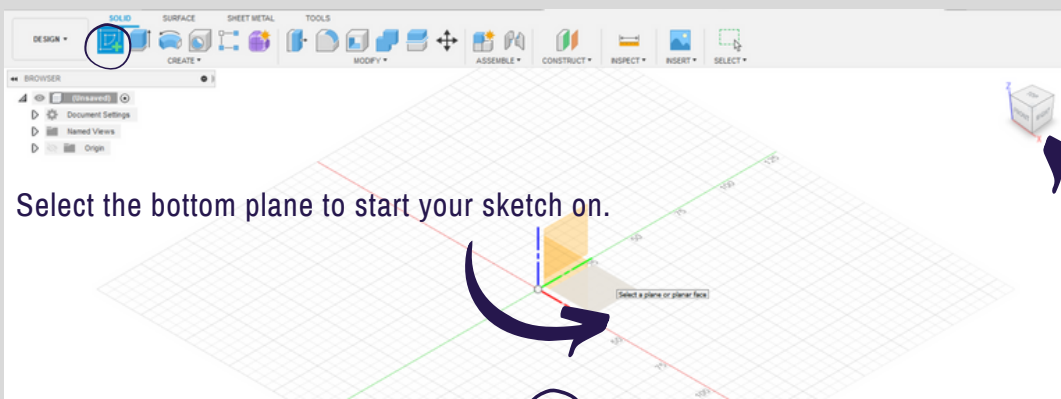




GETTING STARTED

Technical Pointers

The View Cube can be found on the top right corner of your browser and can help a lot with navigation.

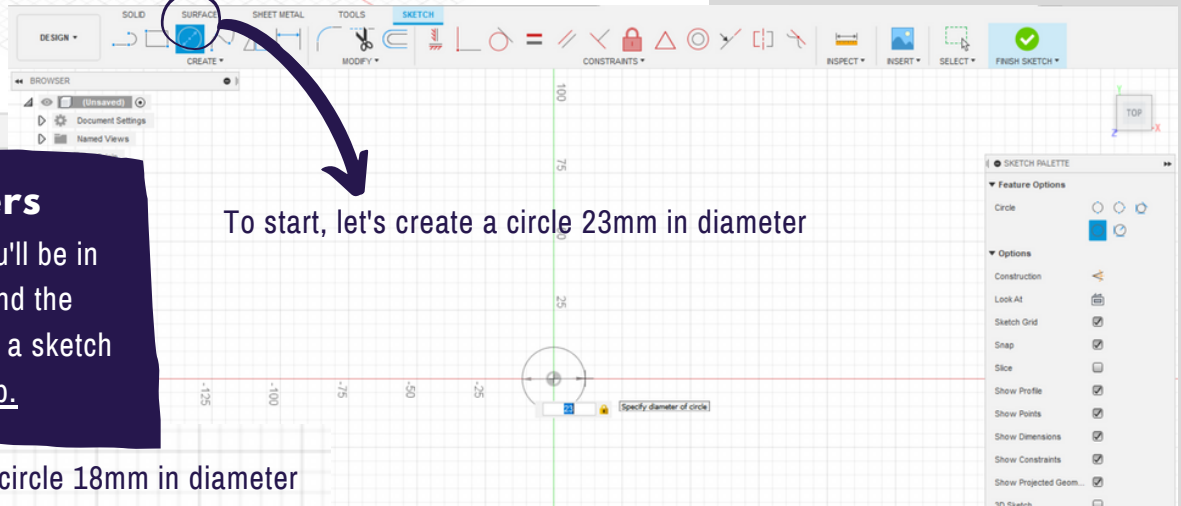


Select the bottom plane to start your sketch on.

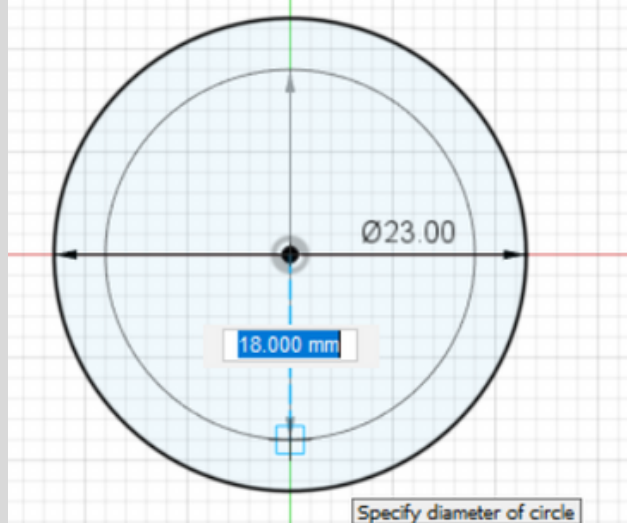
Technical Pointers

When you start Fusion you'll be in the Design Workspace and the Solid Tab. When you start a sketch you'll enter the Sketch Tab.

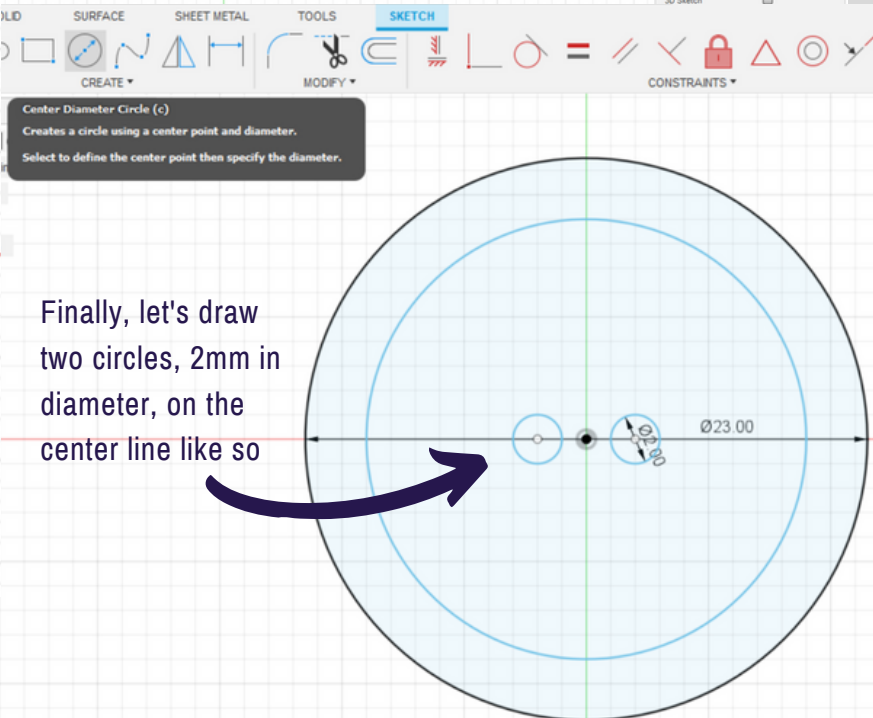
To start, let's create a circle 23mm in diameter



