GAME NIGHT

Thursday March 21st
6-9PM in the iSuite

Hosted By Ambassadors of Computer & Electrical Engineering
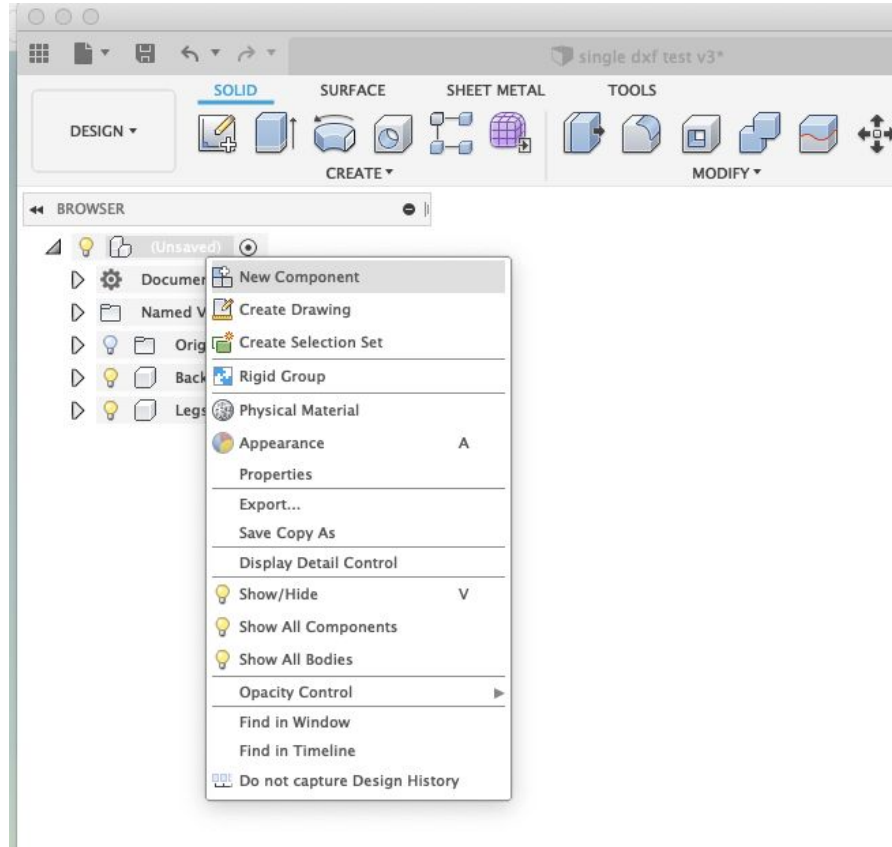
A.C.E.E.

A.C.E.E.

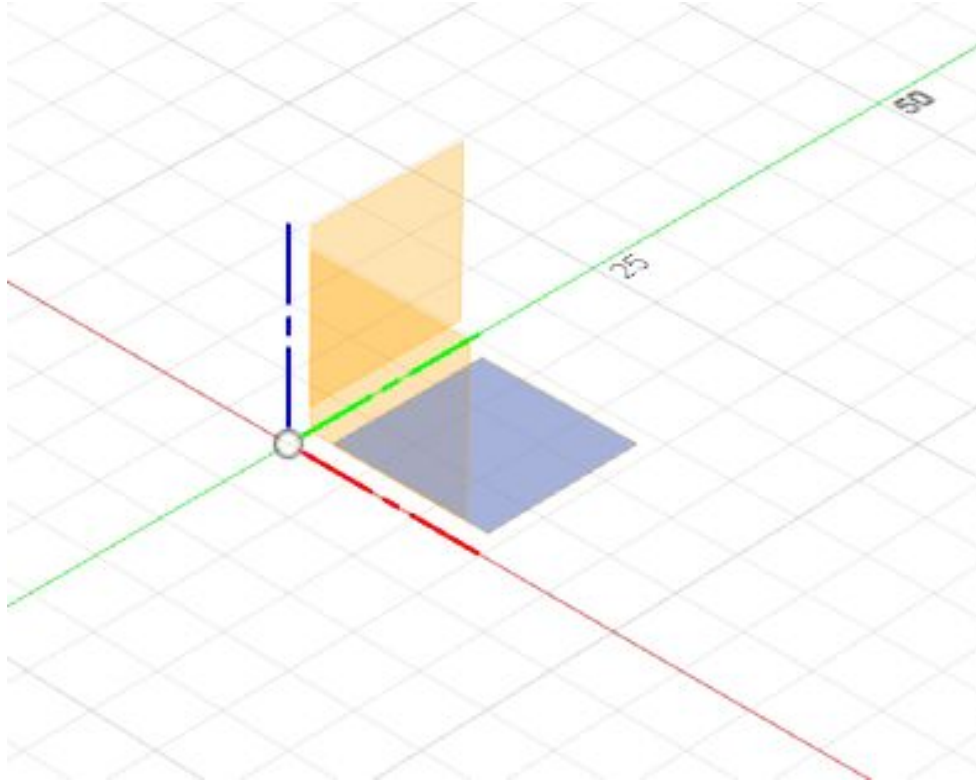## Free Pizza
AR/VR Experience
