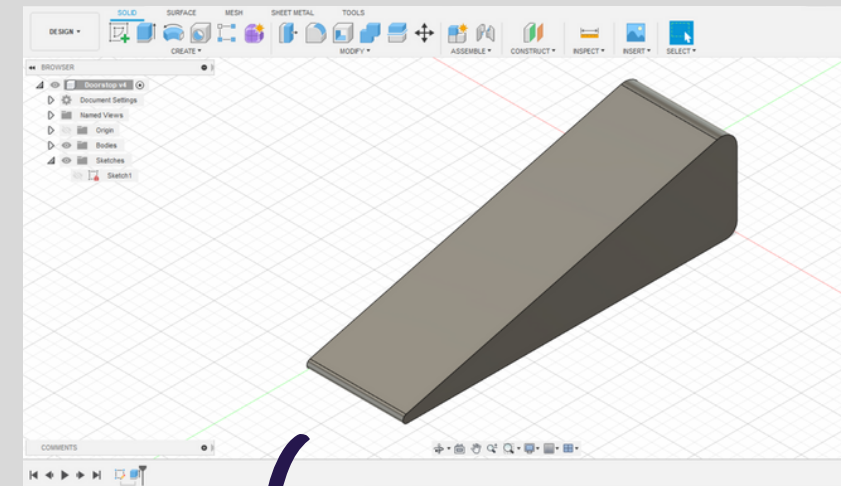
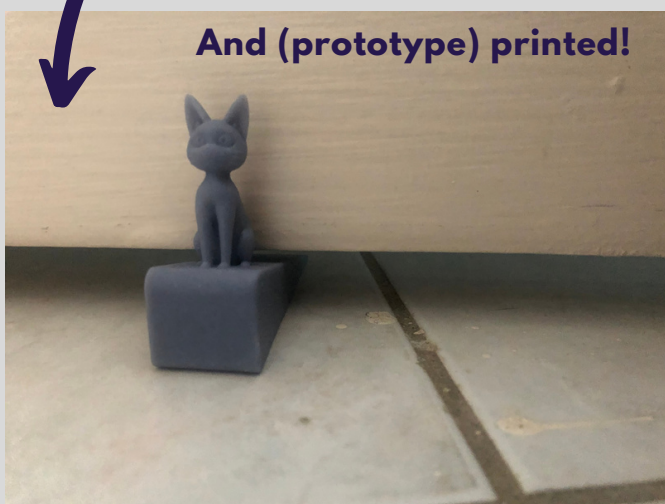
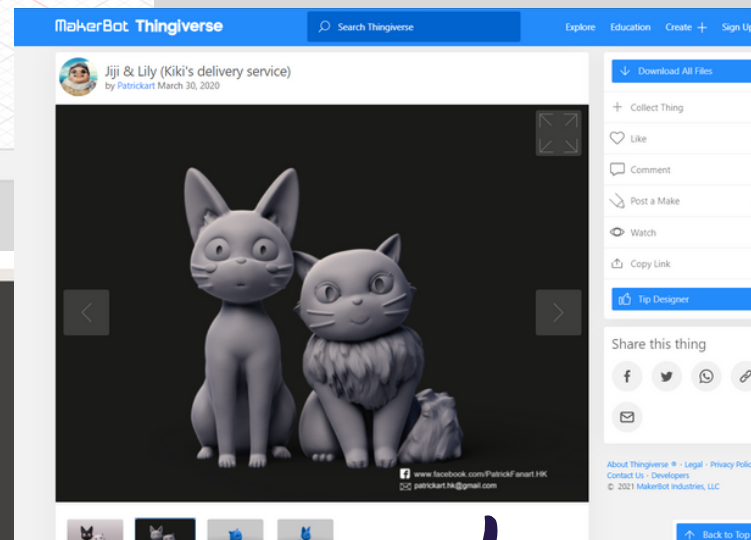
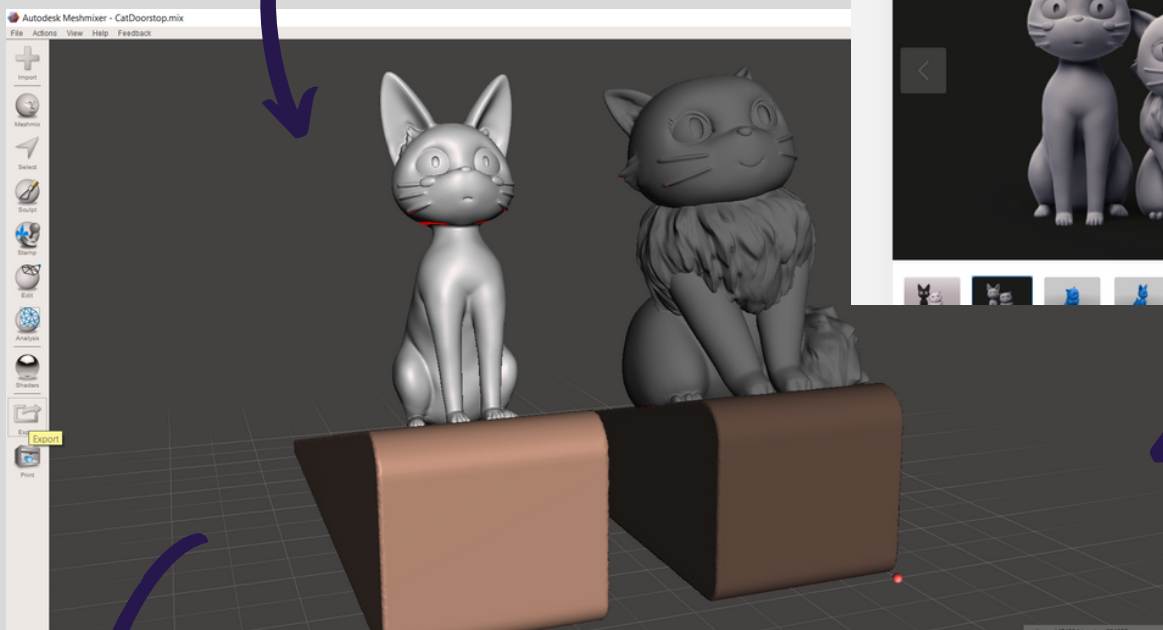