Then, draw another circle 18mm in diameter



Finally, let's draw two circles, 2mm in diameter, on the center line like so



Technical Pointers

To zoom in Fusion, roll the middle mouse button. To pan, hold the middle mouse button



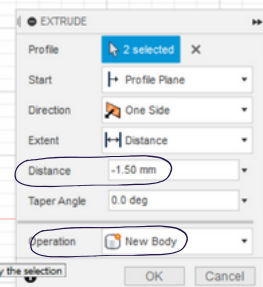
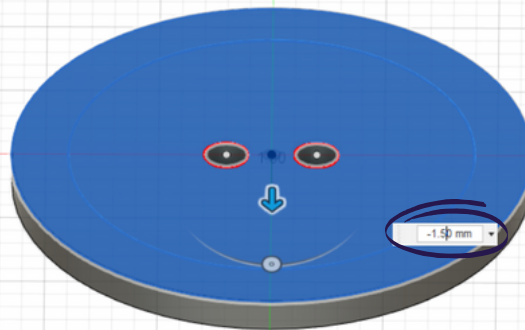
EXTRUDE THE BUTTON

Technical Pointers

Fusion will highlight the tool your currently using

Now, let's extrude down for the base for the button.

Select the button middle and rim and extrude down -1.5mm

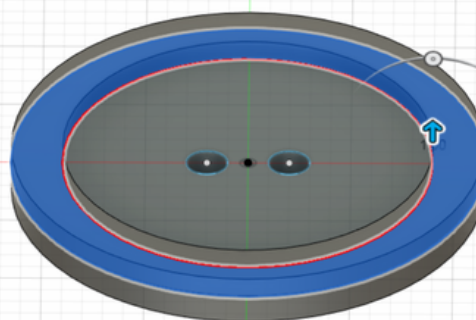
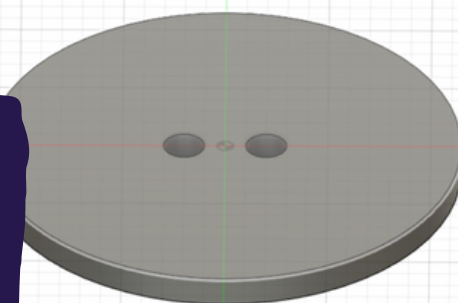


Make sure the Operation is New Body

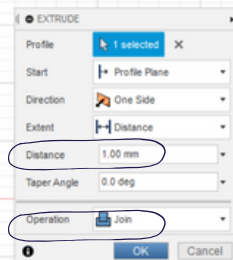
Technical Pointers

Fusion will hide the sketch after it's been extruded from. To show it, navigate to the Sketches Folder of the Browser and click the eye with the cross through it.

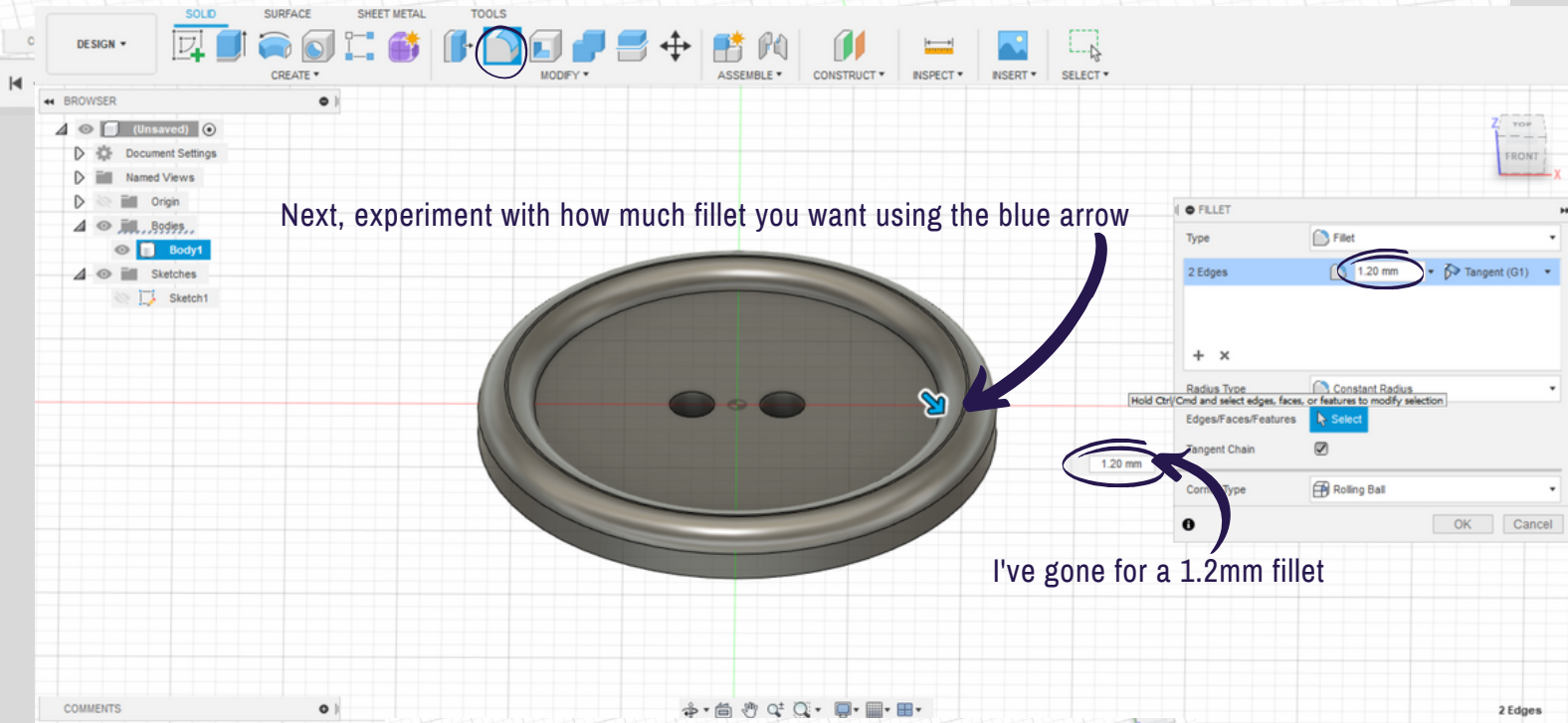
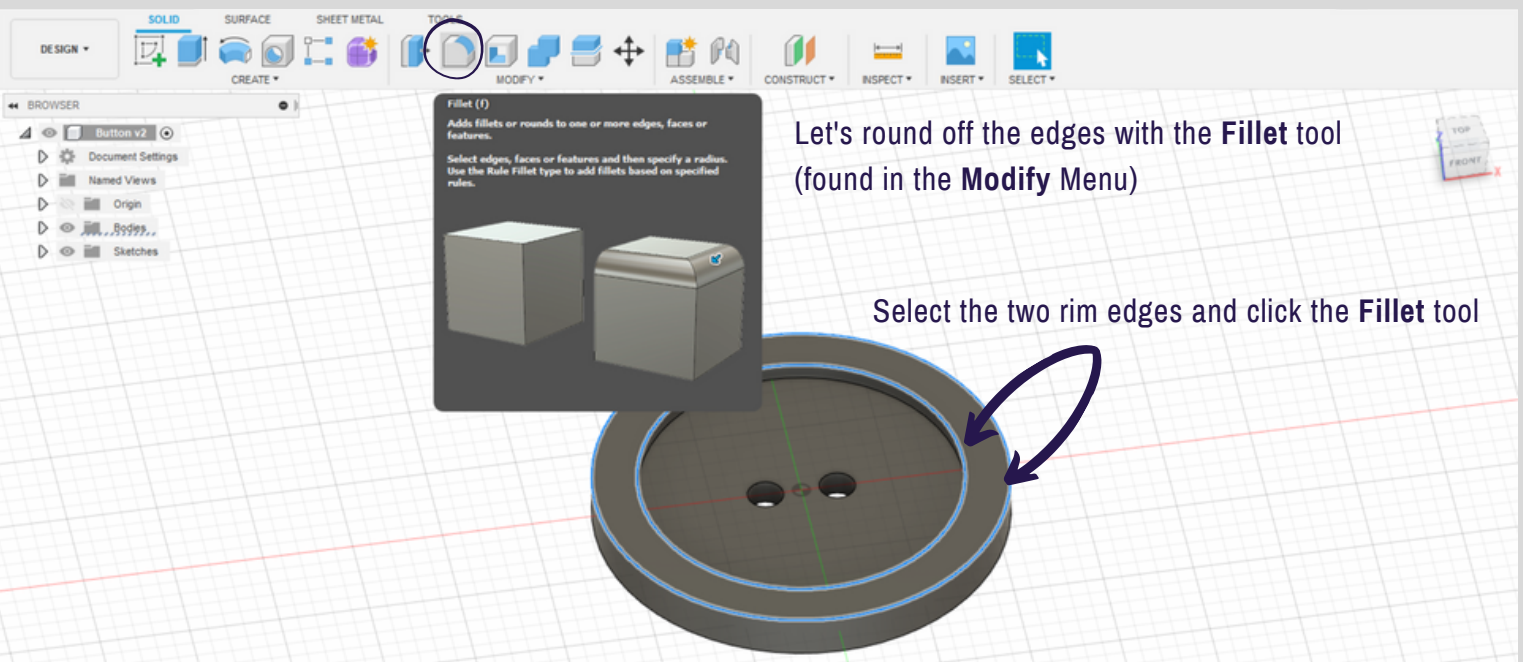
Next, show the sketch again so you can start extruding the rim