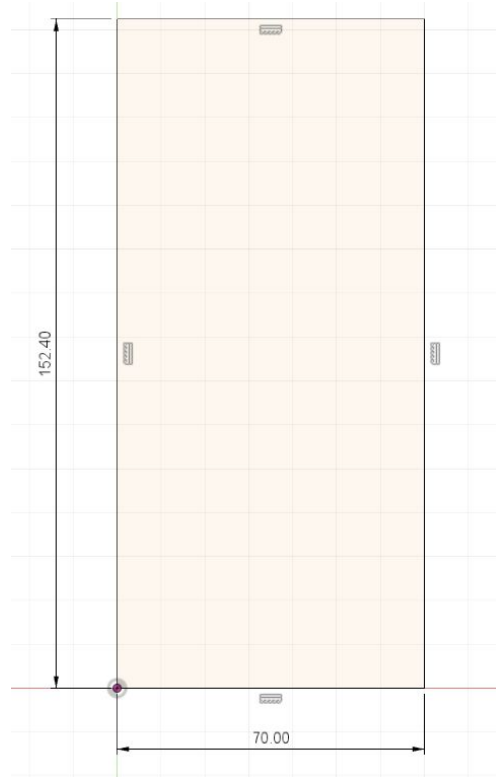## Video & Board Games

Creating an phone stand

Before doing anything, create 2 new components and name one "back" and the other "legs" then hit save.
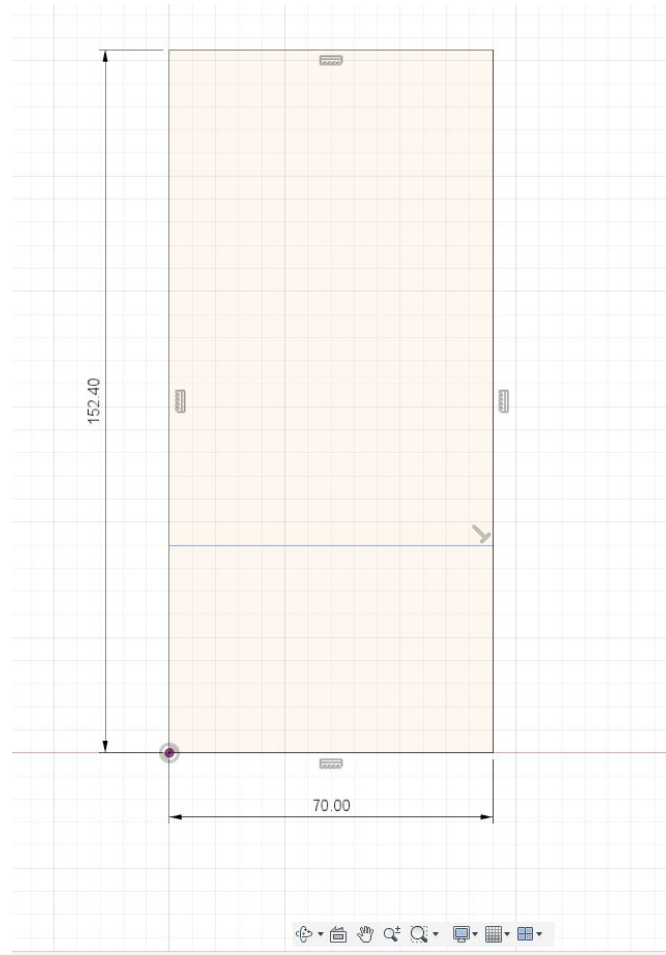
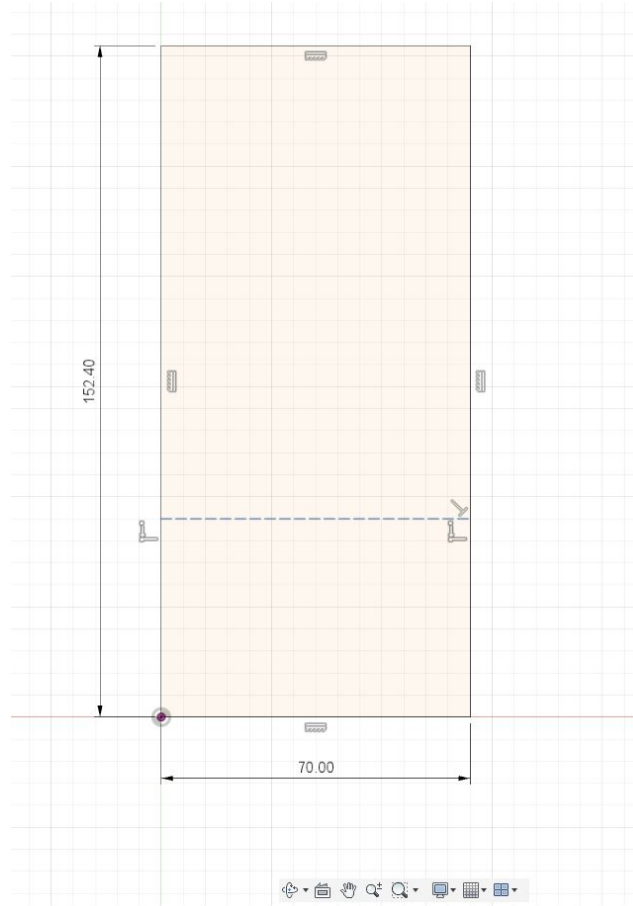**Activate the "back" component and start a sketch on the X/Y plane.**

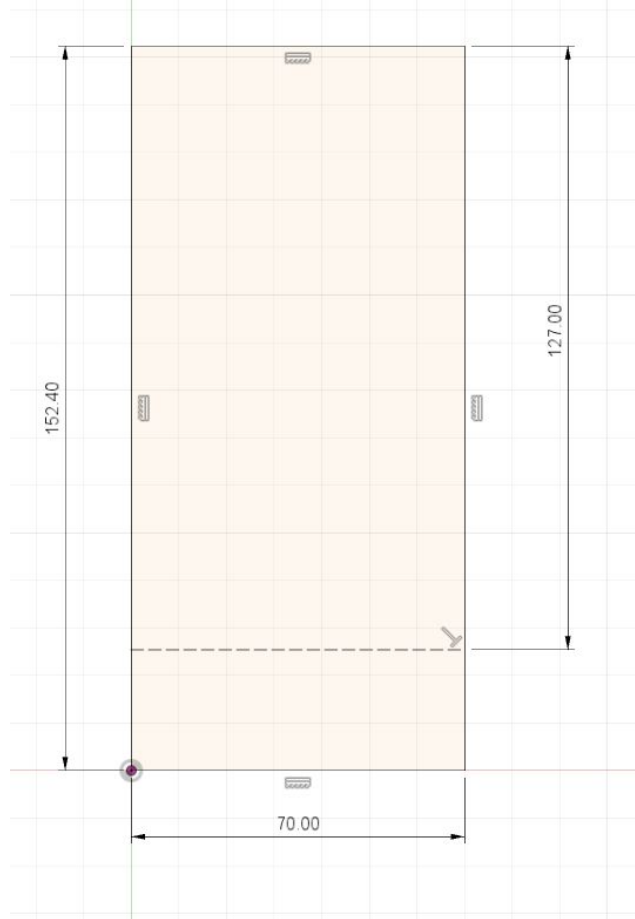# Create a 2-point rectangle starting at the origin with dimensions 70mm wide x 6" high. (Yes, you can mix!)

Create a horizontal line about ¾ of the way down the rectangle.