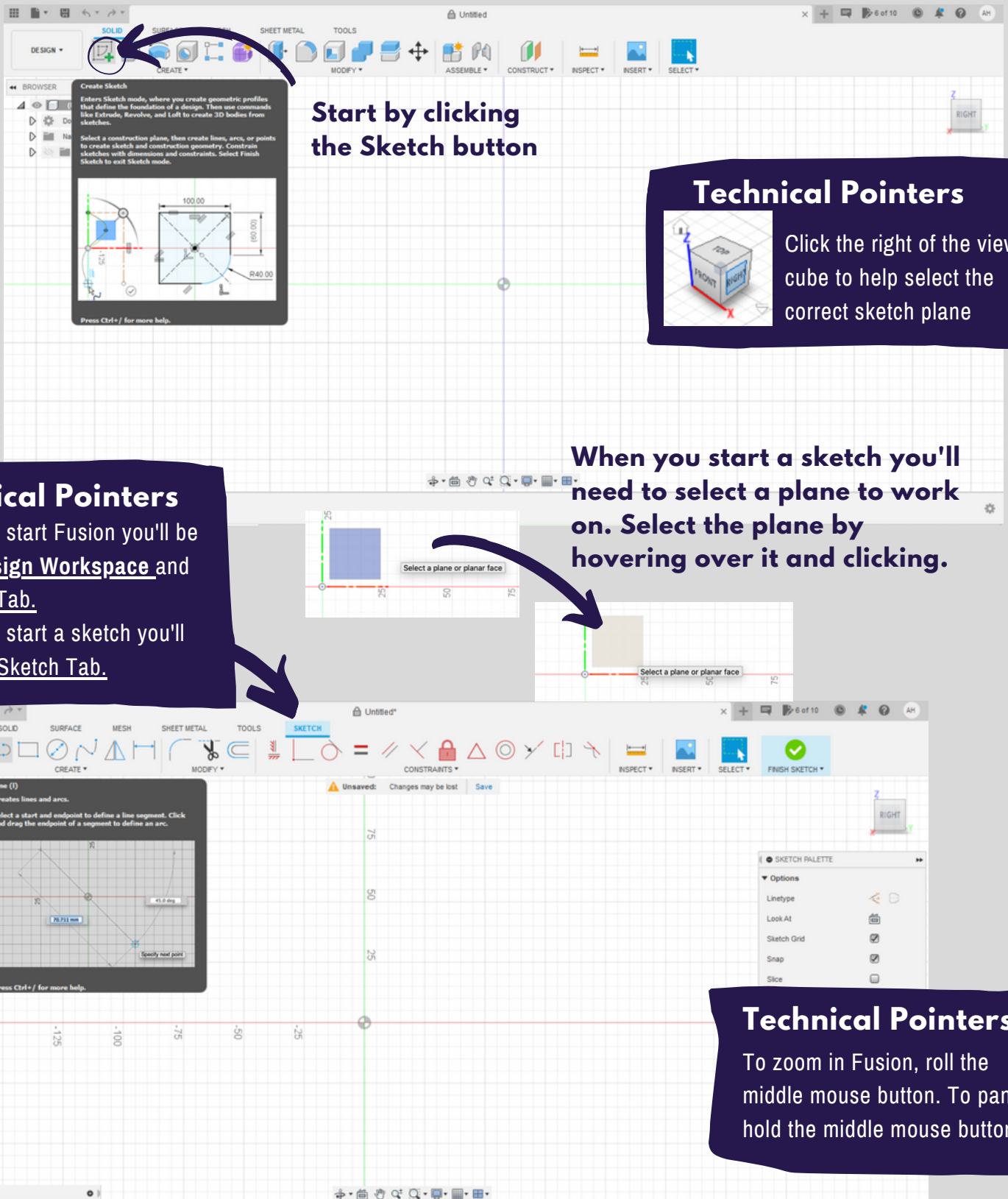
CREATING A DOORSTOP



In this tutorial you will learn how to decorate a simple door stop made in Fusion 360 using files found online and Meshmixer



START IN FUSION 360



DRAW THE TRIANGLE

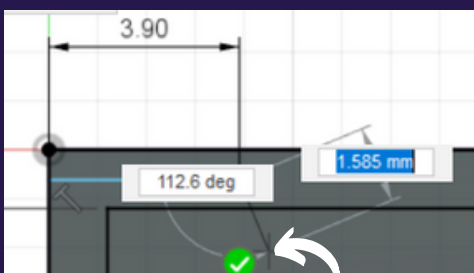
Technical Pointers

Fusion will highlight the tool you're currently using.

Next draw a line for the base of your doorstep. After looking online and doing some measuring, I've decided my door stop will be 170mm long.

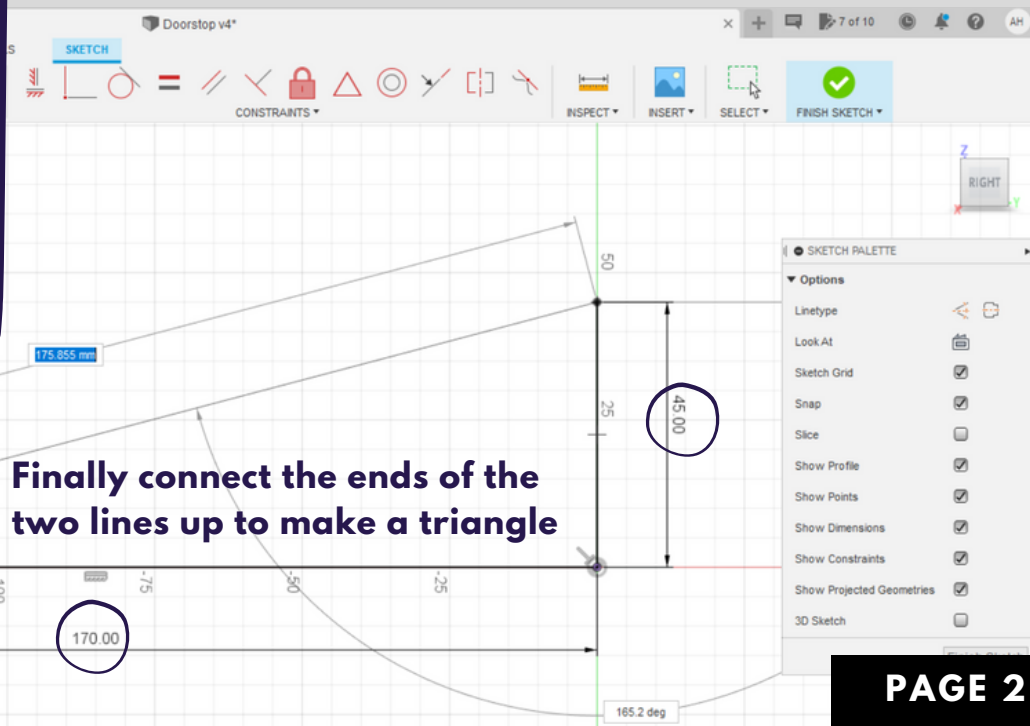
To draw a line select the line tool, click at the origins point to start the line...
...type in 170mm and click along the red line.

Technical Pointers



How do I finish a line?
When drawing lines unless you close the shape, Fusion will assume you want to keep on drawing. To finish just press the **green tick** or press the **escape** button.