Extrude the rim up 1mm making sure the Operation is Join this time

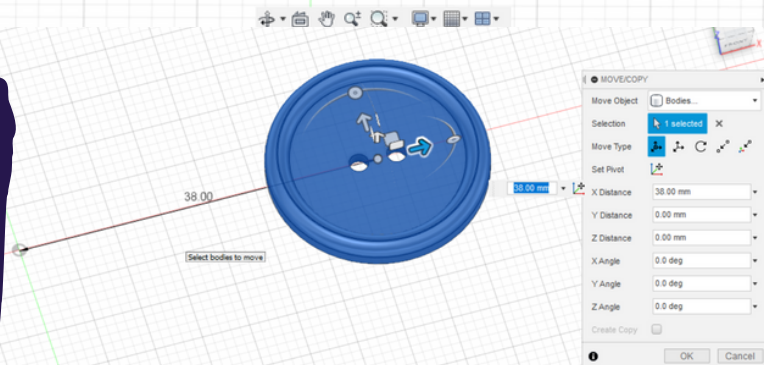


FILLET THE EDGES



Technical Pointers

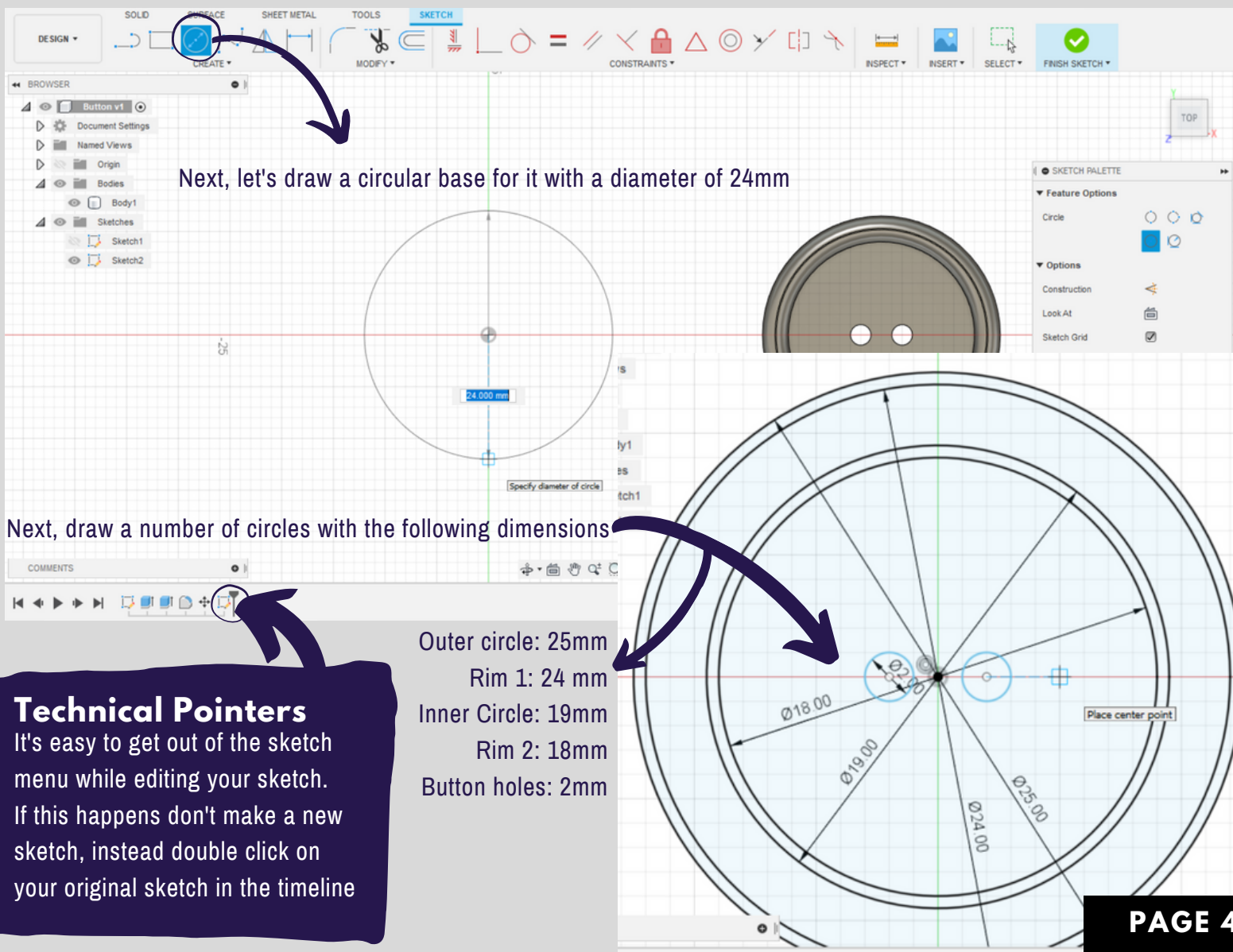
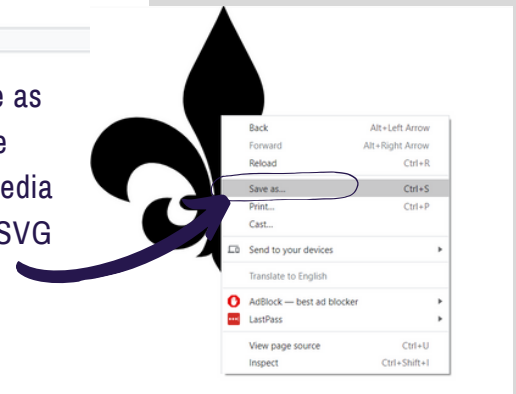
To access the move tool
Type M or select it from the
Modify menu



