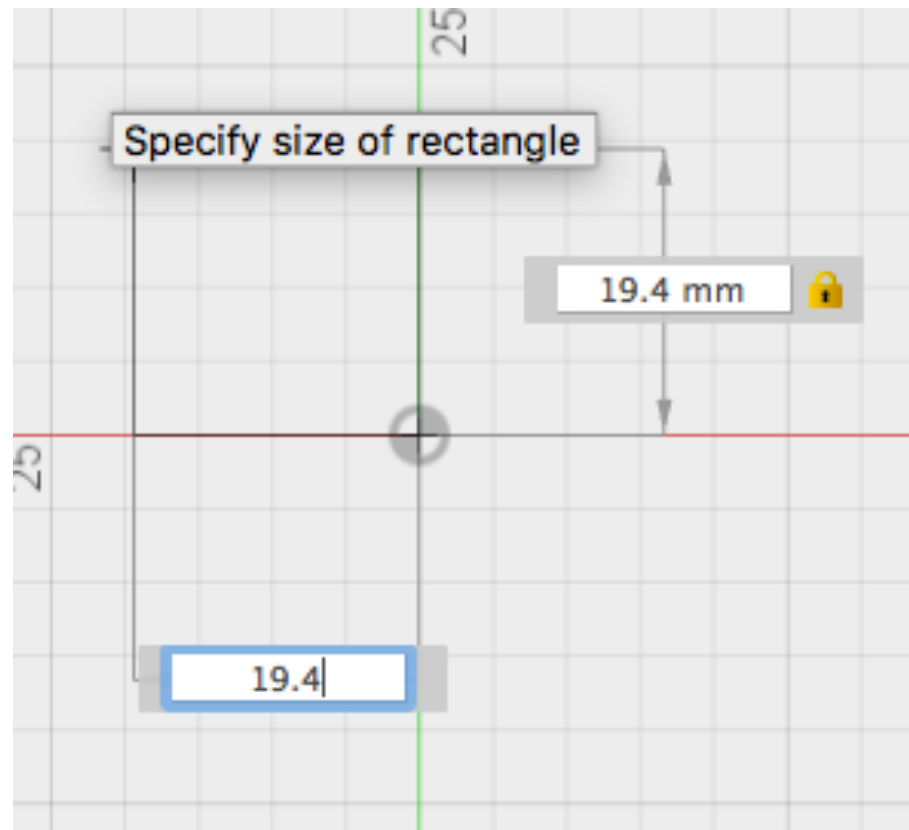
Step 2: Select the base panel.



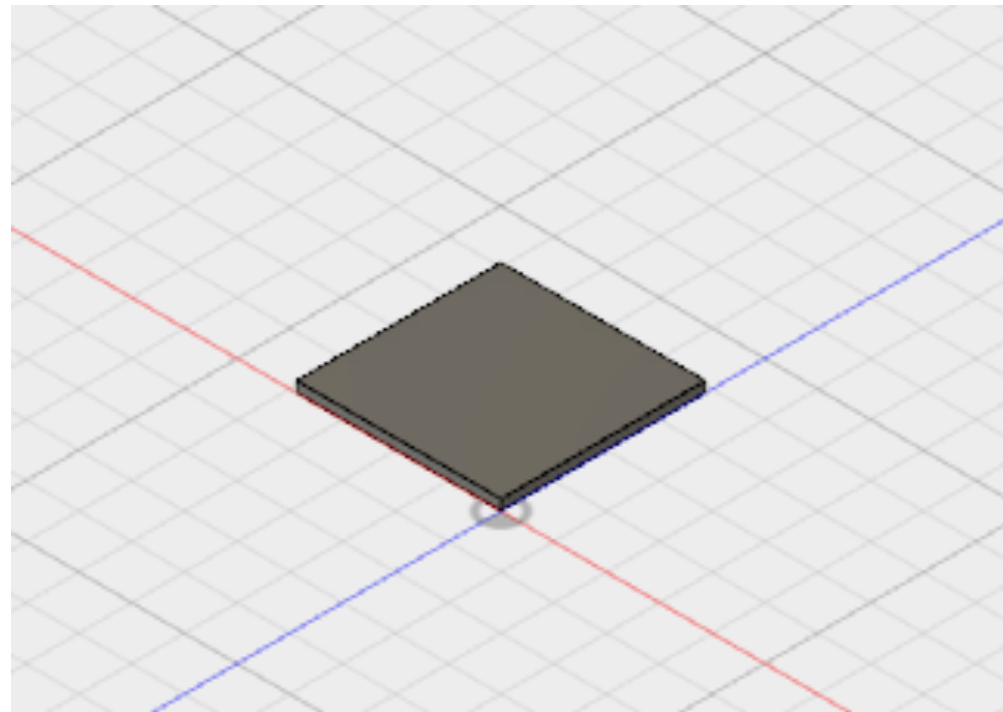
Step 3: Click on the origin, then drag your mouse diagonally to the upper left corner.



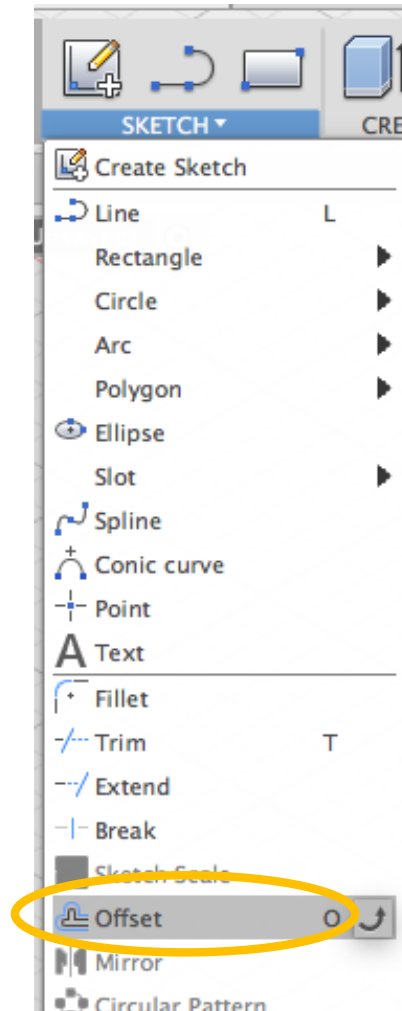
Step 4: Key in “19.4”, hit “Tab” then key in another “19.4” as shown and hit “Enter”.



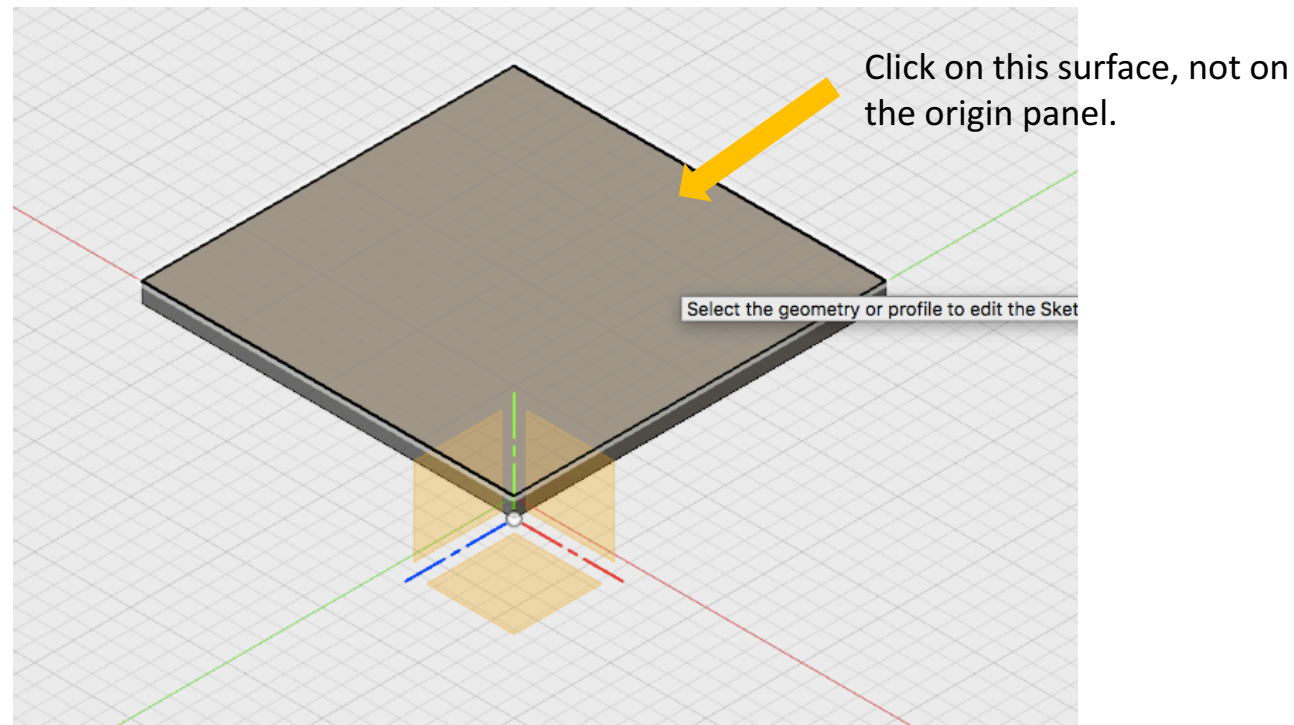
Step 5: Extrude the square box by 1mm to get something like shown below.