Now draw a 45mm horizontal line

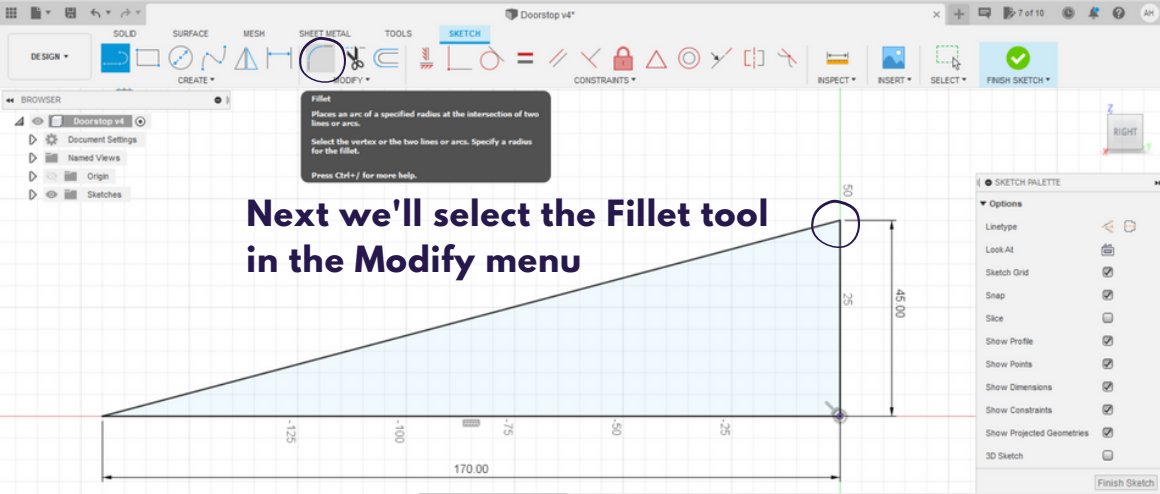


Finally connect the ends of the two lines up to make a triangle



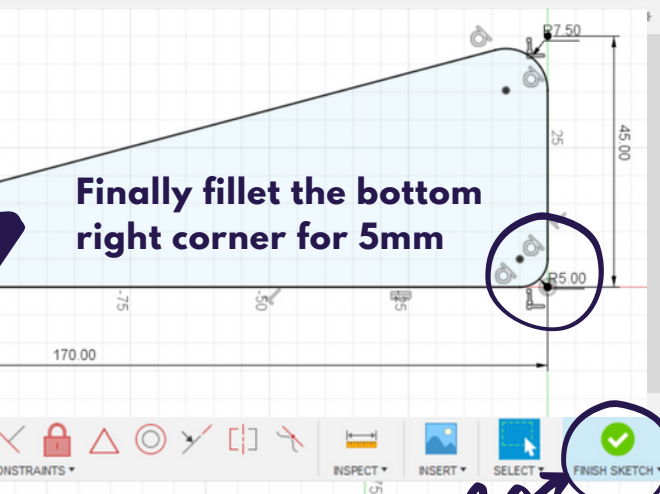
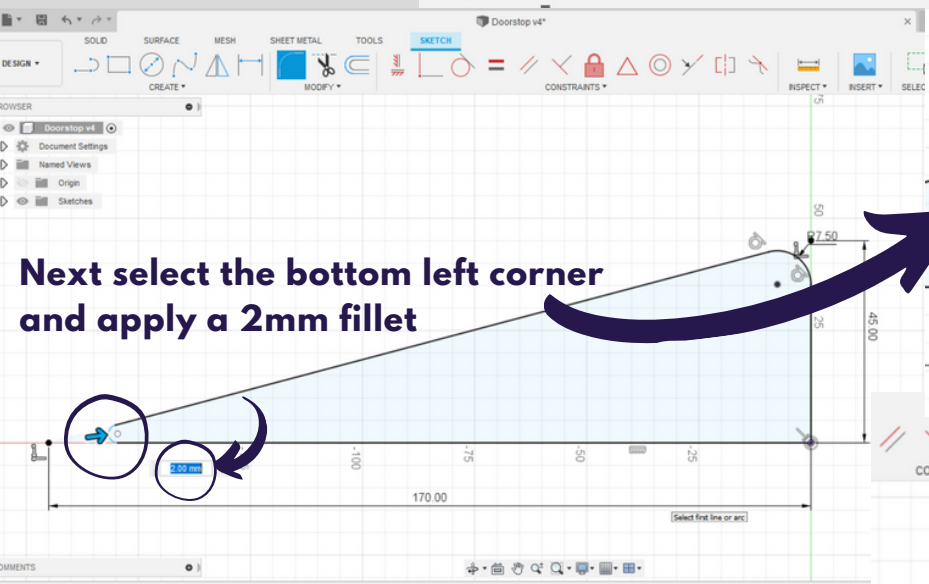
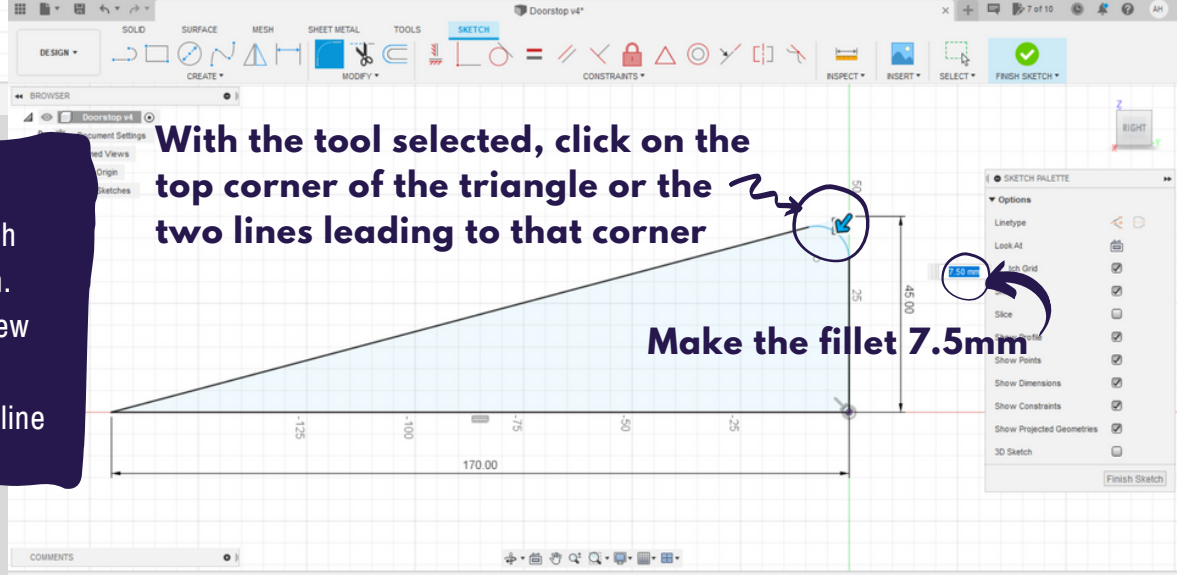
FILLET THOSE CORNERS

If you've correctly connected the lines, the shape will go blue



Technical Pointers

It's easy to get out of the sketch menu while editing your sketch. If this happens don't make a new sketch, instead double click on your original sketch in the timeline



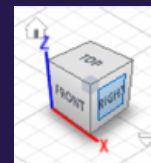
Then click Finish Sketch

EXTRUDE YOUR SHAPE

Now we have a complete face ready for extrusion

You'll want to rotate your view so the face isn't flat when your extruding.

Technical Pointers



Click on the house icon next to the viewcube to return to the home view. To zoom in Fusion roll the middle mouse button. To pan hold the middle mouse button.

Now click the Extrude button...

...and select the triangle as the 'profile'. Once selected it will go a dark blue.