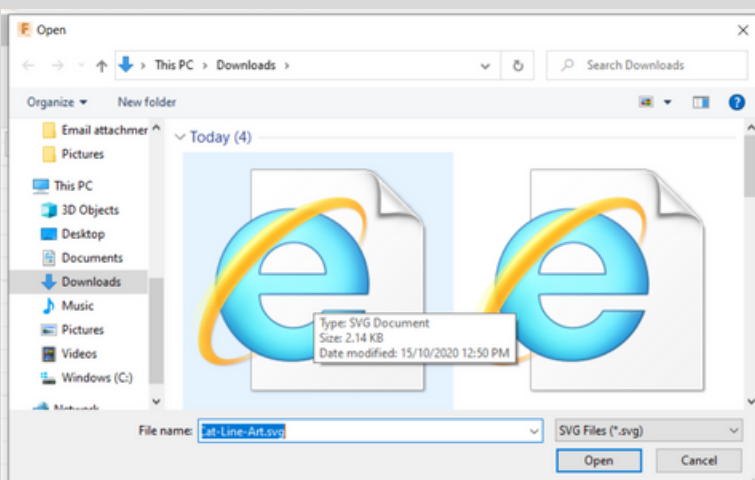
Once your happy with the
fillet, click the **OK** button
and then move your button
to the side to start a new
one



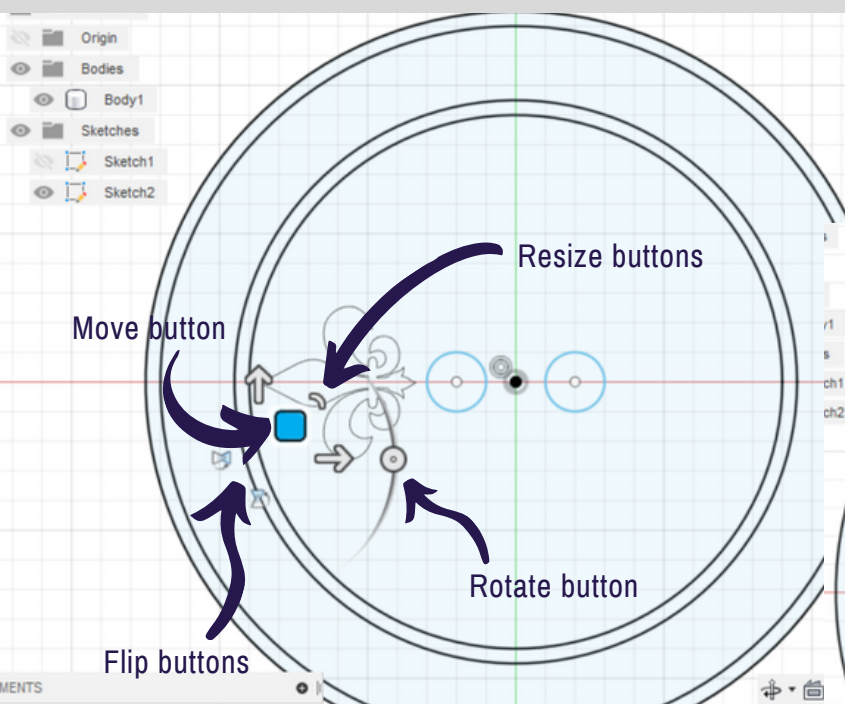
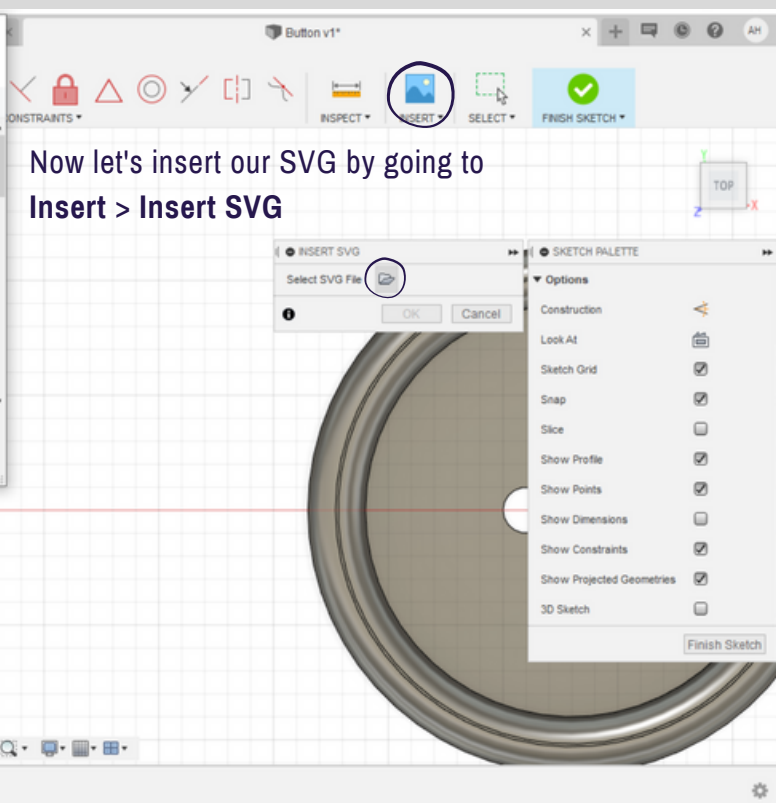
FINDING AN SVG