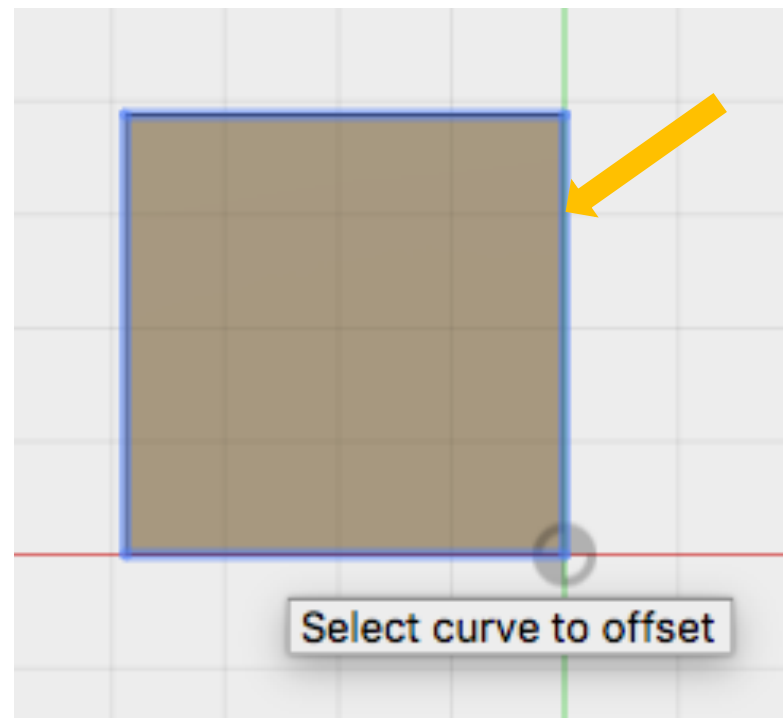
Step 6: Next, go to “Sketch” > “Offset”.



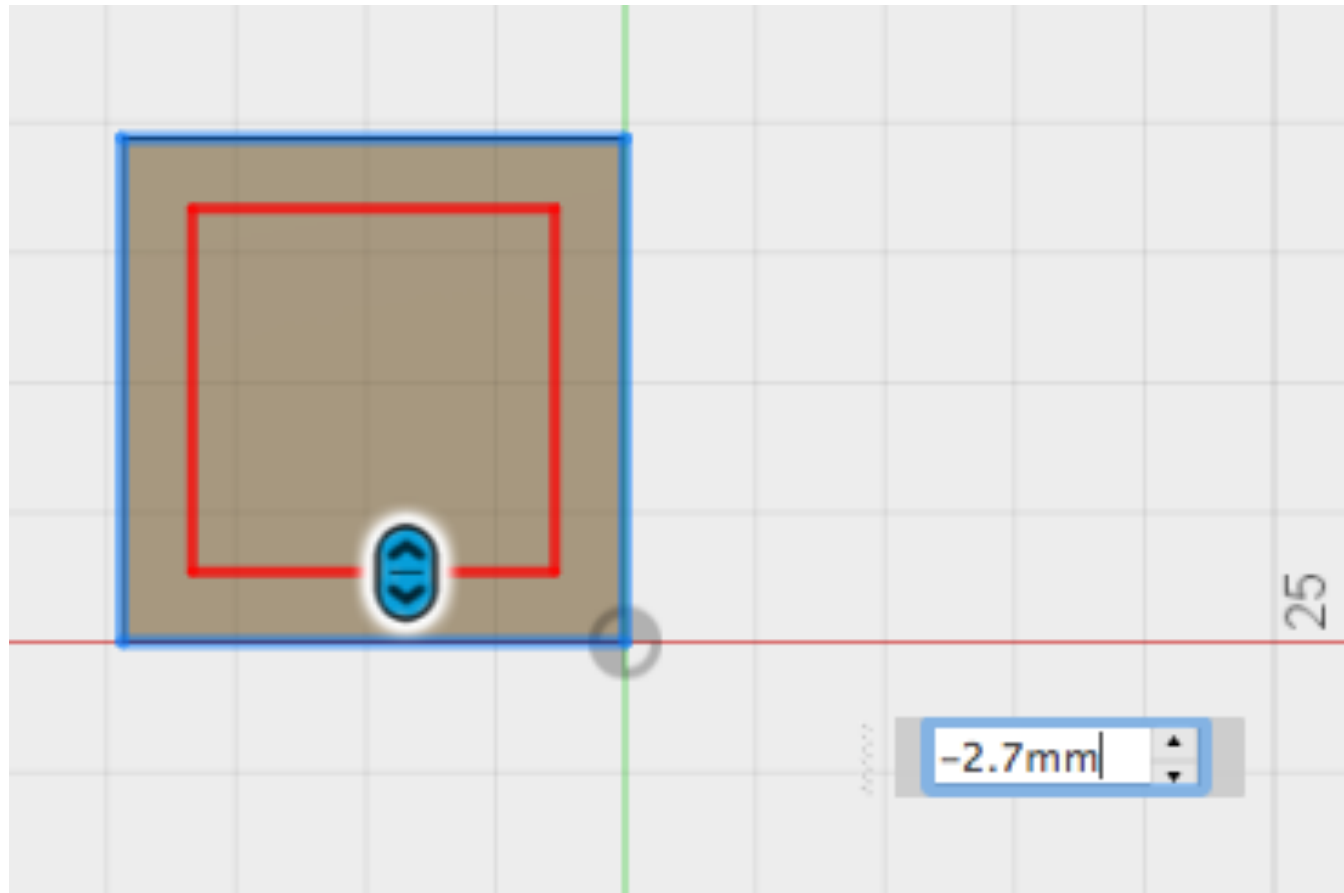
Step 7: Select the top plane of the 3D part.



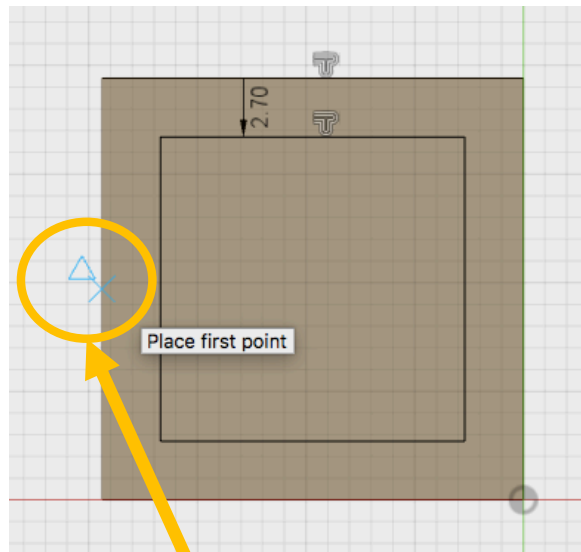
Step 8: Select the edge of the object as shown.