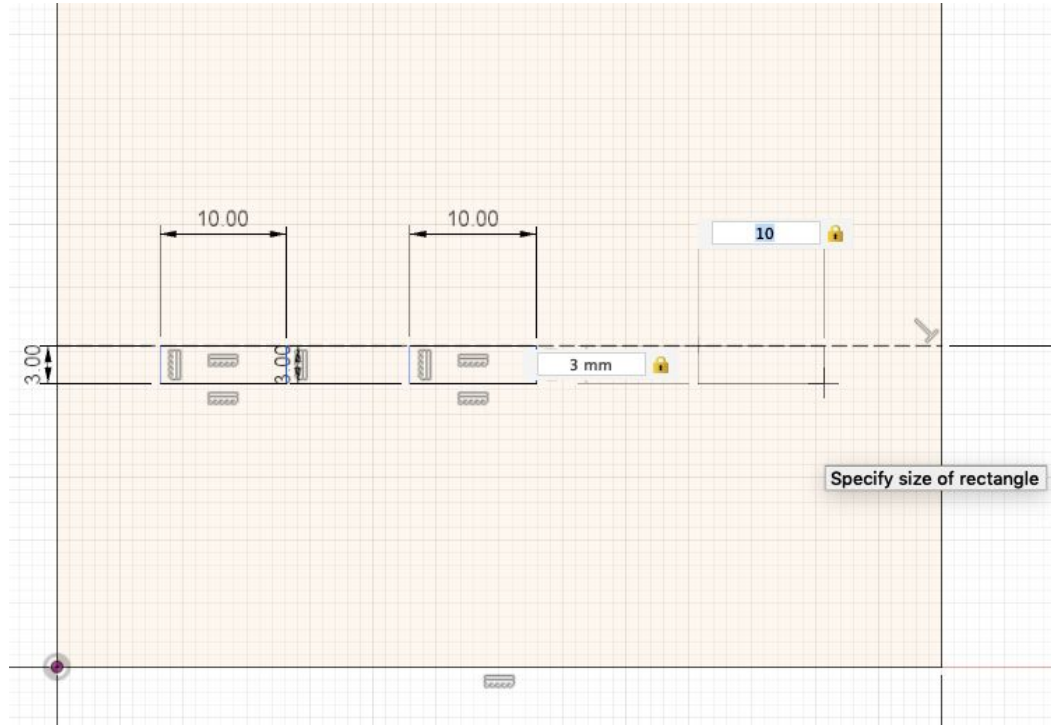**Change it to a construction line by clicking on it and then hitting the "x" key.**
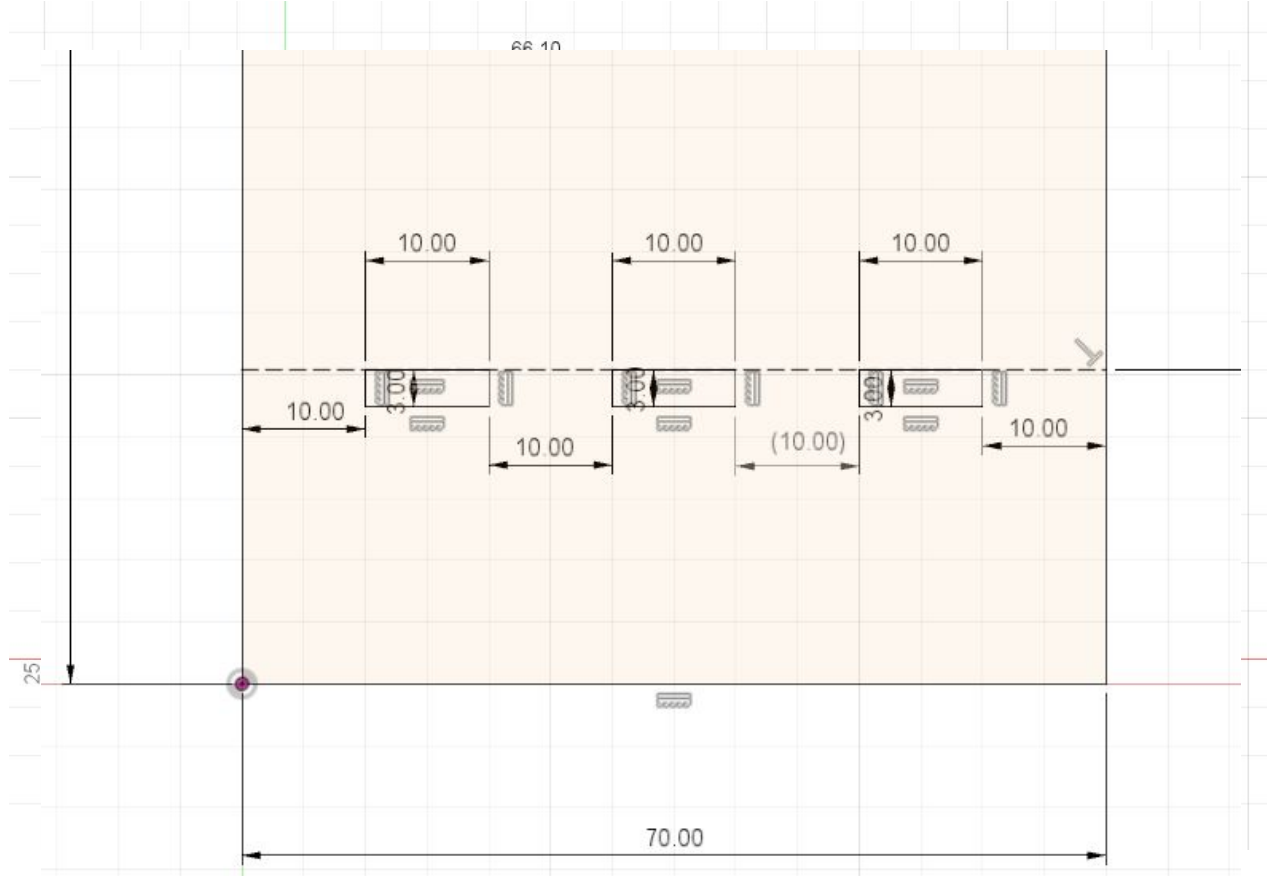
# Dimension it 5" down from the top.

Create a total of three 2-point rectangles with dimensions of 3mm x 10mm with the top edge collinear with the construction line you just created.