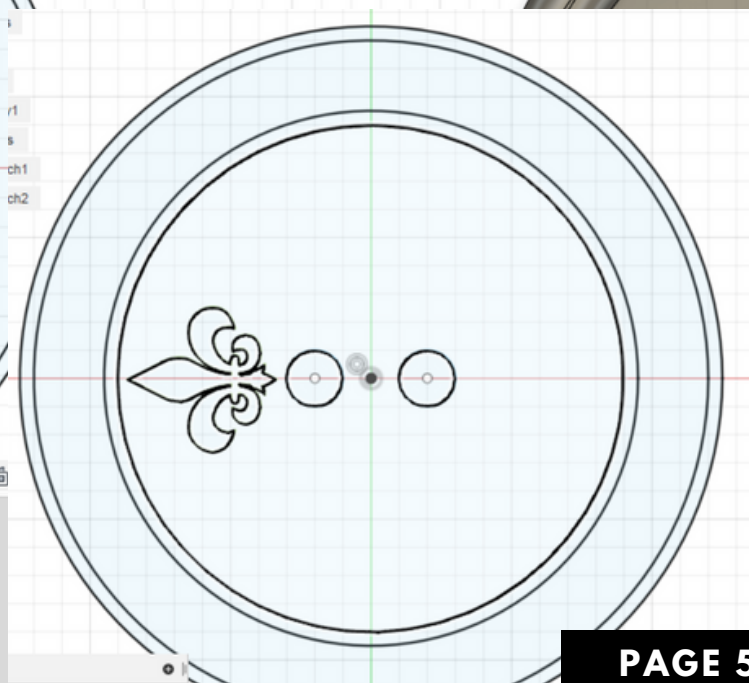
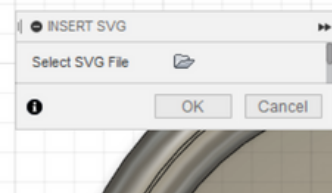
PLACING THE SVG



Now let's insert our SVG by going to
Insert > Insert SVG



Now, edit your SVG so it
sits in the button design
and press the **OK** button
once you're happy with it





CIRCULAR PATTERN

Next, let's create a pattern using our SVG.
To start, select the entire SVG.

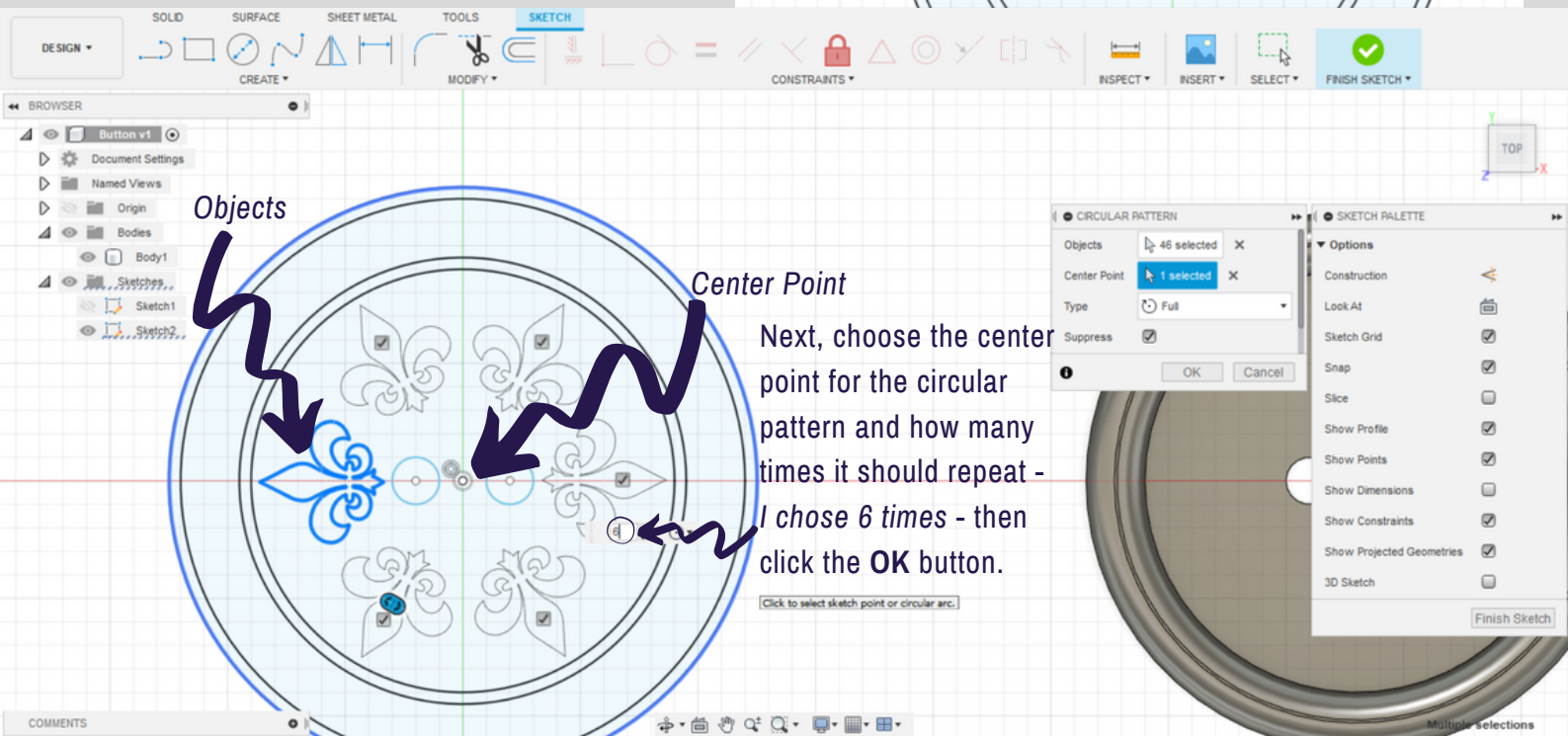
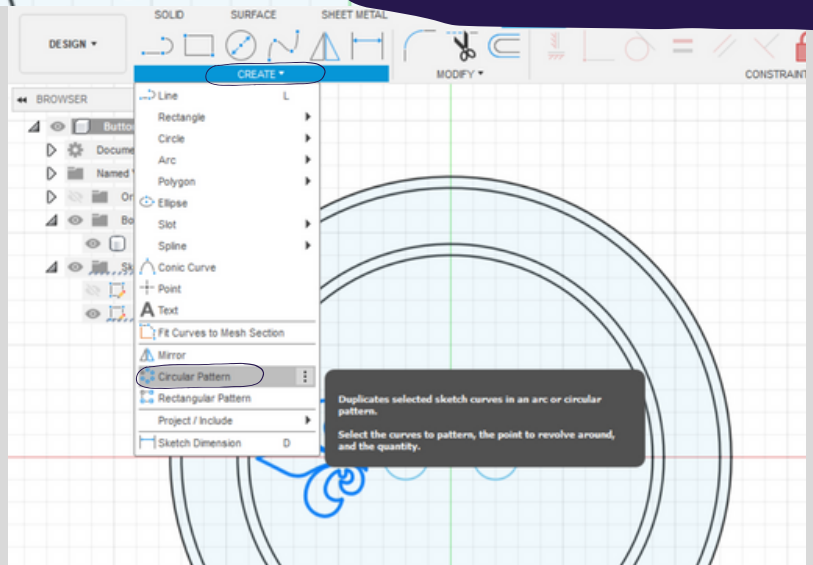
Technical Pointers