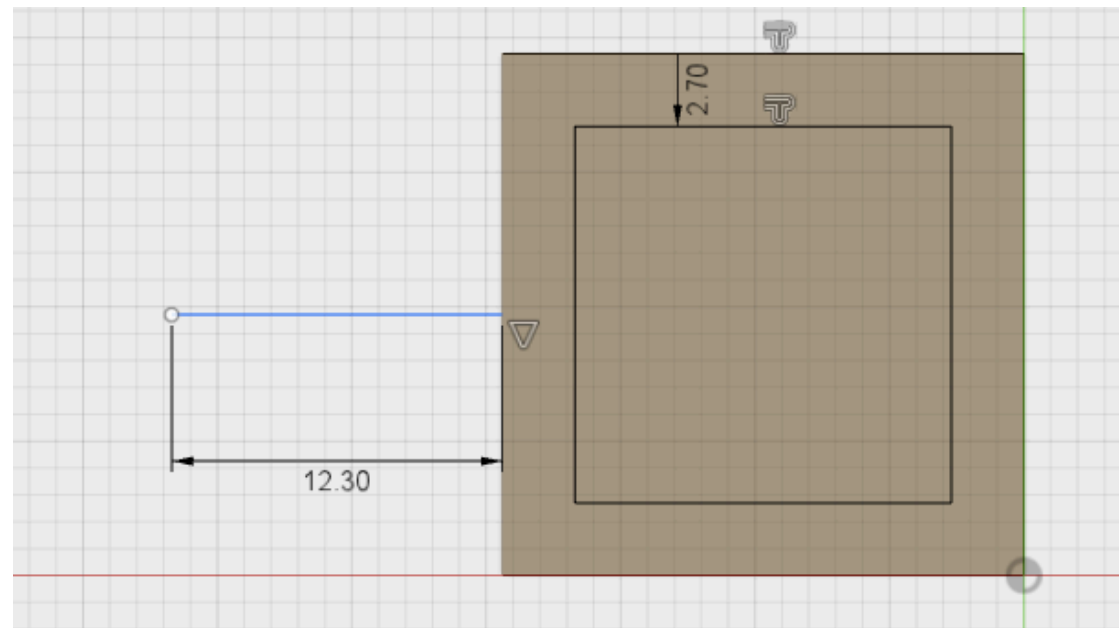
Step 9: Key in “-2.7mm” then hit



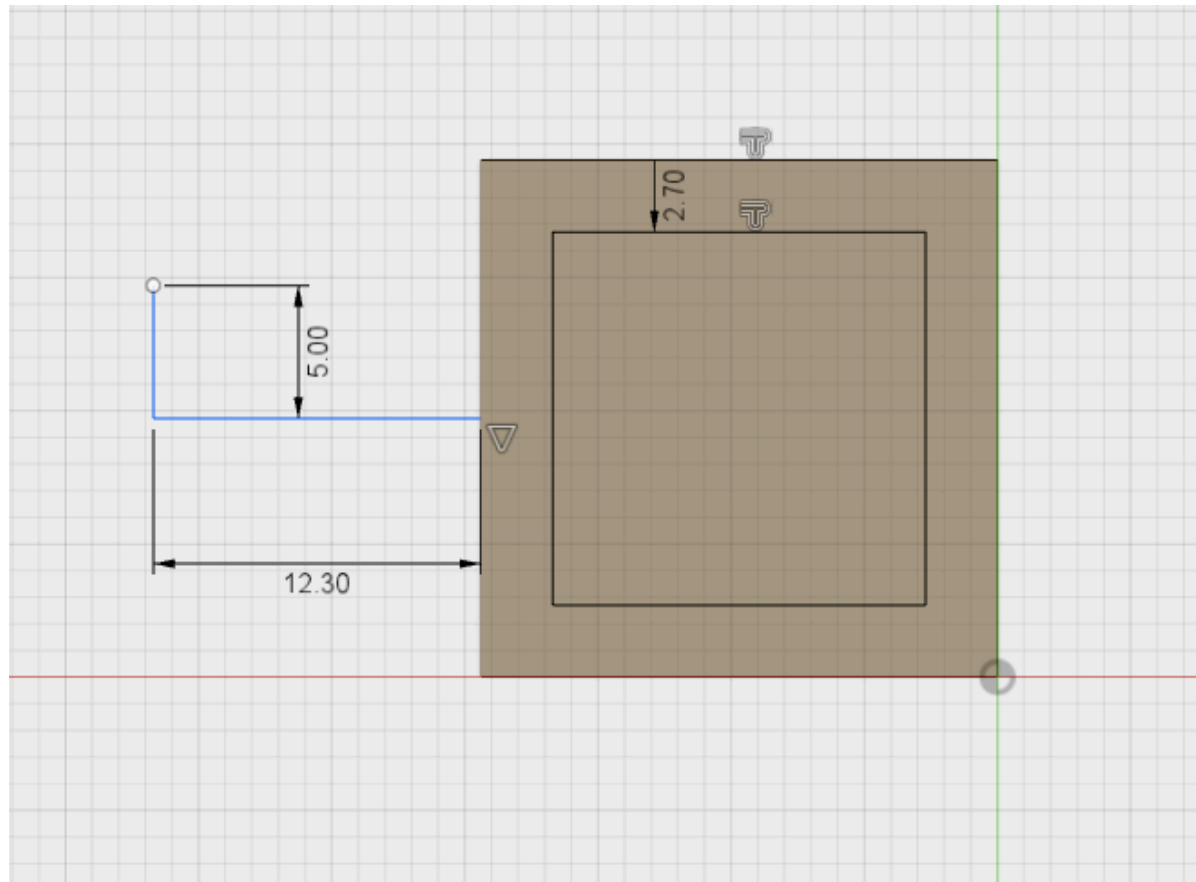
Step 10: Draw a straight horizontal line 12.3mm to the left of the square (starting from the midpoint).



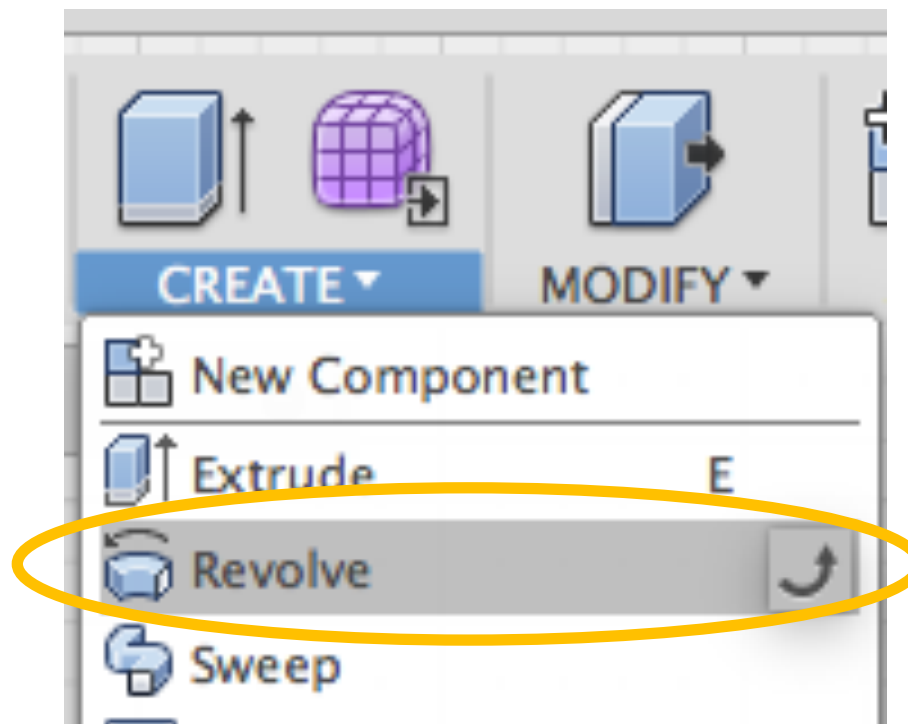
The symbol of midpoint of the object



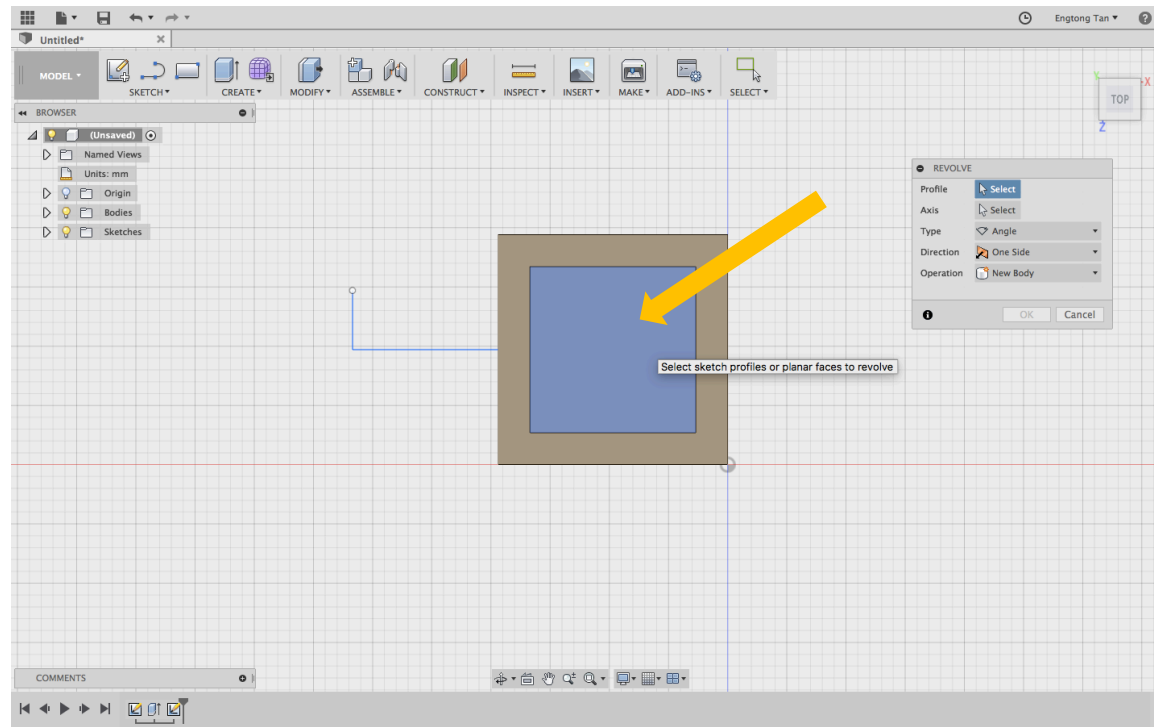
Step 11: Draw a 5mm vertical line from the previous horizontal line drawn.



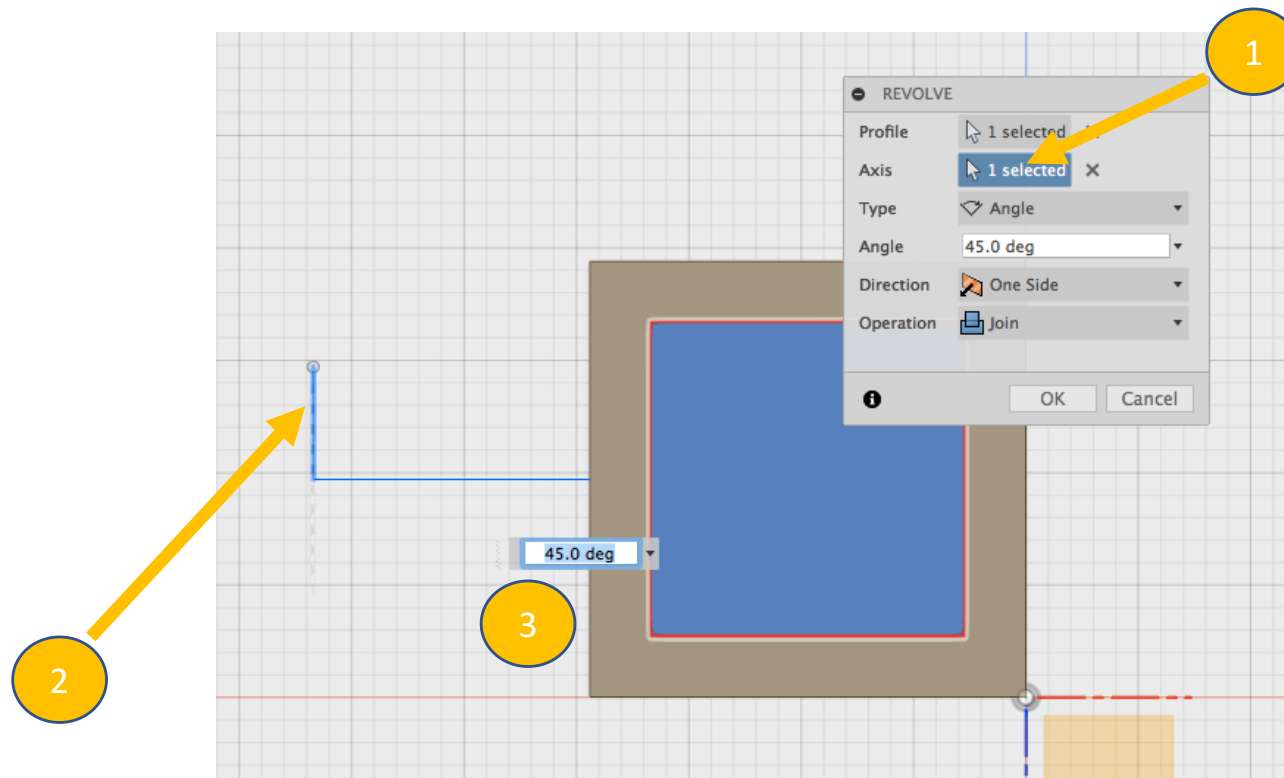
Step 12: Next, go to “Create” > “Revolve”.