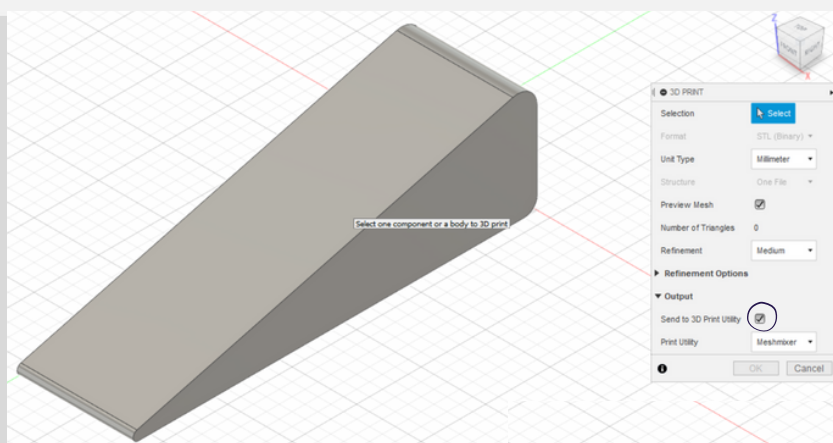
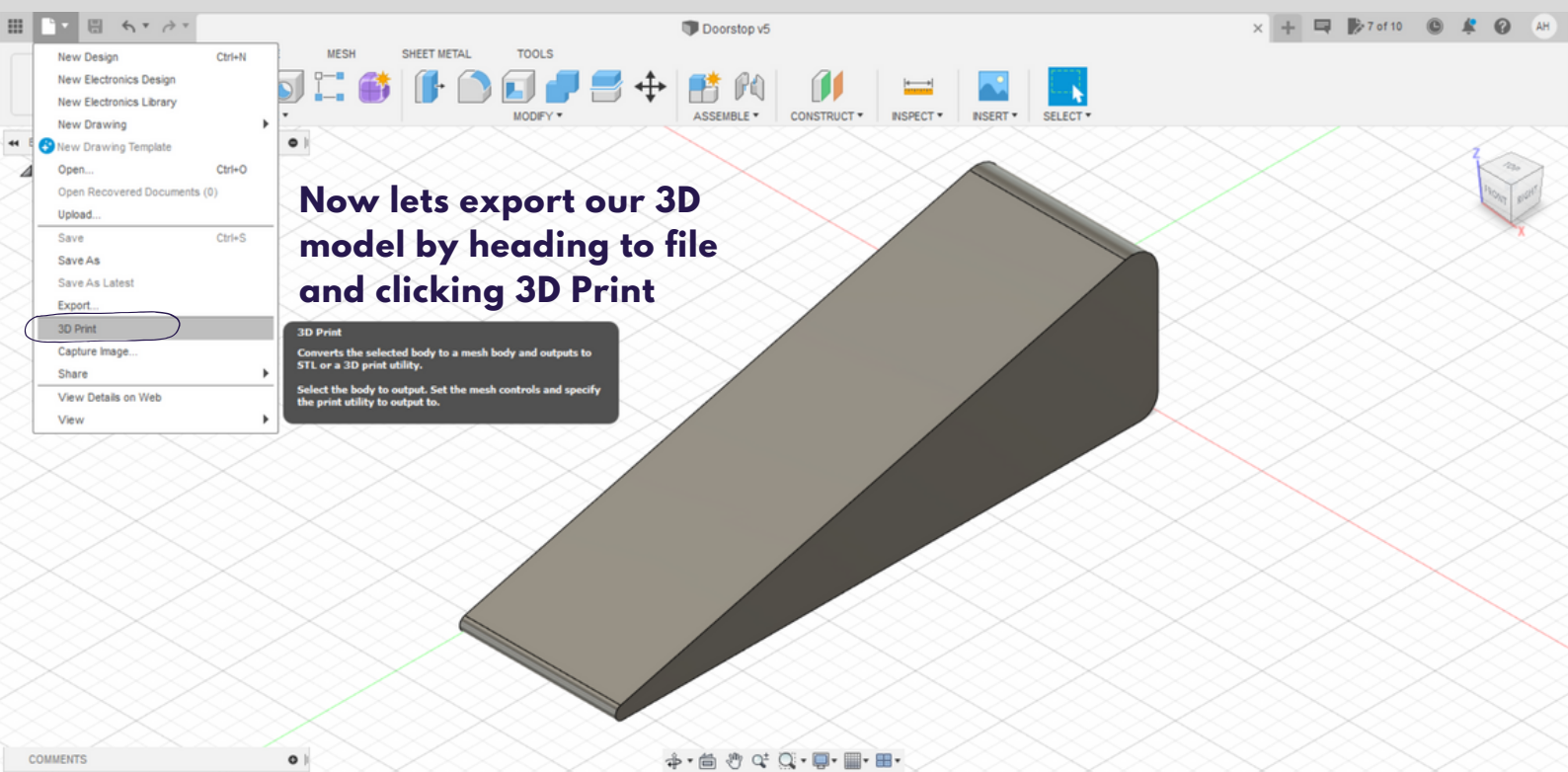
Technical Pointers

The bar on the bottom is your history bar. If you don't like the look of your model you can double click the sketch icon and edit the original sketch.

Next type in 45mm as the distance and press the ok button

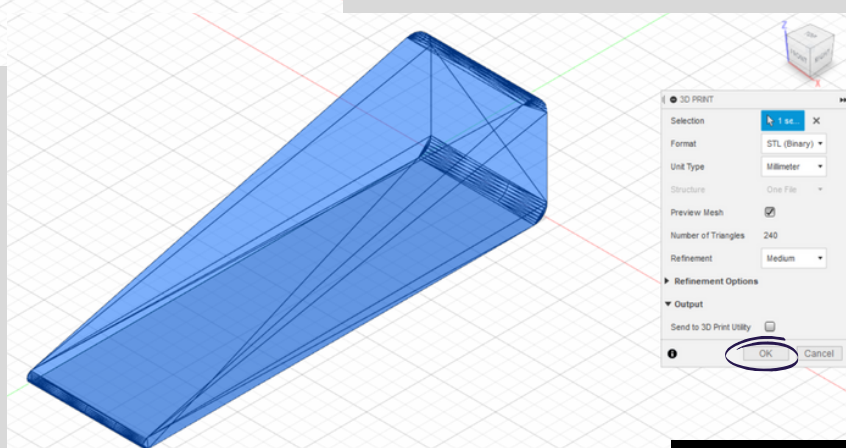
1 Profile | Area : 3773.037 mm²

EXPORT YOUR MODEL



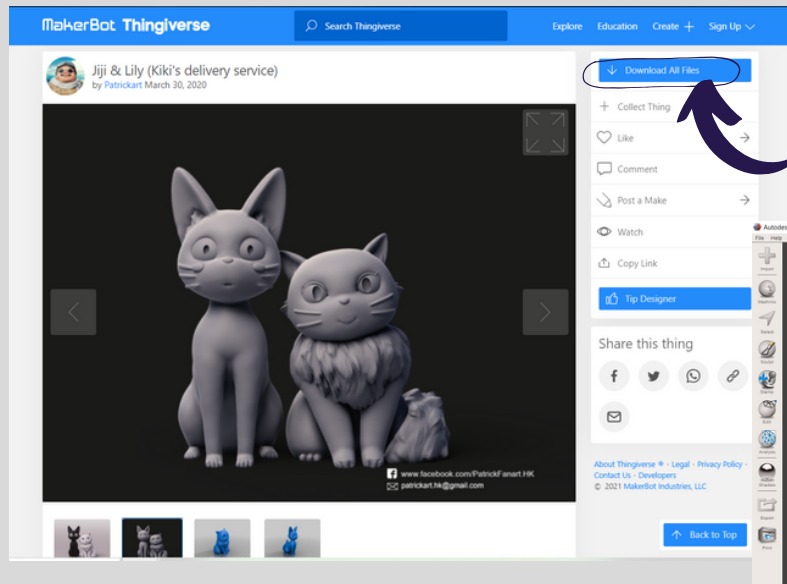
Next select the model (it will go blue and see through if selected) and untick the 'Send to 3D Print Utility' box

Finally click ok and choose what to name your print and where to save your print



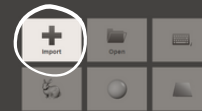


PAGE 6

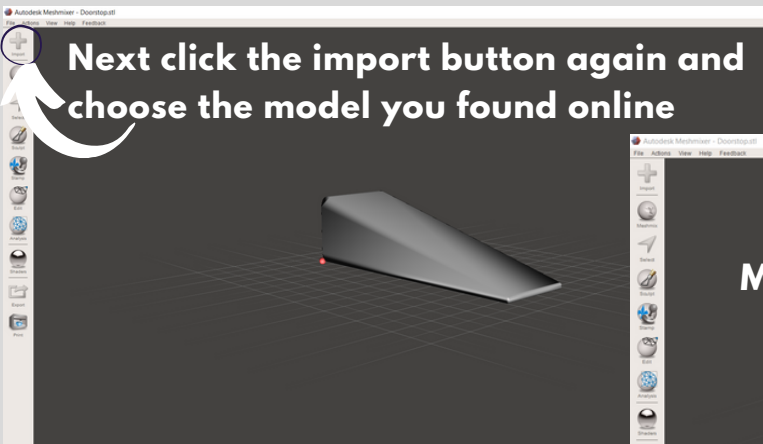


Next head online and pick what models you want to add to the end of your doorstep. I choose these models and downloaded them from Thingiverse.