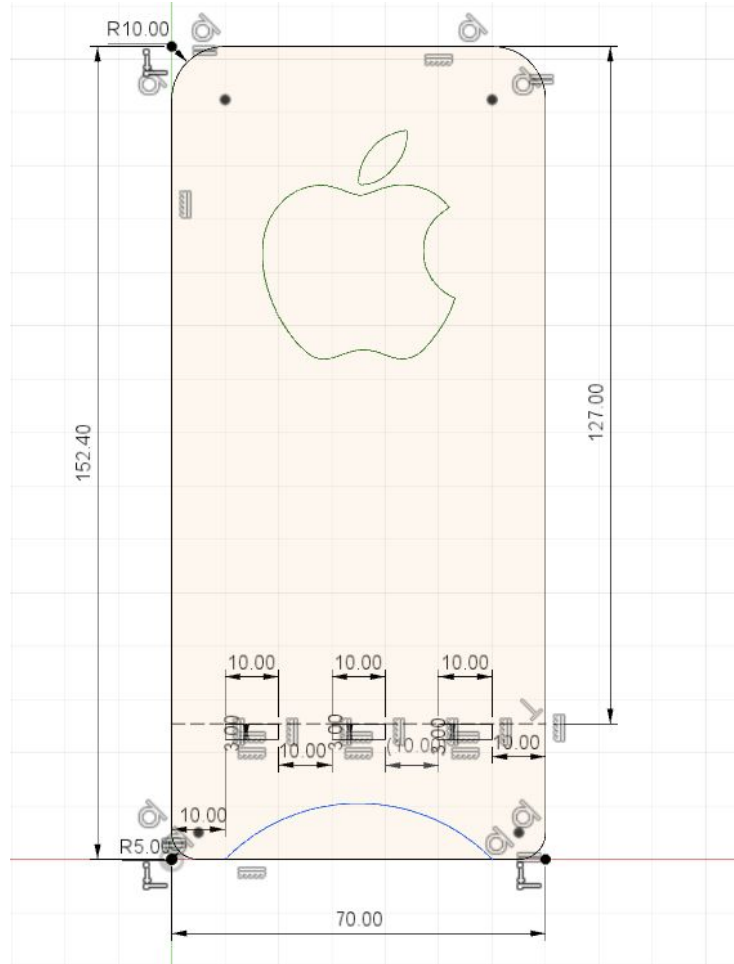
Dimension (place) those rectangles 10mm away from the sides and each other. The last dimension will give a warning,

That is the basic construction of the back plate for your phone case. I will add other touches such as filet the corners and add an stencil. These are not required.