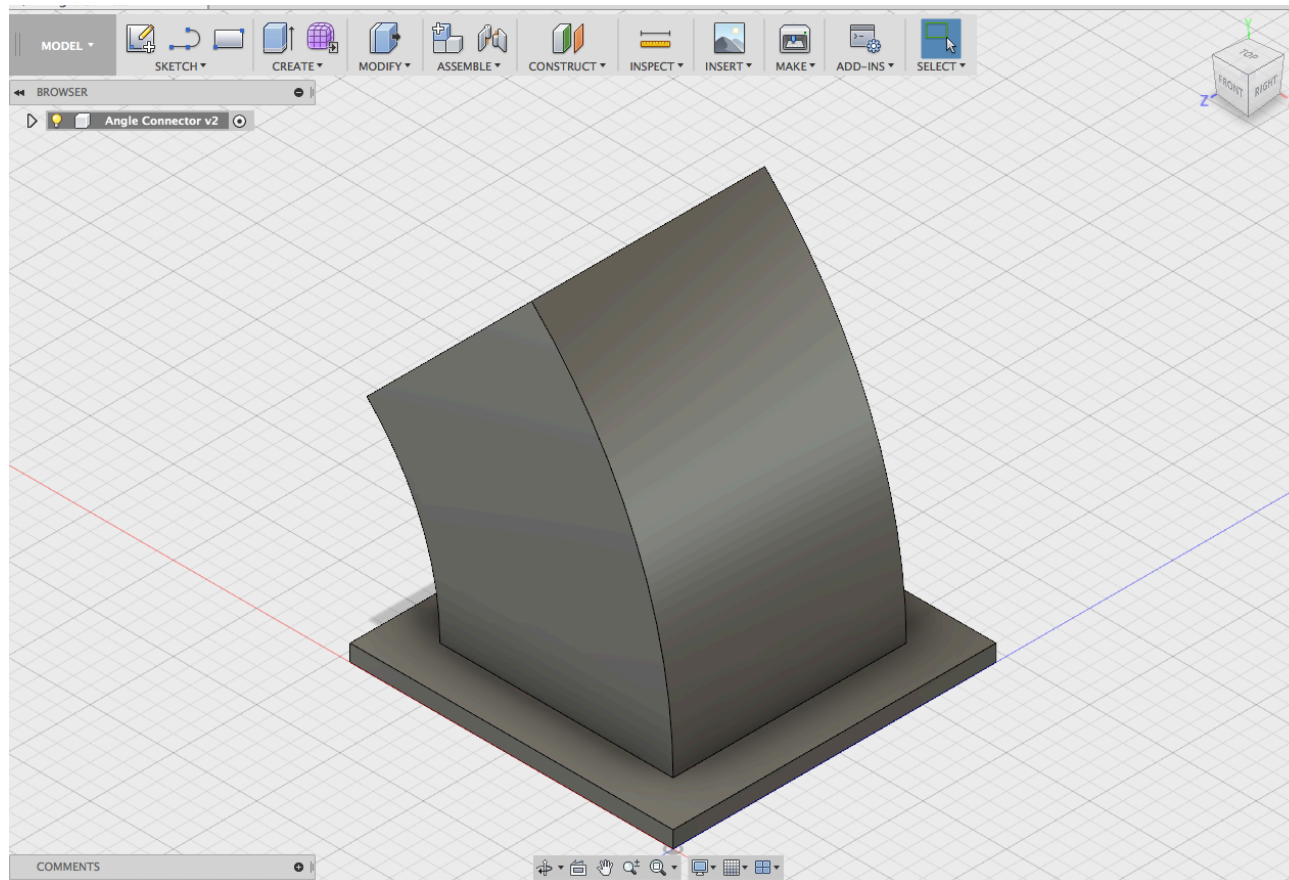
Step 13: Select the inner surface.



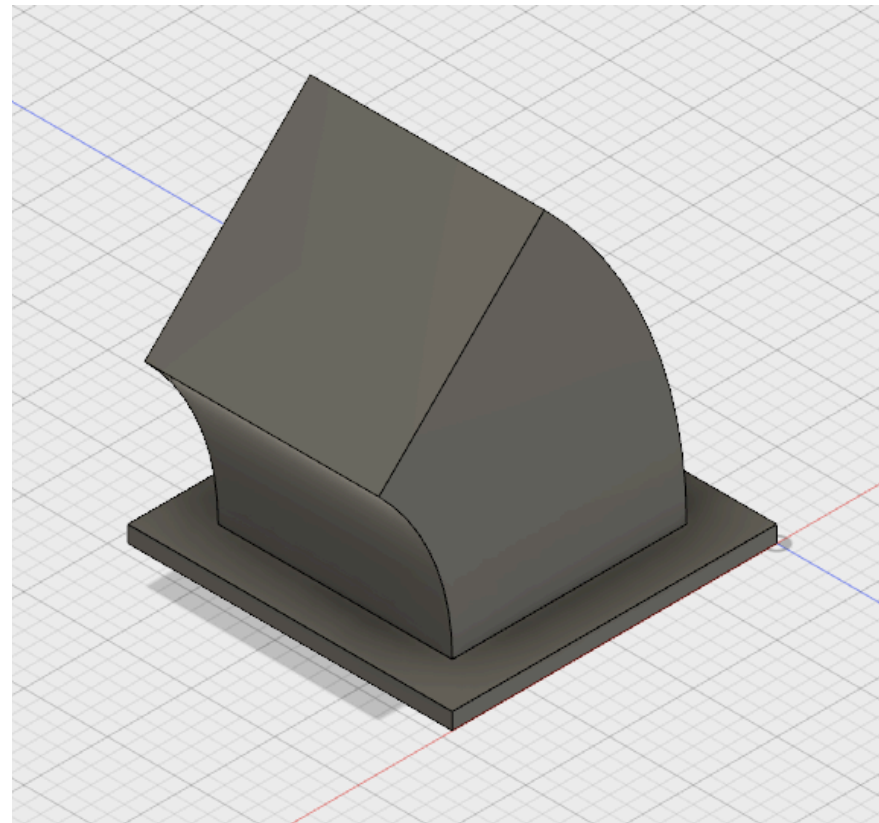
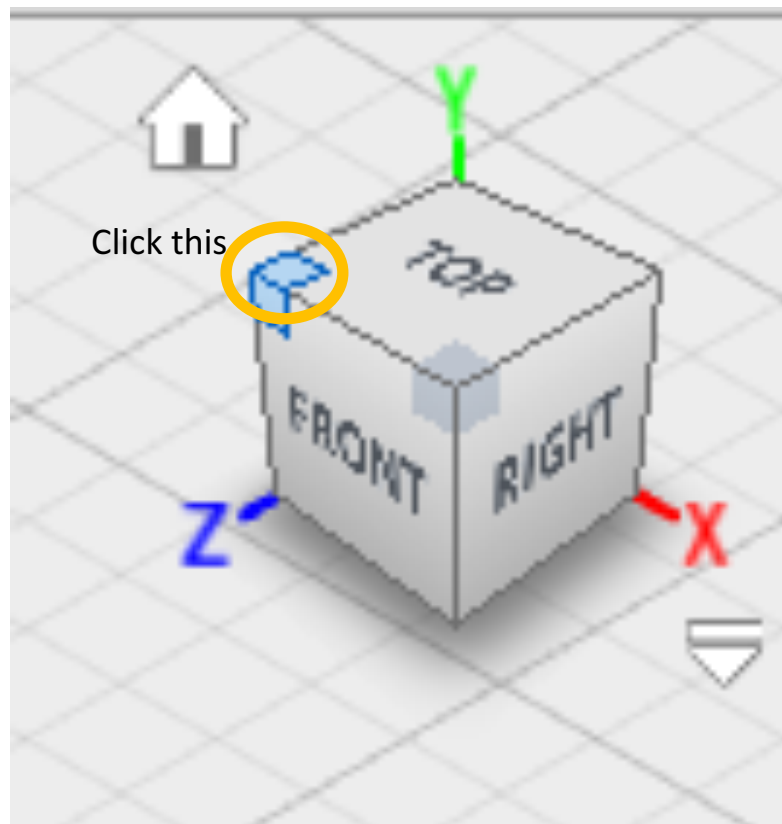
Step 14: Next, click on the “Axis” selection, then click on the 5mm vertical line followed by choosing “45 degree”.



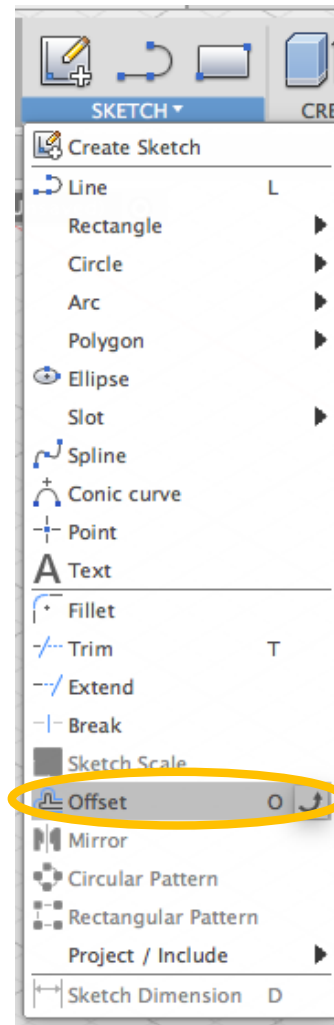
Step 15: Change to isometric view to see the result.