To select multiple lines hold shift and select each one OR double click to select all connected lines

Technical Pointers

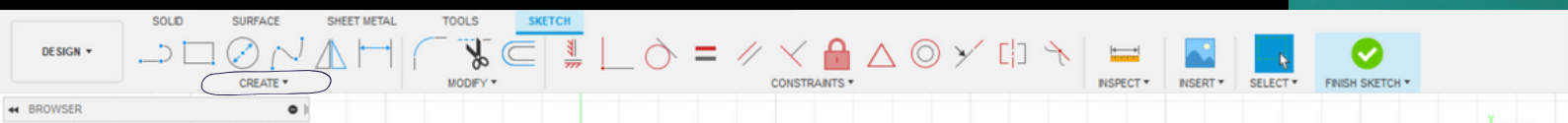
Why are the lines green?
A SVG will be imported 'locked', this constraint will cause the lines to be green.

Then, head to the **Create** menu and select **Circular Pattern**

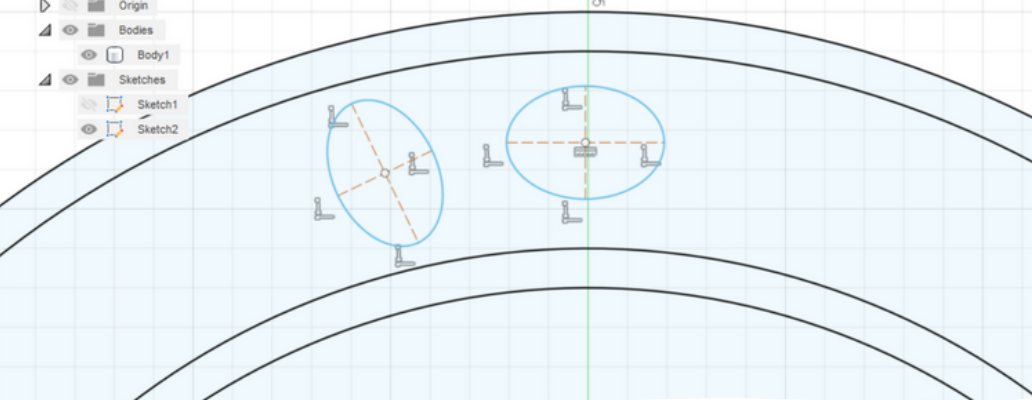




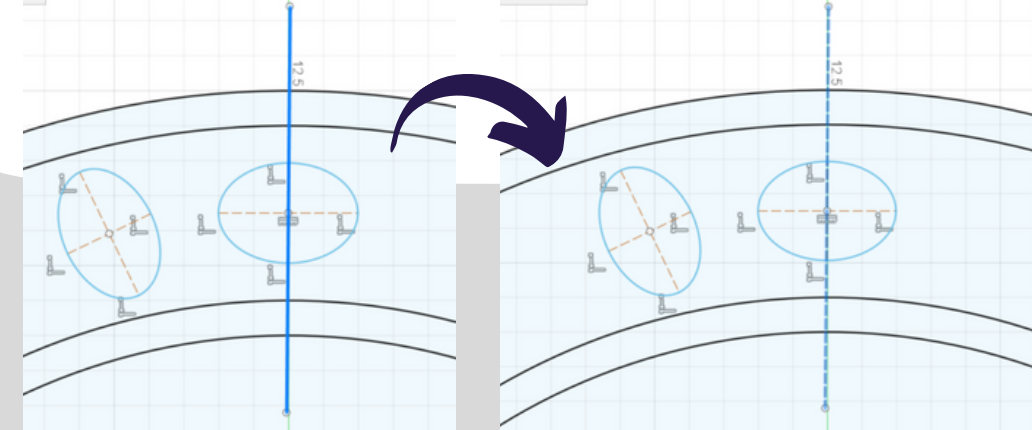
OUTER RIM PATTERN



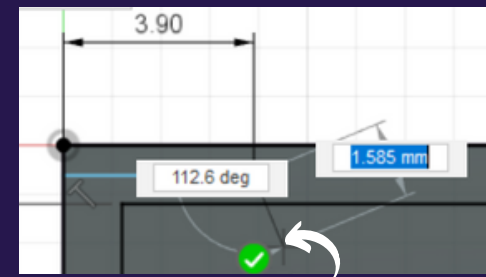
Next, let's create the pattern for the outer edge of the button. I used two ellipses (find the **Ellipse** tool in the create drop down menu)



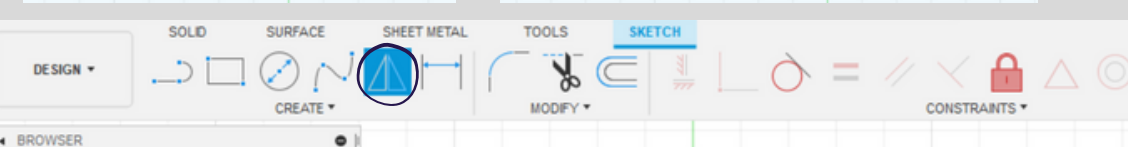
Then, draw a line down the center of the button and type X to make it a construction line.



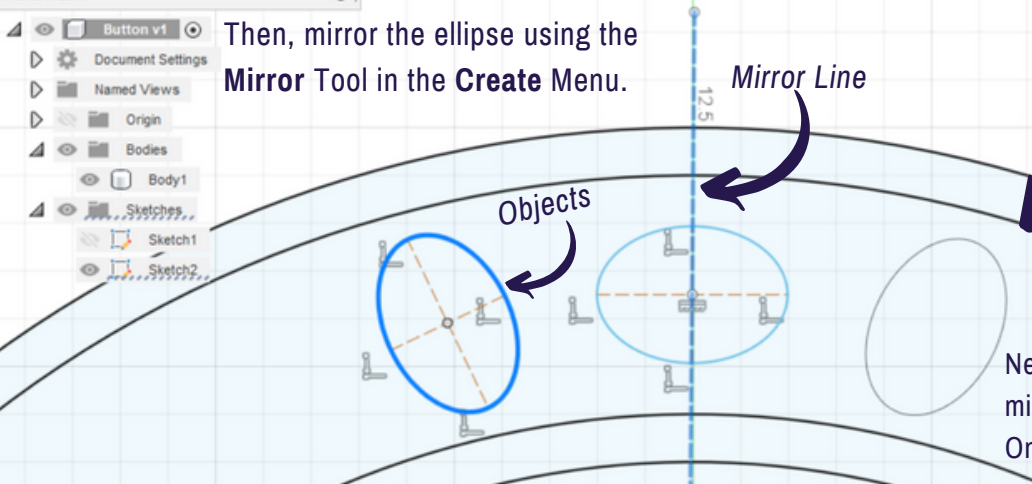
Technical Pointers



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.