Then open up Meshmixer and click import

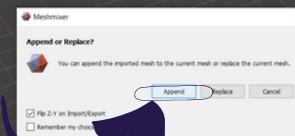


First import your doorstep model



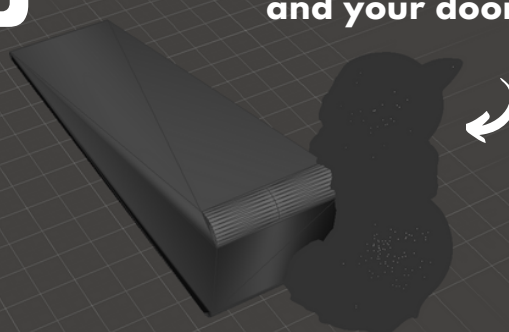
Next click the import button again and choose the model you found online

Make sure you click Append and not Replace

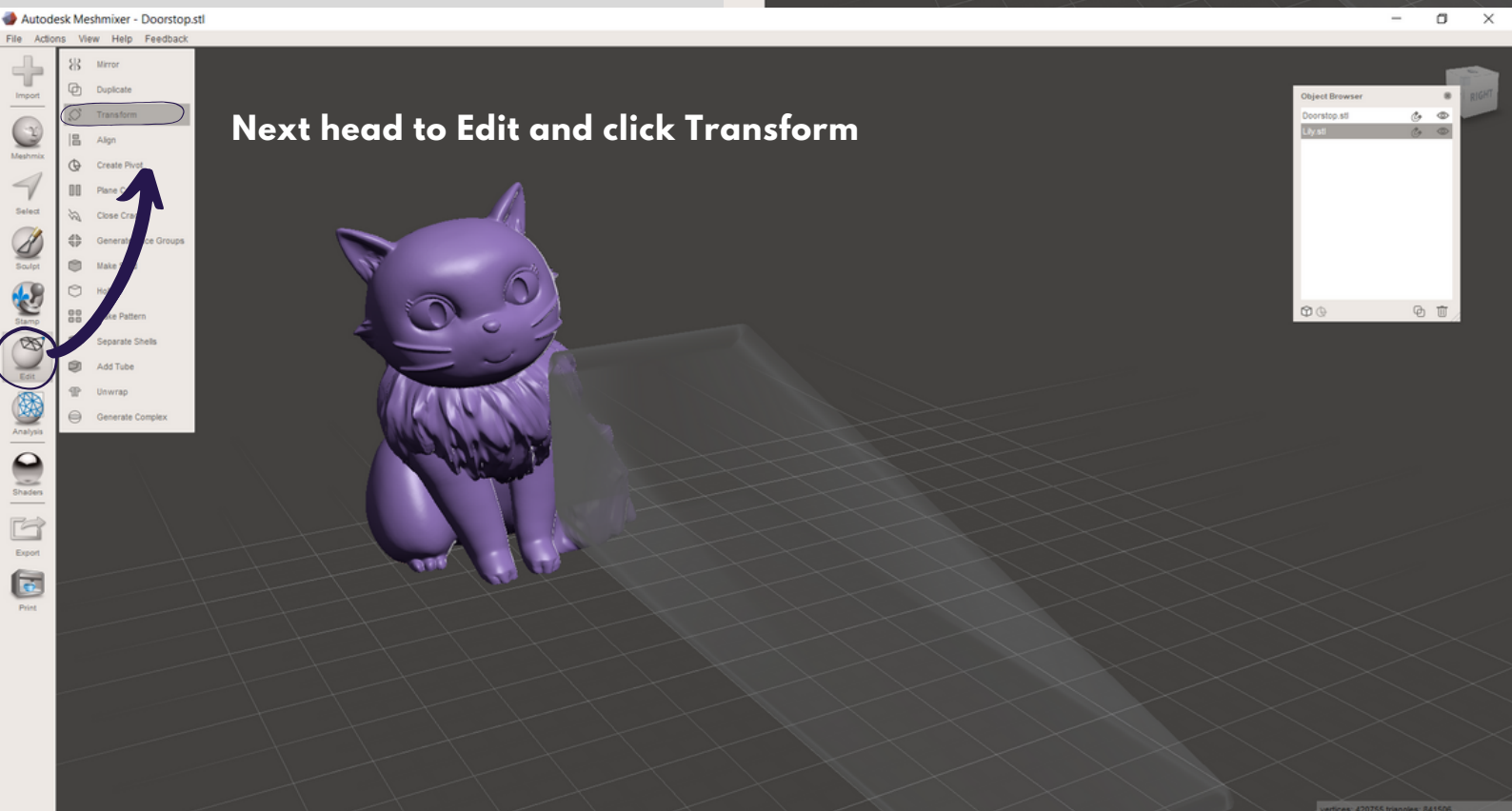


I typed W, the keyboard shortcut to show wireframe, but that's not essential now

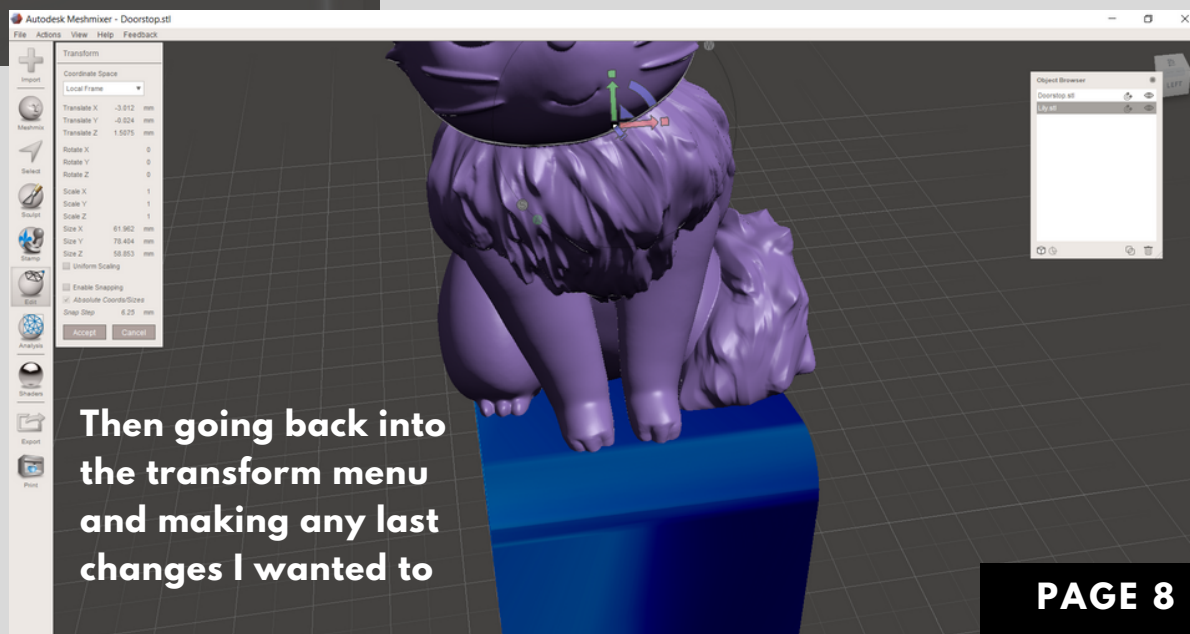
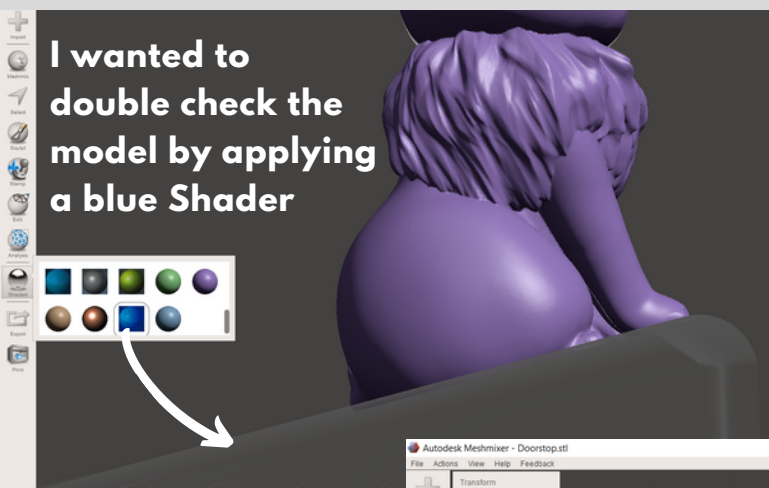
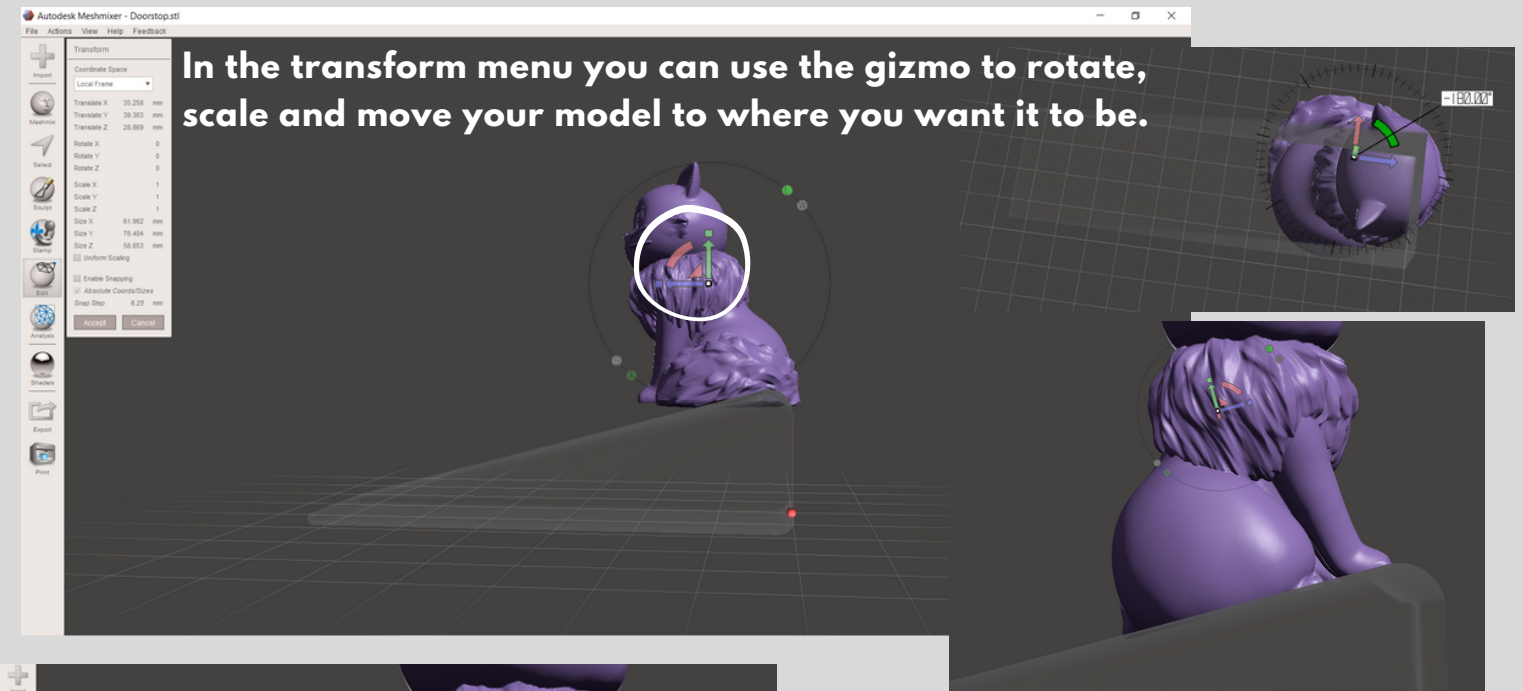
Now you should have your model and your doorstep



APPLY SHADERS



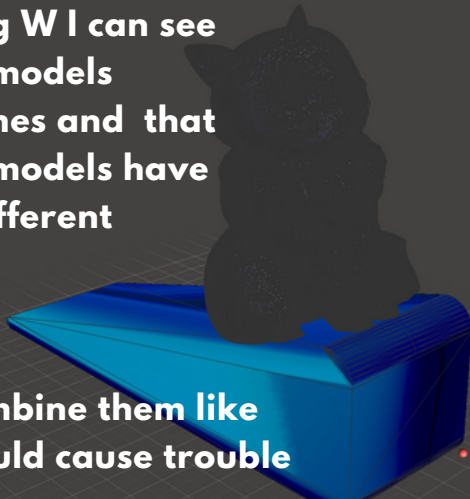