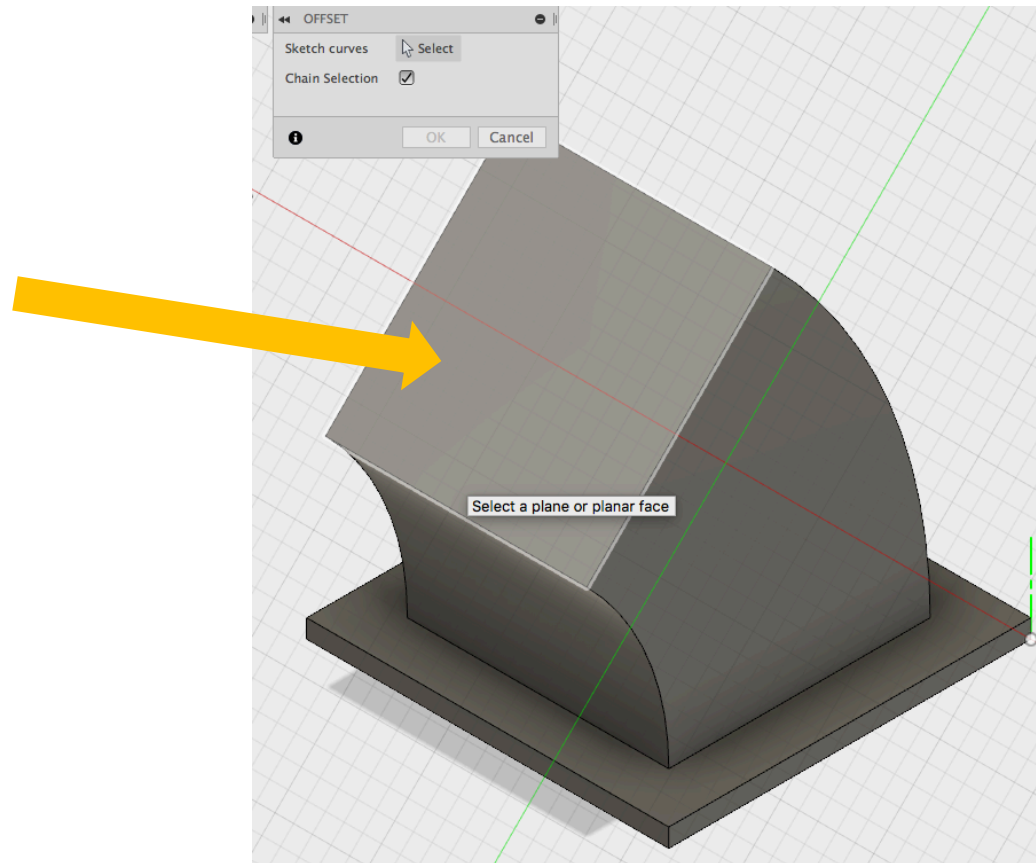
Step 16: Click this corner to change view angle.



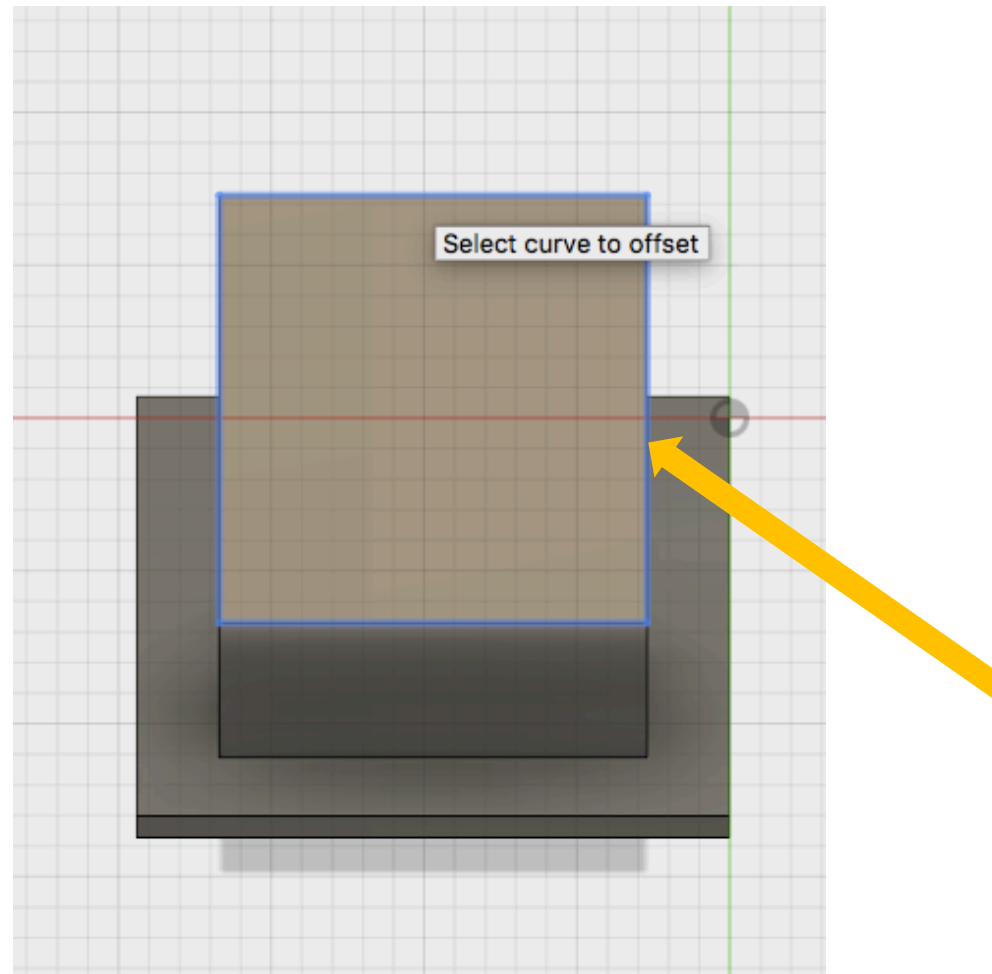
Step 17: Go to “Sketch” > “Offset.”



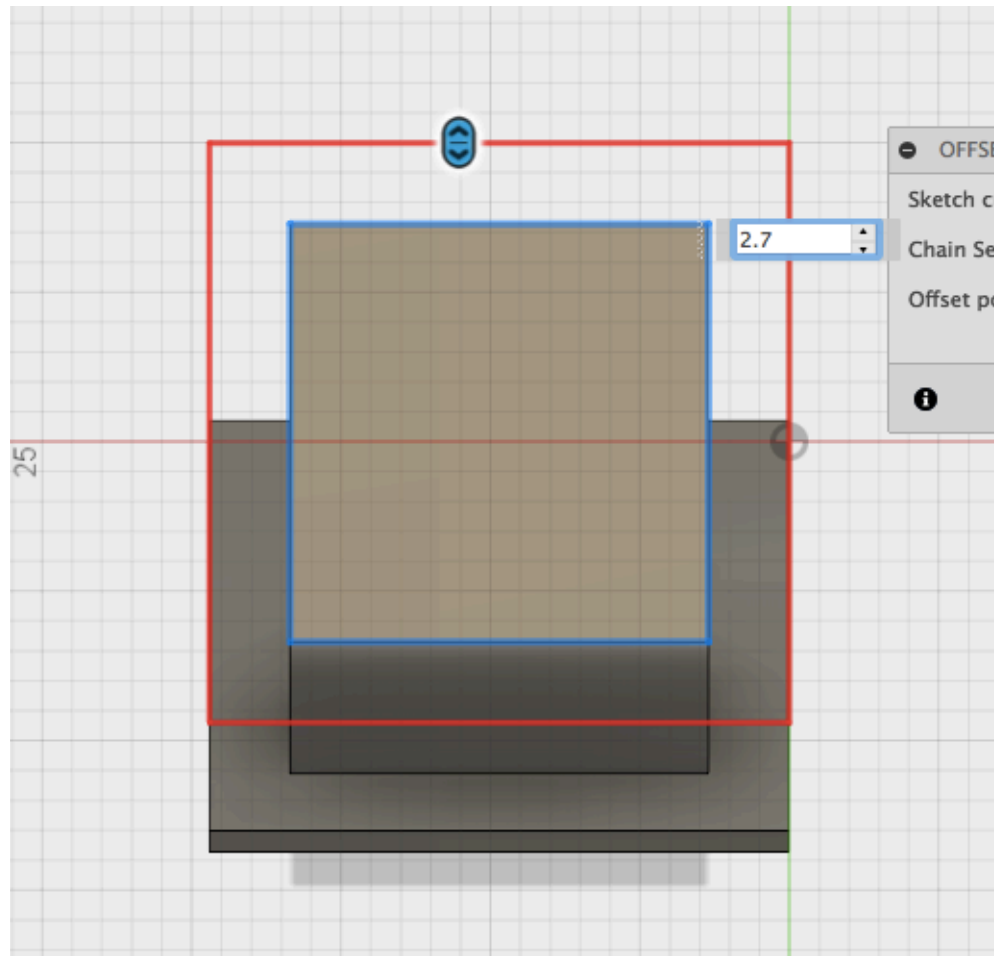
Step 18: Click on this surface.