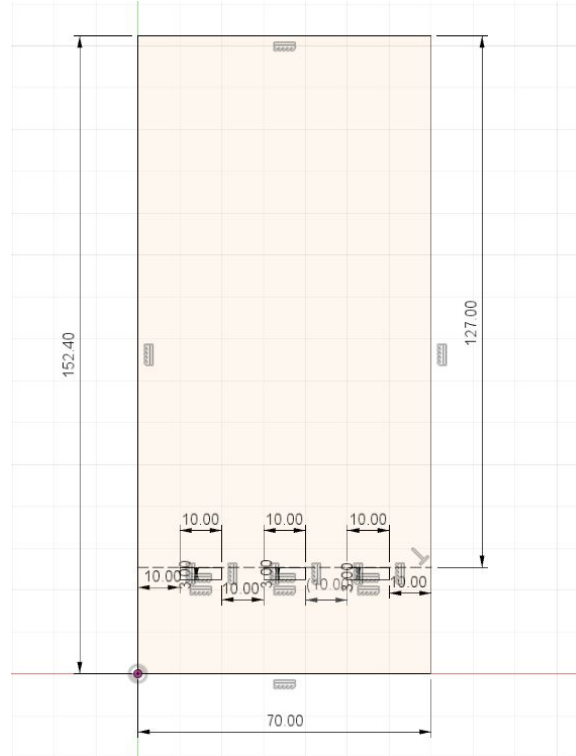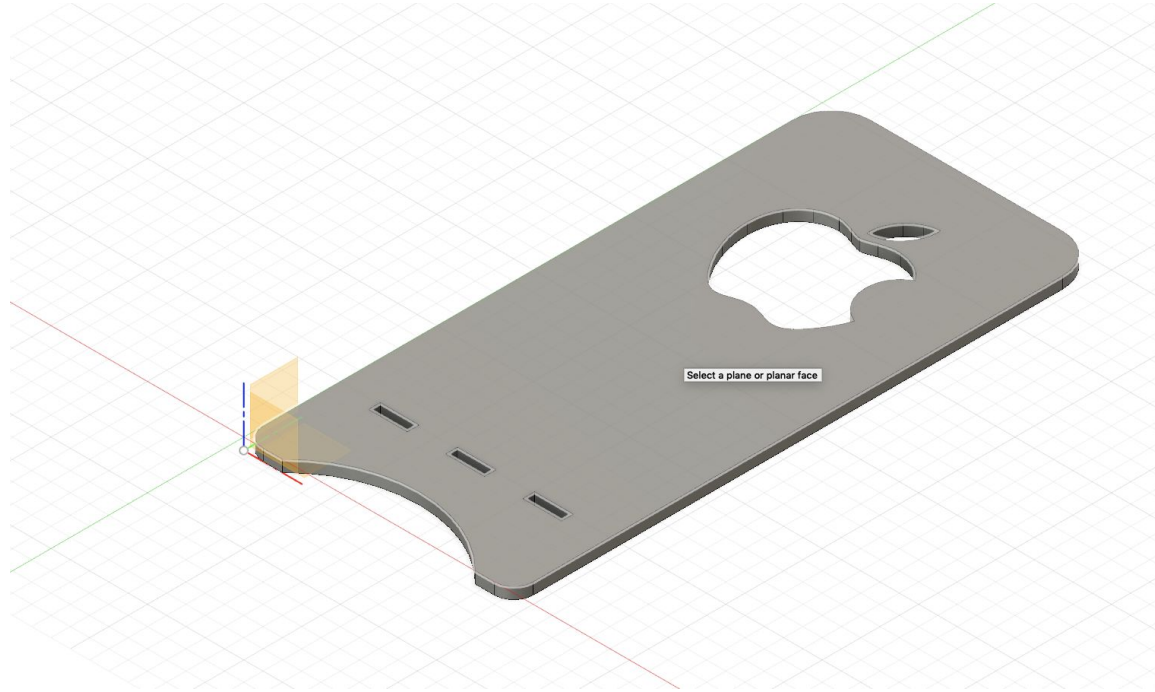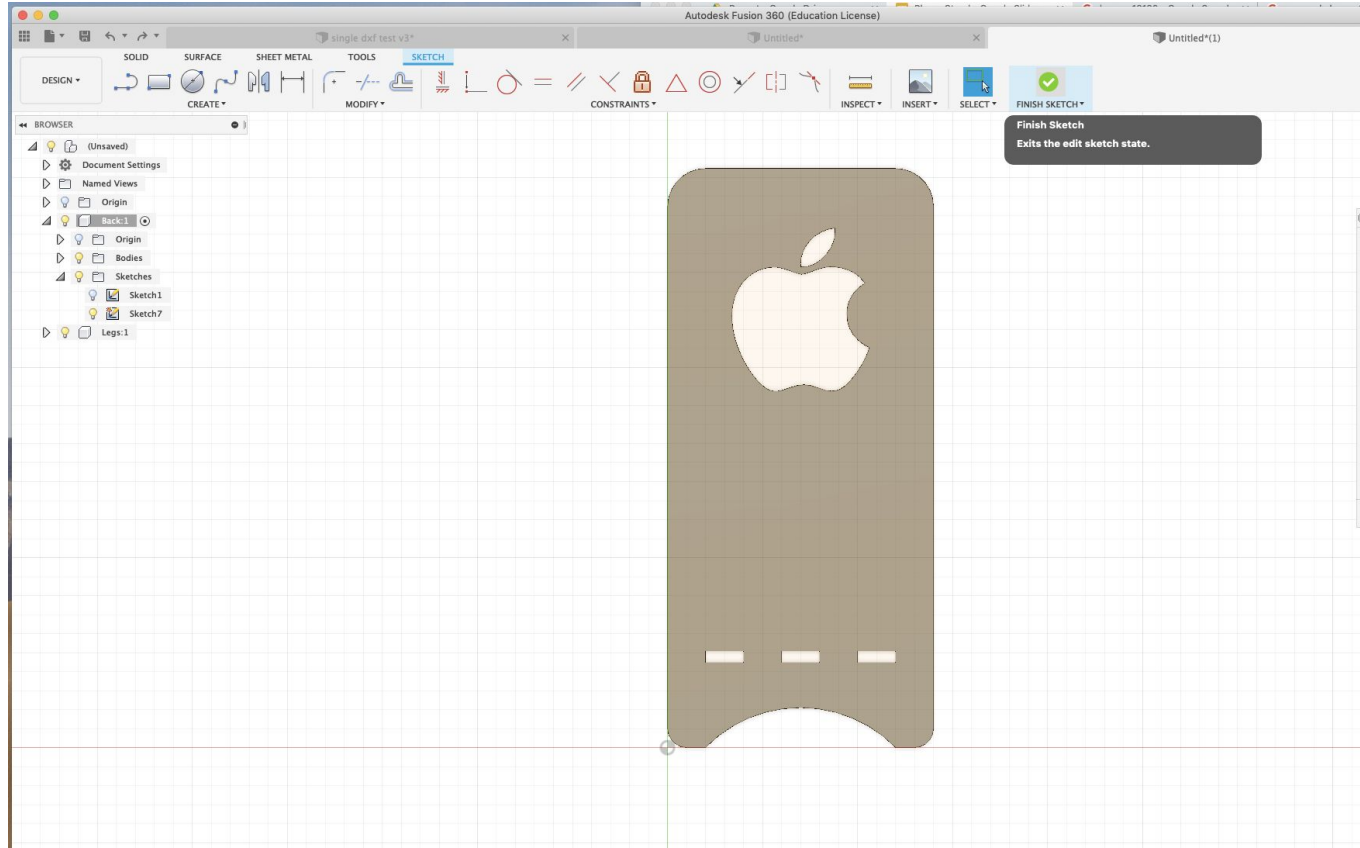
Extras added:

Stop sketch and extrude your back plate up 3 mm.

This will seem weird but start a new sketch on top of your back plate but don't sketch anything. We just want Fusion to project our back plate onto the new sketch, nothing else.