ARRANGE YOUR MODELS



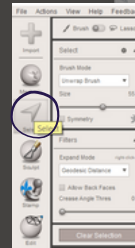


DIFFERENT DENSITIES

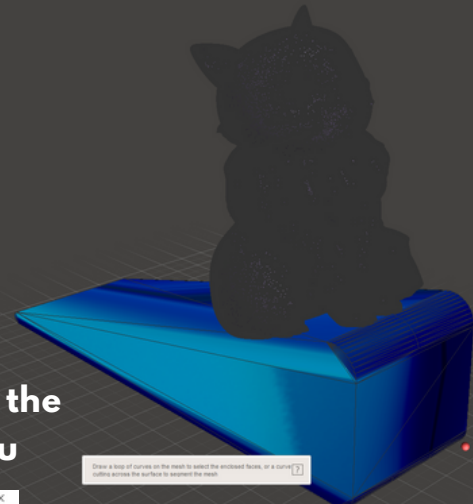
By typing W I can see the two models wireframes and that the two models have vastly different surfaces



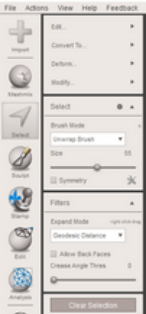
If we combine them like this it could cause trouble



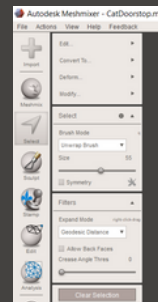
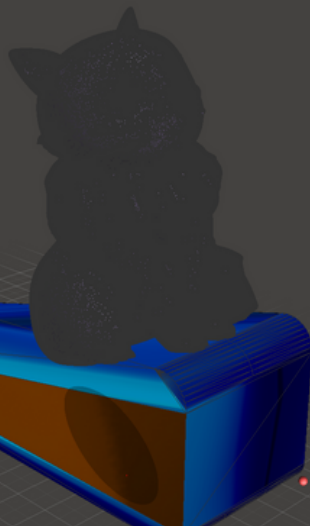
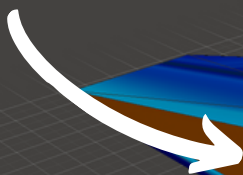
So head to the Select menu



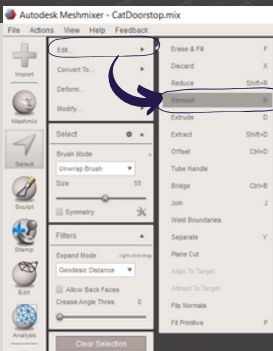
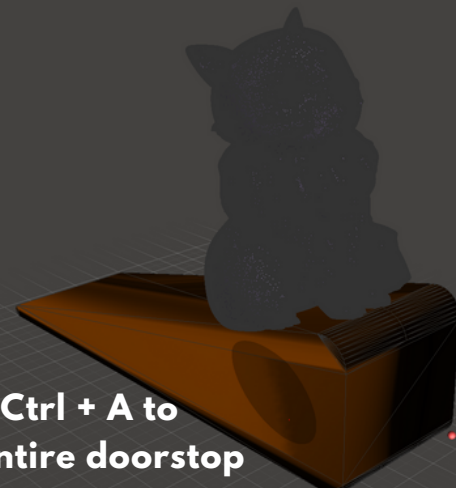
Autodesk Meshmixer - CatDoorstop.mlx