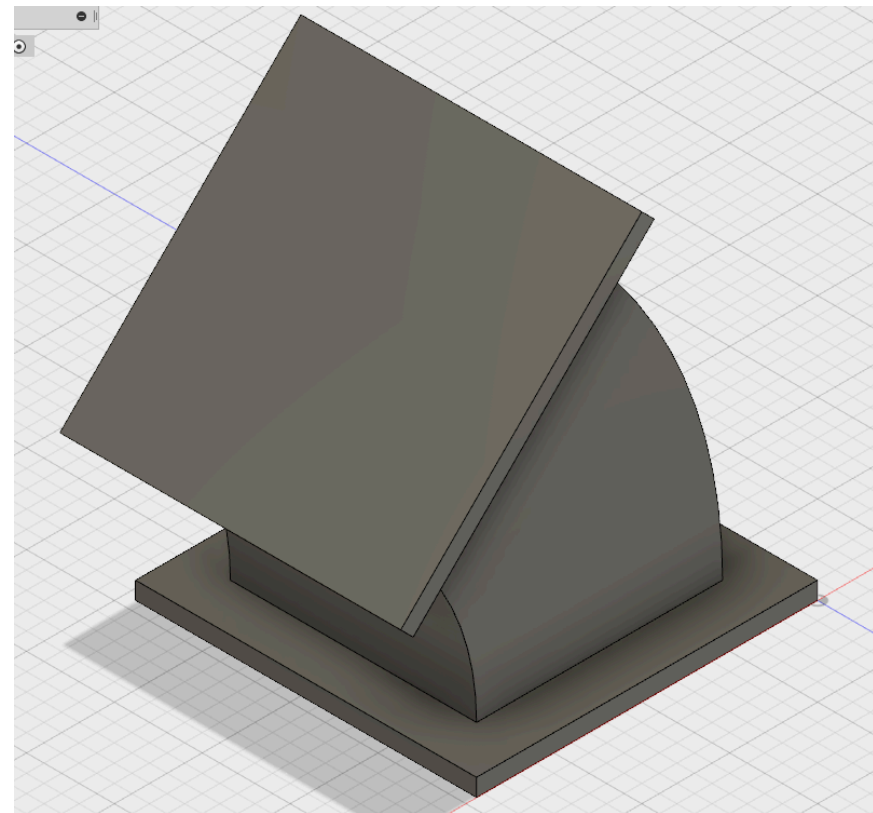
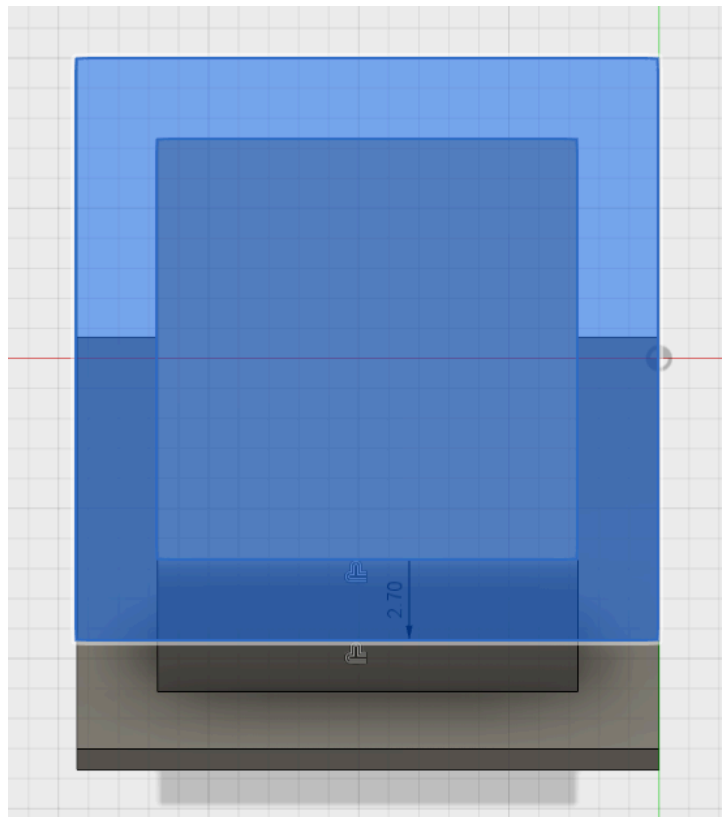
Step 19: Click on the edge of the surface as shown.



Step 20: Key in “2.7mm” then hit

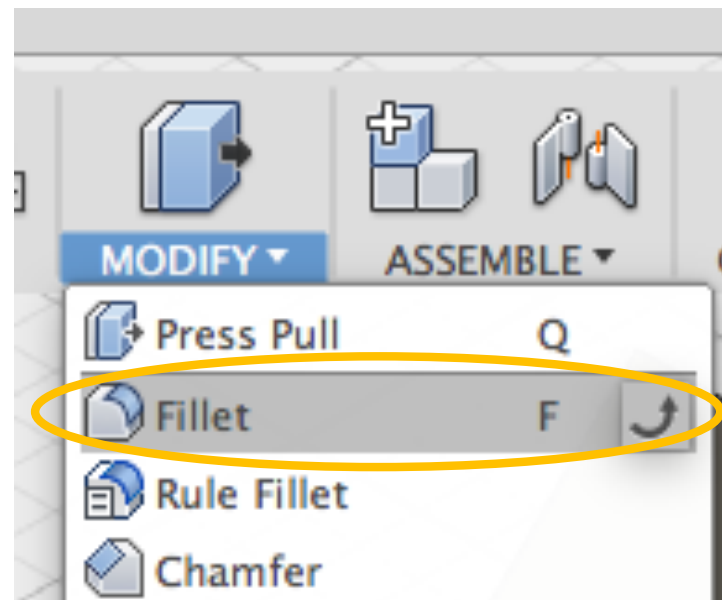


Step 21: Extrude the sketched surface by 1mm.

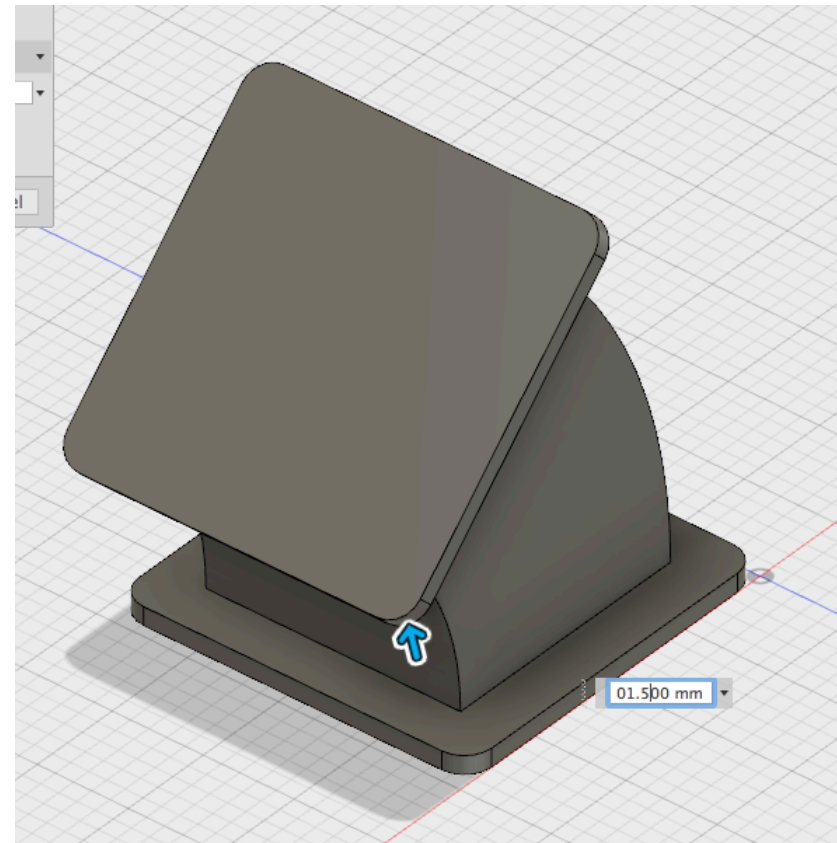
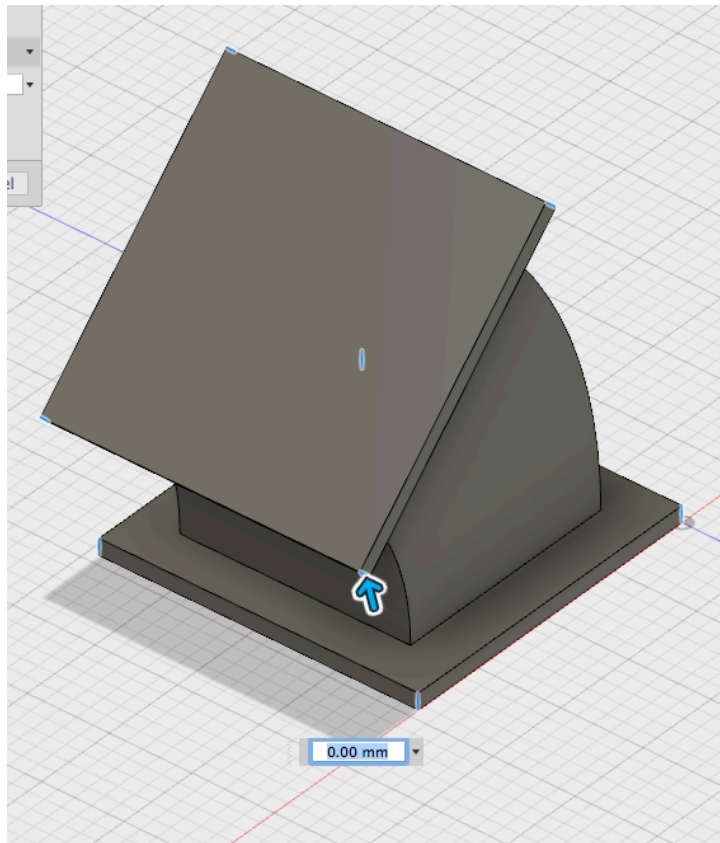


Note: You will need to select both the inner and outer surface.