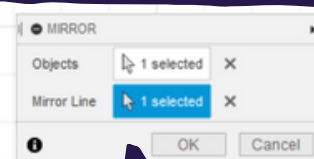


Then, mirror the ellipse using the **Mirror Tool** in the **Create** Menu.



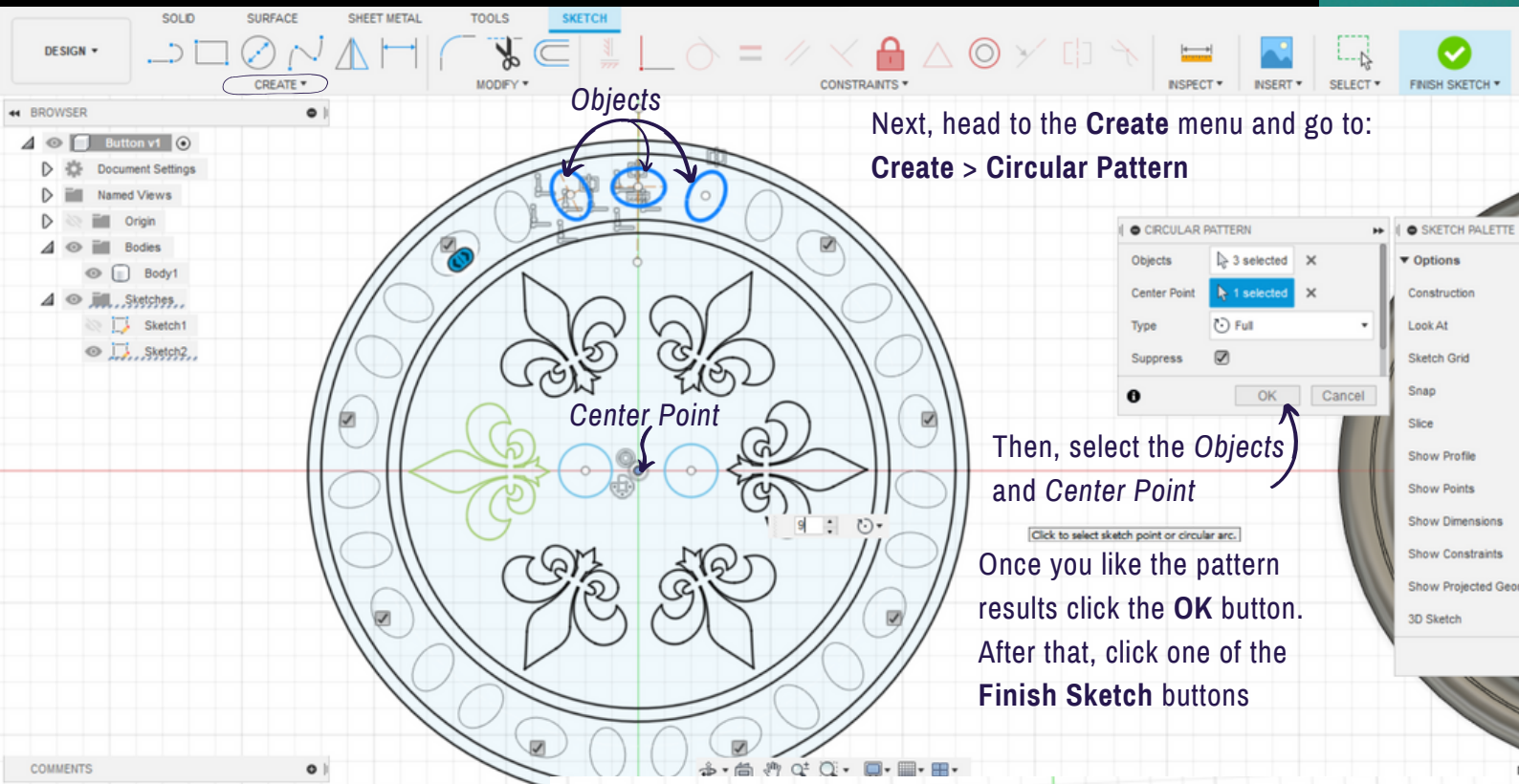
Technical Pointers

Fusion will show what the mirror will produce with black lines



Next, select the *Objects* to mirror and the *Mirror Line*
Once done click **OK**