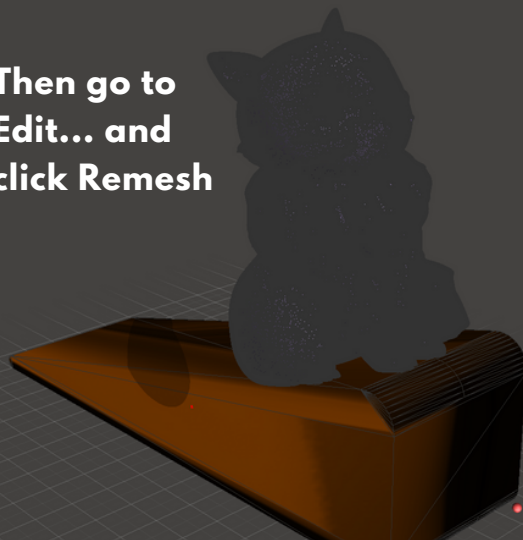
Next click one side of the doorstop...



...and type Ctrl + A to select the entire doorstop

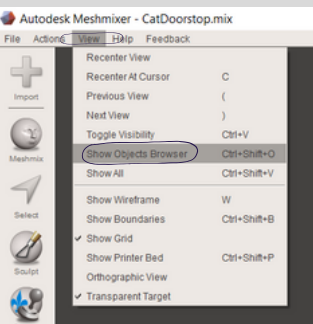
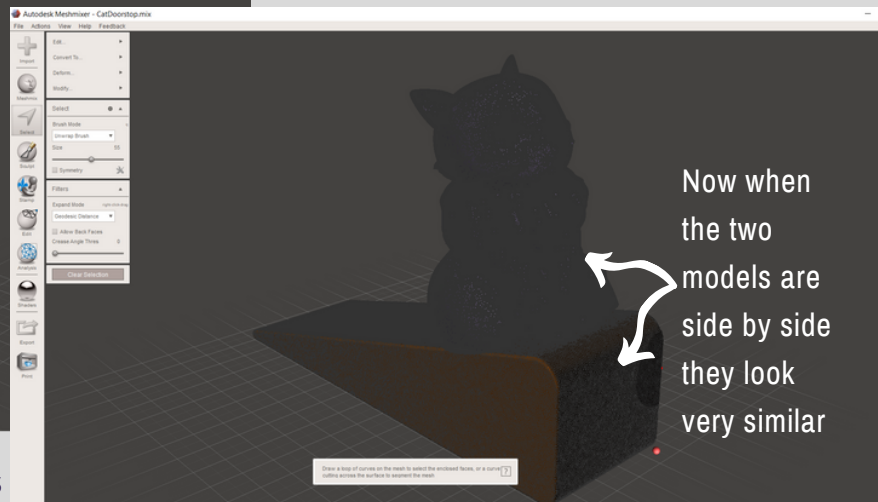
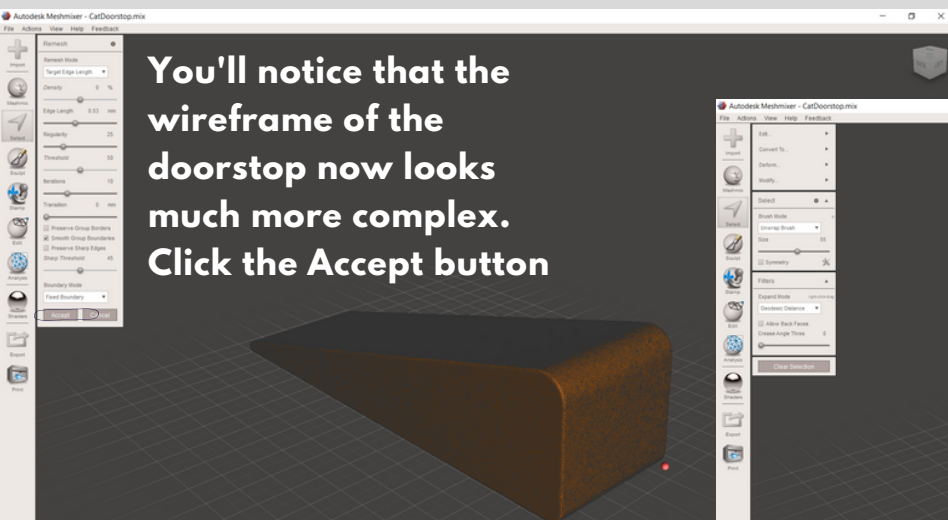


Then go to Edit... and click Remesh

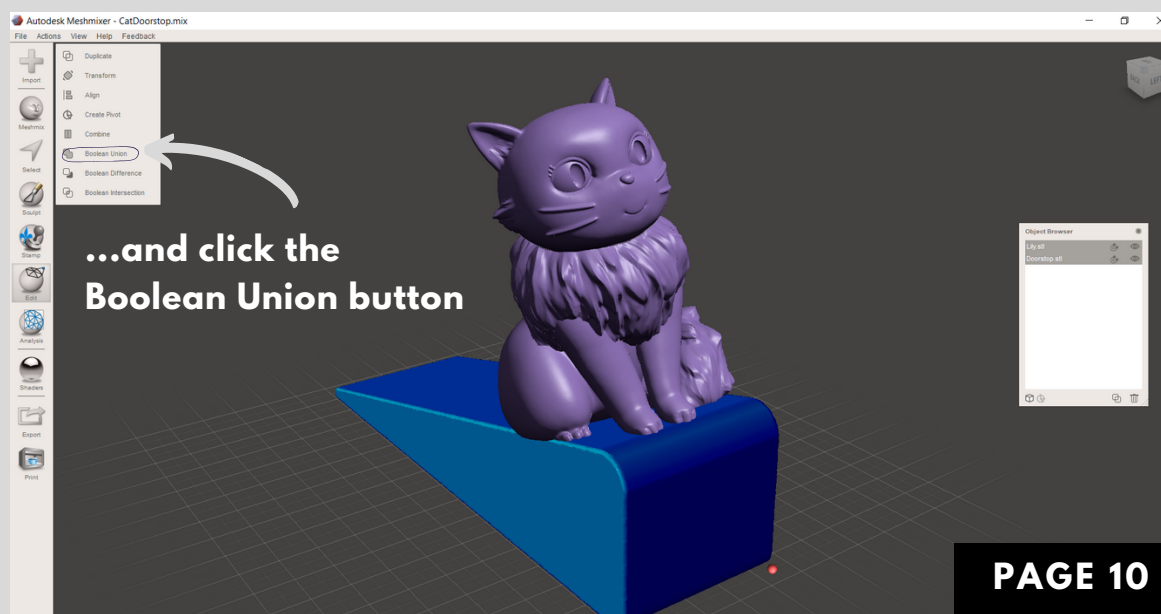
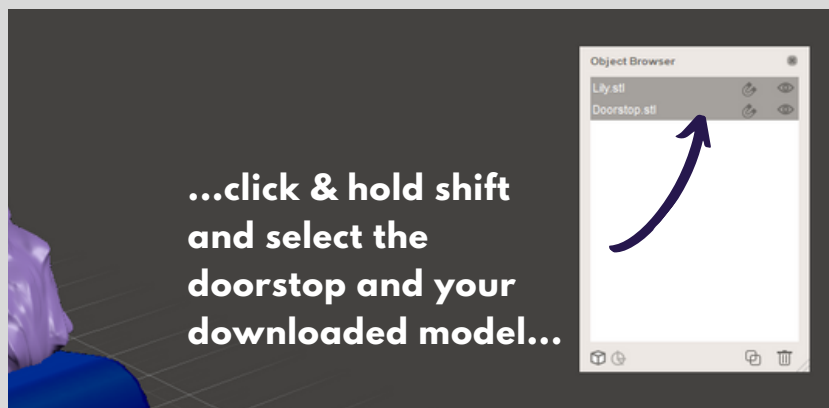