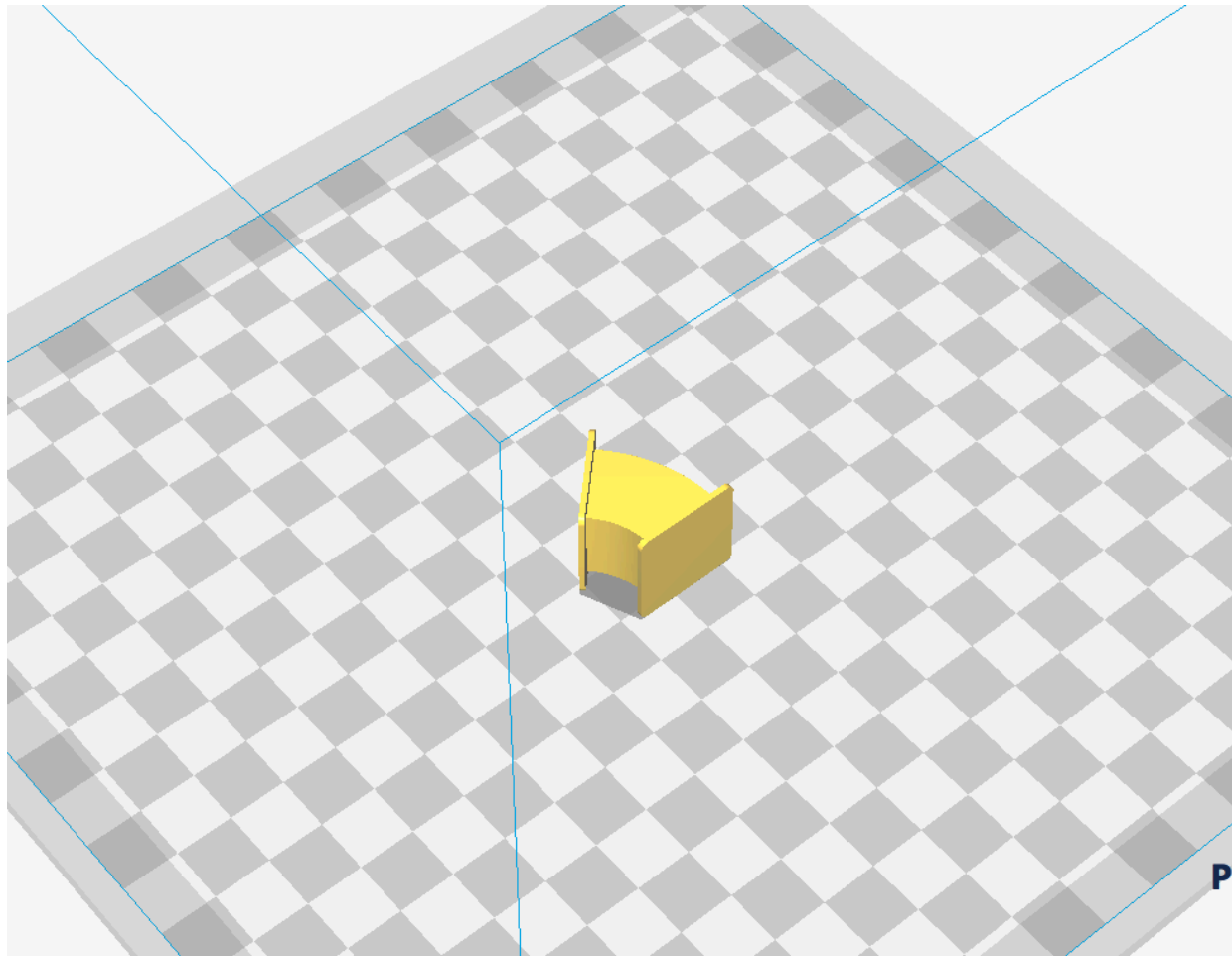
Step 22: Go to “Modify” > “Fillet”.



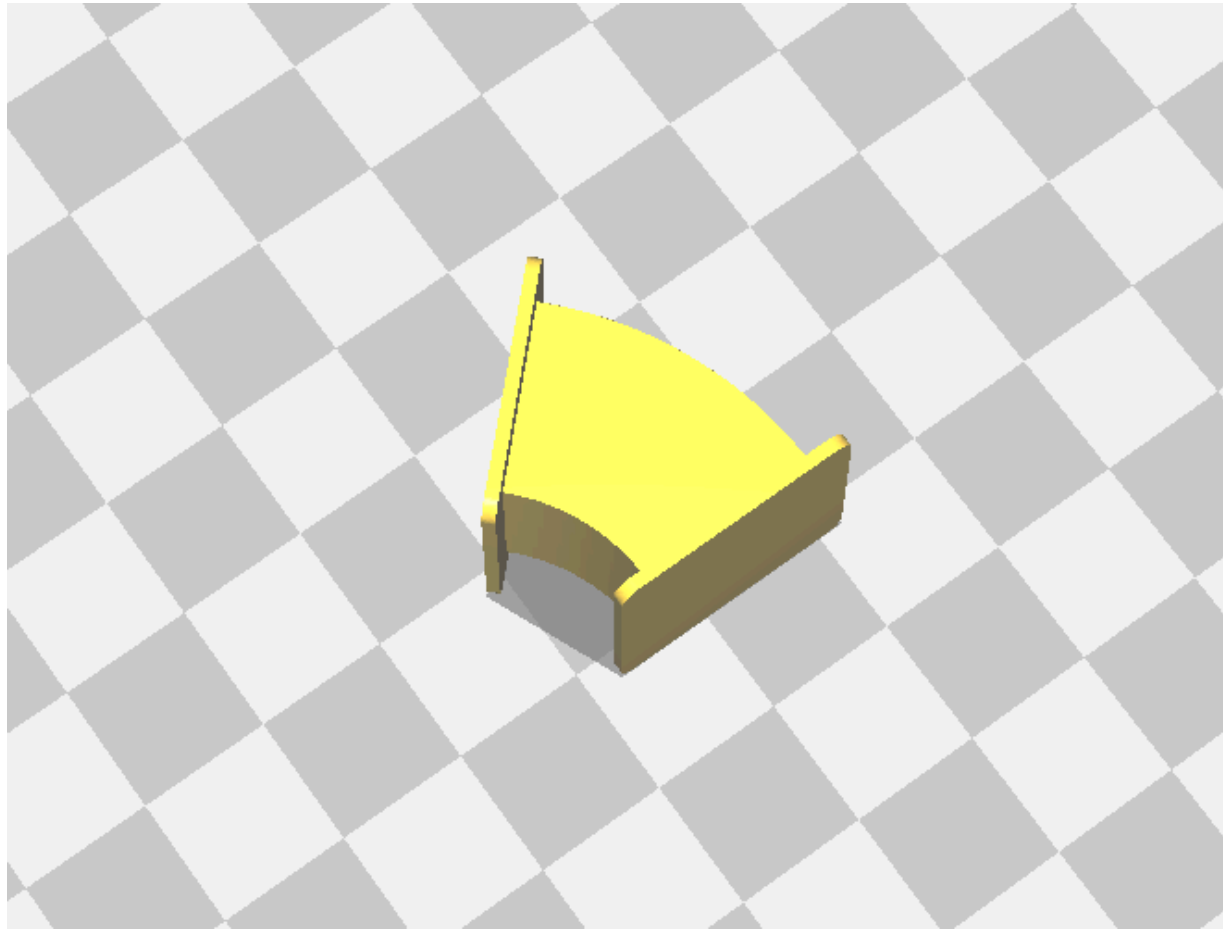
Step 23: Fillet all corners within a 1.5mm radius.



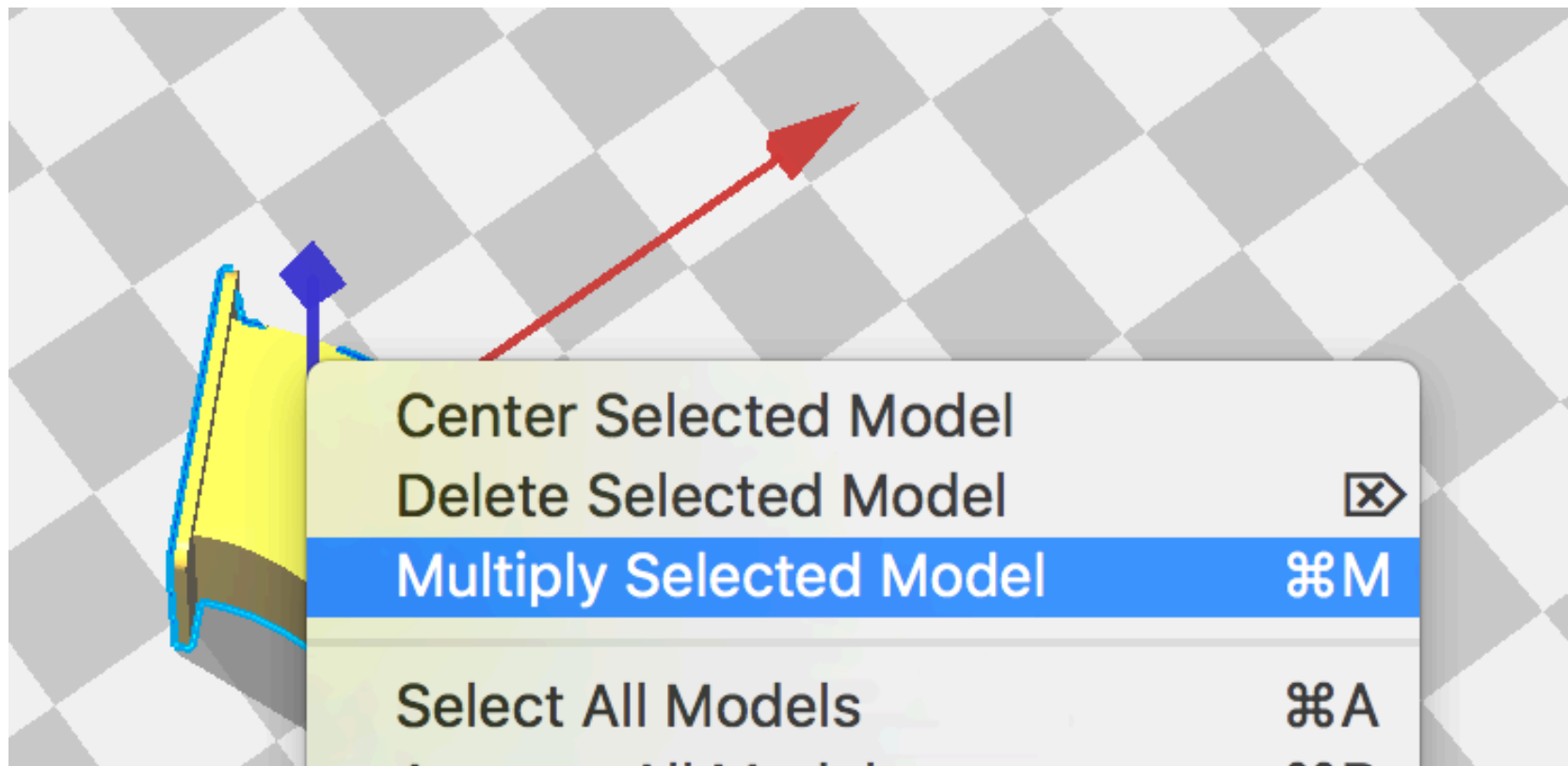
Step 24: Save the design in the STL file, then import it into Cura.