CIRCULAR PATTERN 2

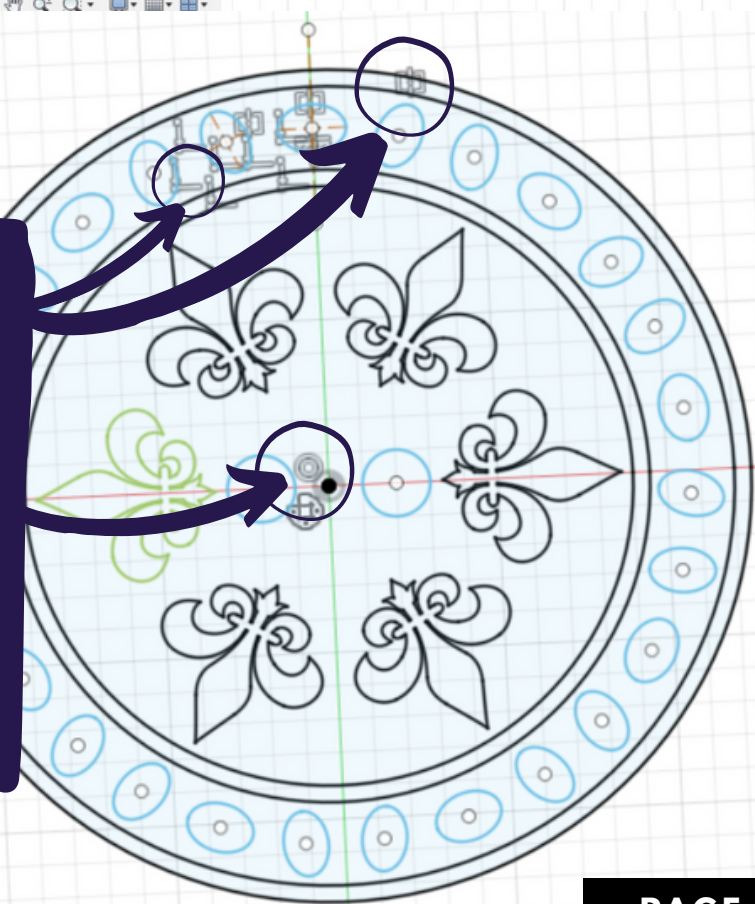


Technical Pointers



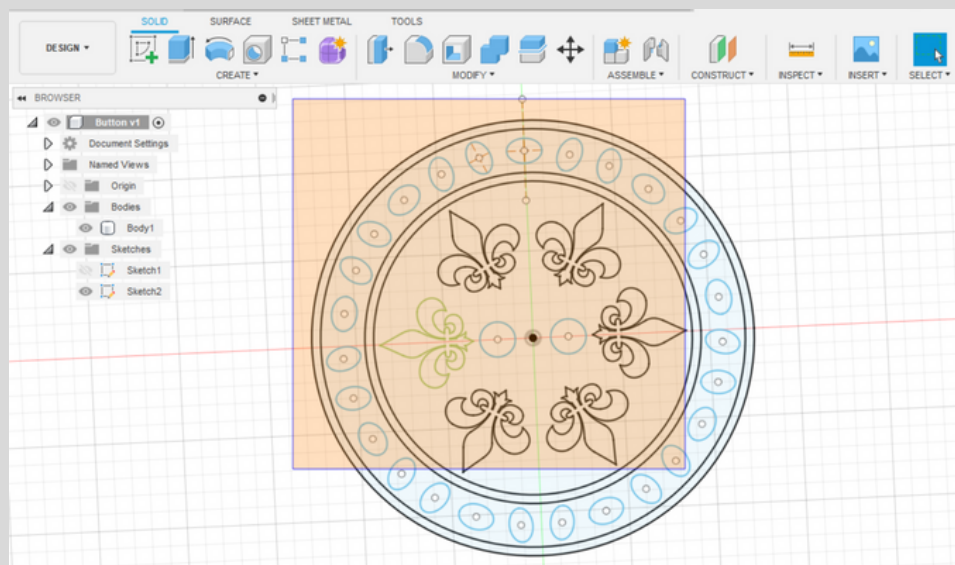
What are constraints?

Constraints are tools in Fusion that allow you to relate one sketch entity to another sketch entity. Like making sure a line intersects with another at it's midpoint, or one circle is at the absolute center of another. Constraints are your friends in sketching and Fusion will often automatically apply the best constraint to your sketch while you're working.

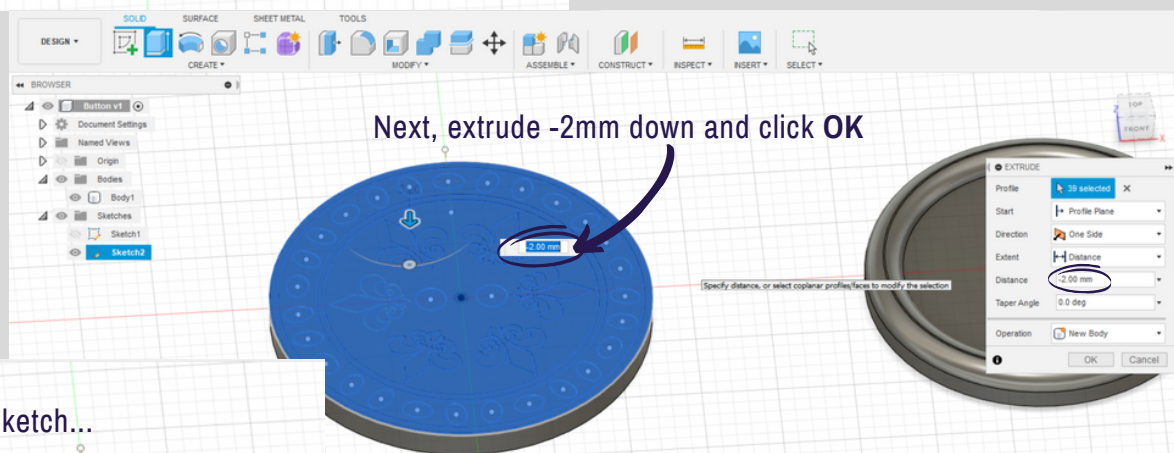




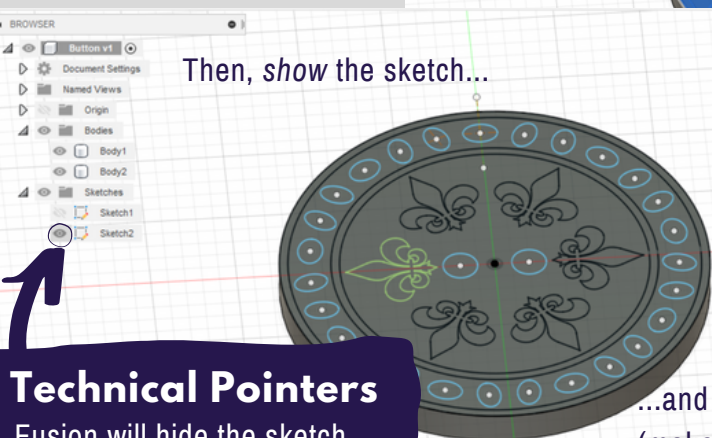
EXTRUDE BUTTON 2



To select the entire button **right click** and **hold**, dragging down the selection box until you've selected the entire button



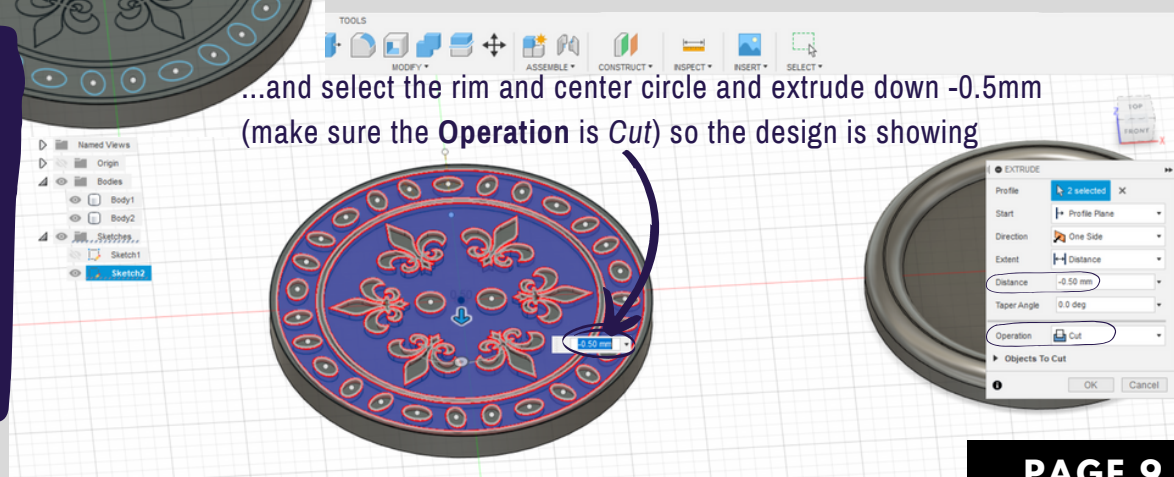
Then, show the sketch...



Technical Pointers

Fusion will hide the sketch after it's been extruded from. To show it, navigate to the Sketches Folder of the Browser and click the eye with the cross through it.

...and select the rim and center circle and extrude down -0.5mm (make sure the **Operation** is **Cut**) so the design is showing





CUT THE HOLES