REMESH AND COMBINE

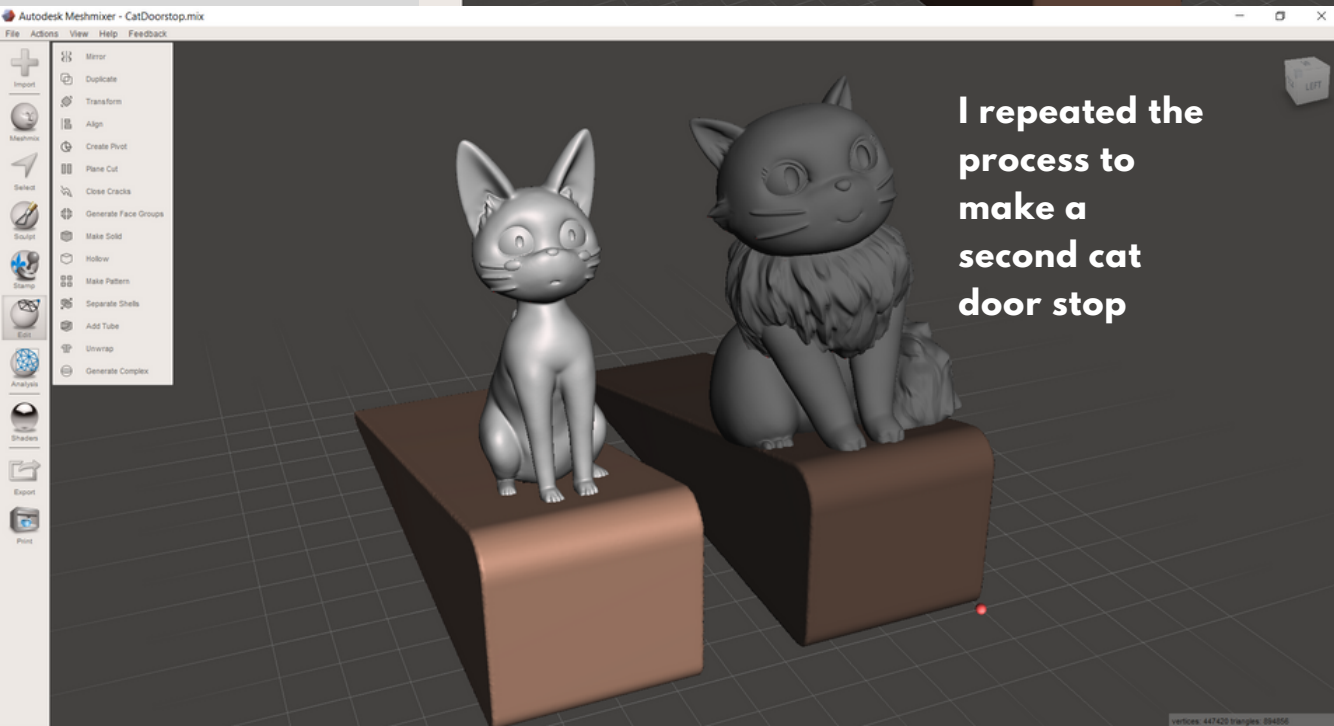
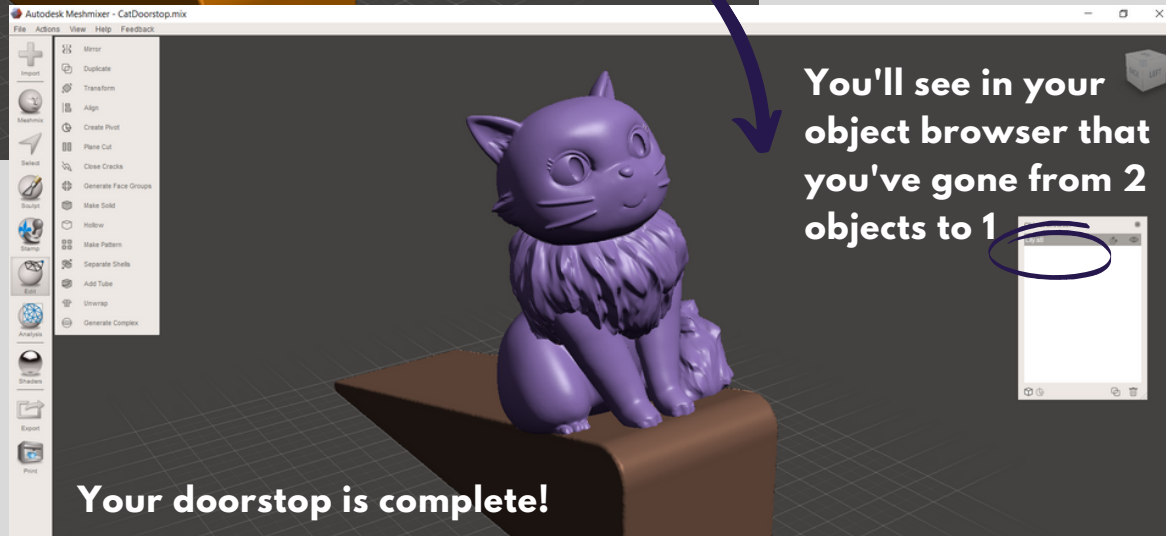
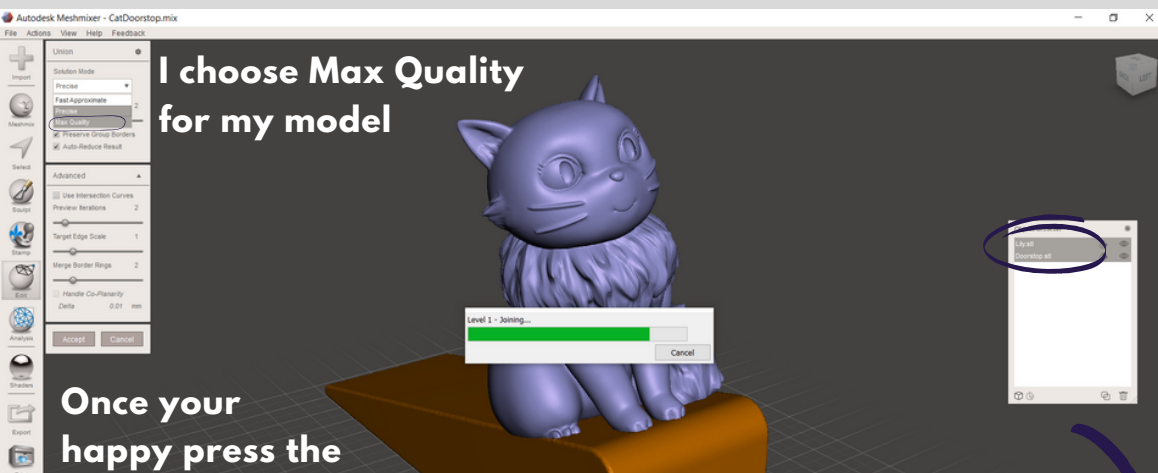


Now open the **Objects Browser** from the view menu...





BOOLEAN UNION





AUTO REPAIR