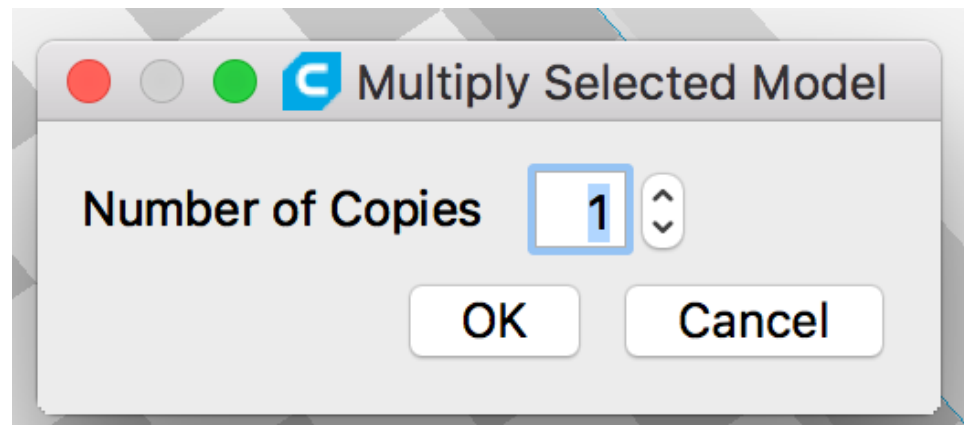
Step 25: Make sure that the part is in this orientation.



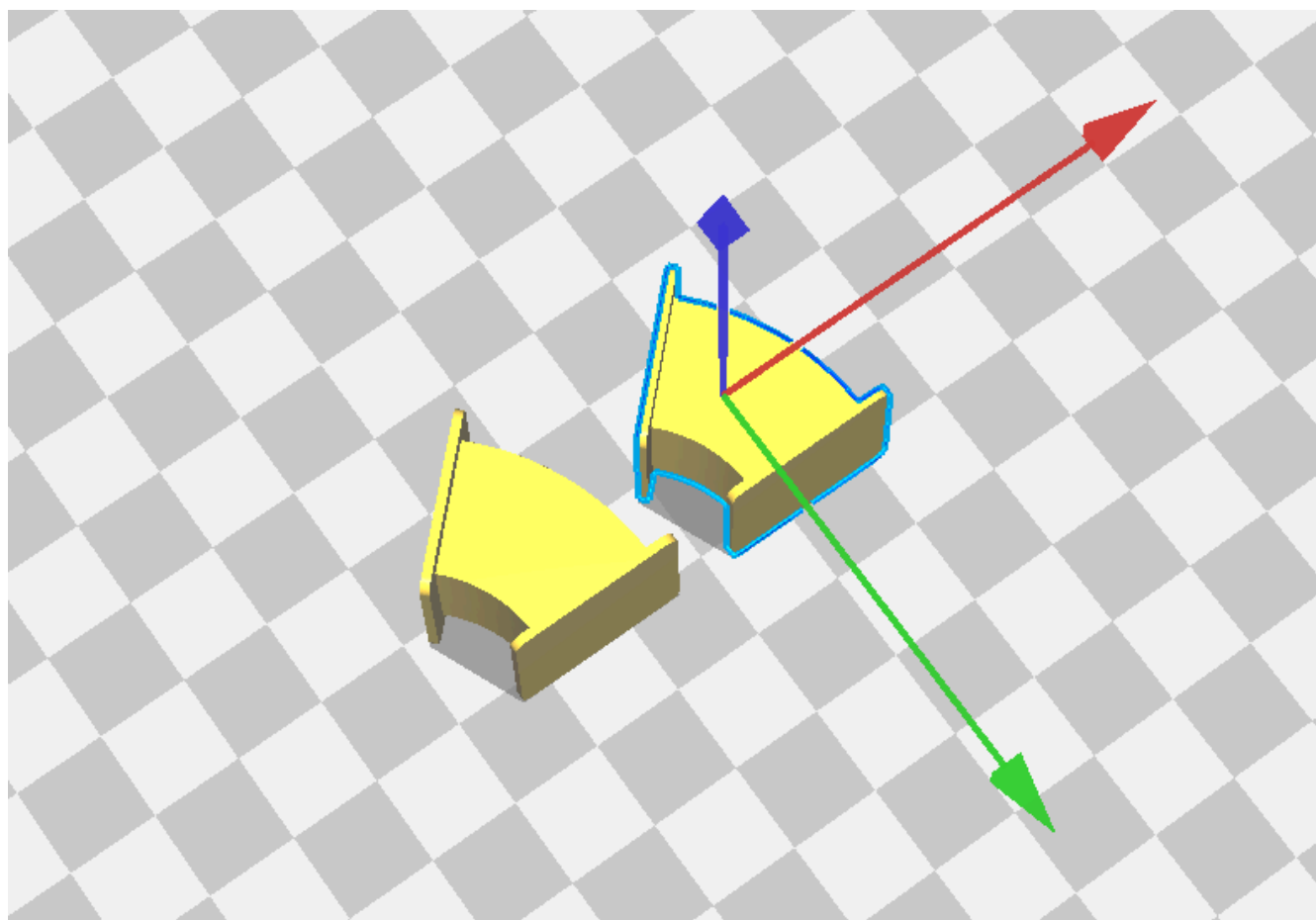
Step 26: Click on the 3D model, right click then click “Multiply Selected Model”.



Step 27: Select “1” then click “OK”.



Step 28: You will see that the model has been duplicated.



Step 29: Follow the printing parameter shown below.



Print Setup

Recommended ☒ Custom

Infill



0%



20%



50%



100%



Gradual

Generate Support



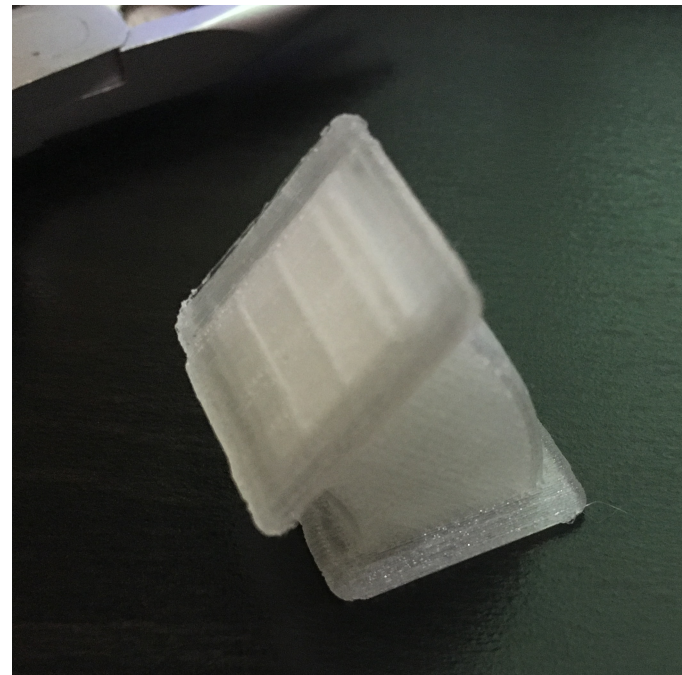
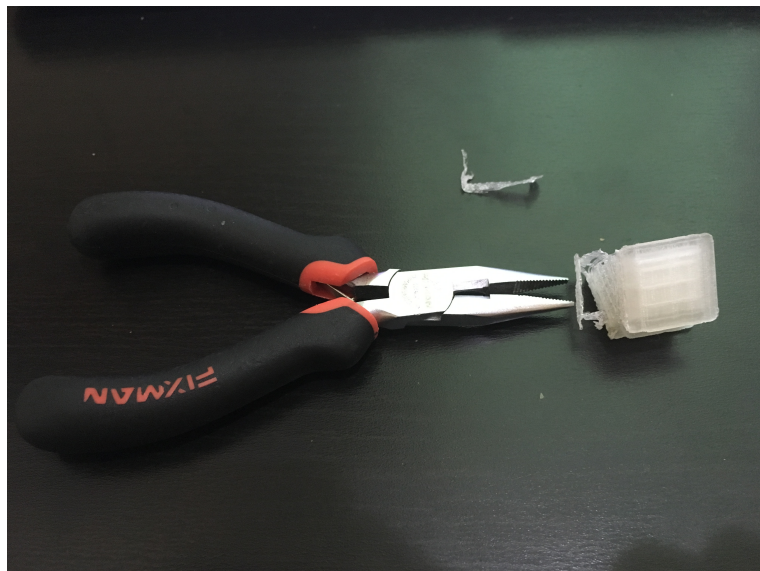
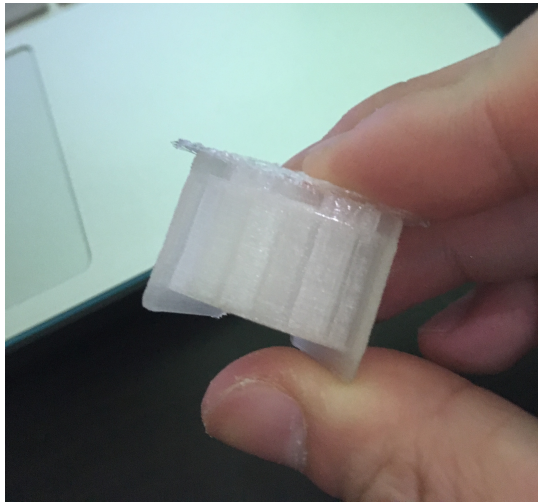
Build Plate Adhesion



Need help improving your prints?

Read the [Ultimaker Troubleshooting Guides](#)

Step 30: Remove the 'support'



Step 31: Try it on your rero!





Challenge:

- Try to think of where would you need to apply this part on your rero.
- Change the degree of extension to fit your needs!