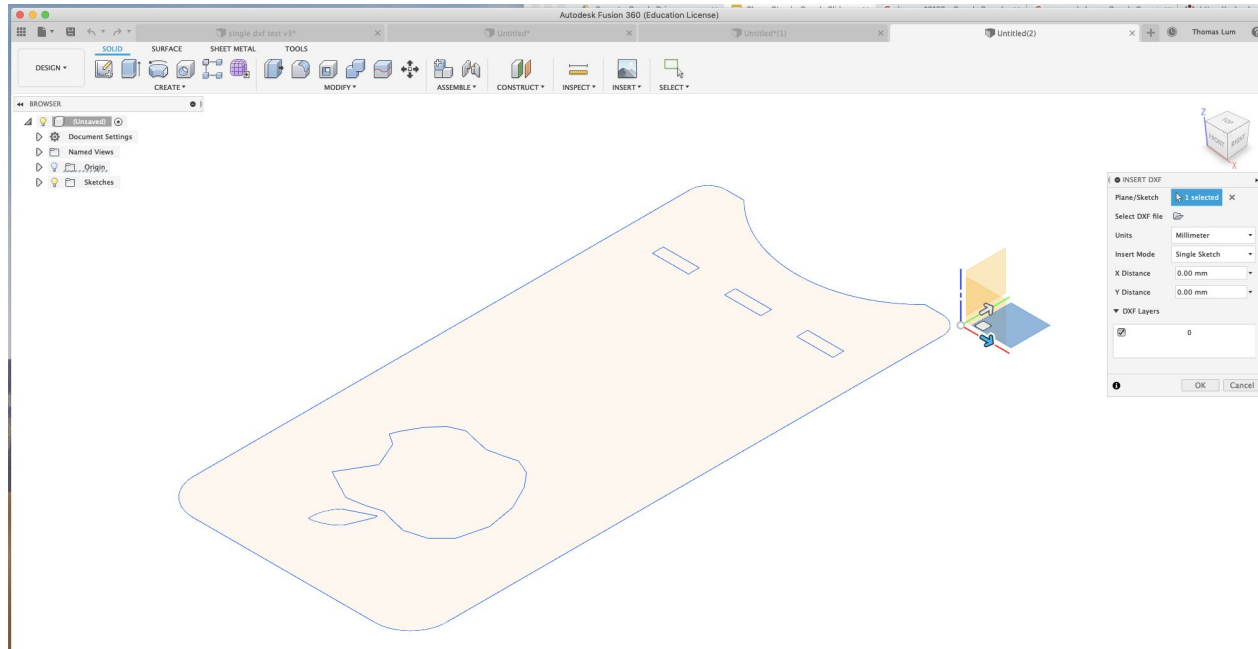
Finish sketch without doing anything.

Right click on your new sketch and save as a dxf. Make a note of where you save it. Desktop is fine, just know where it is.
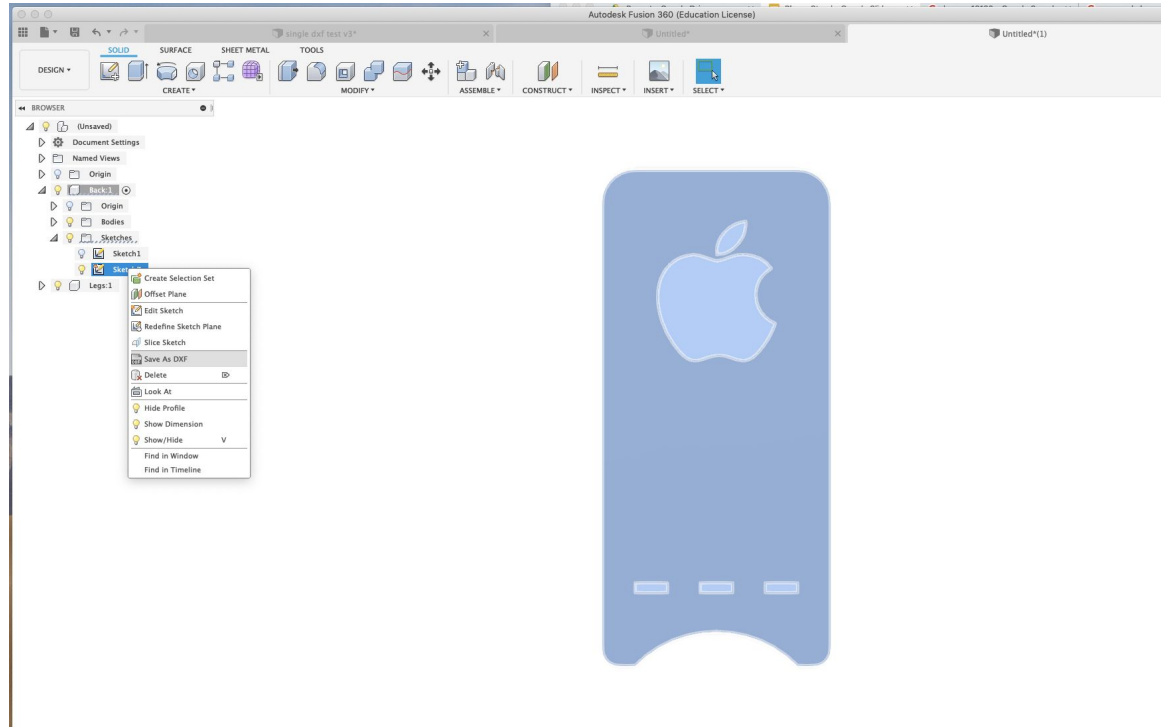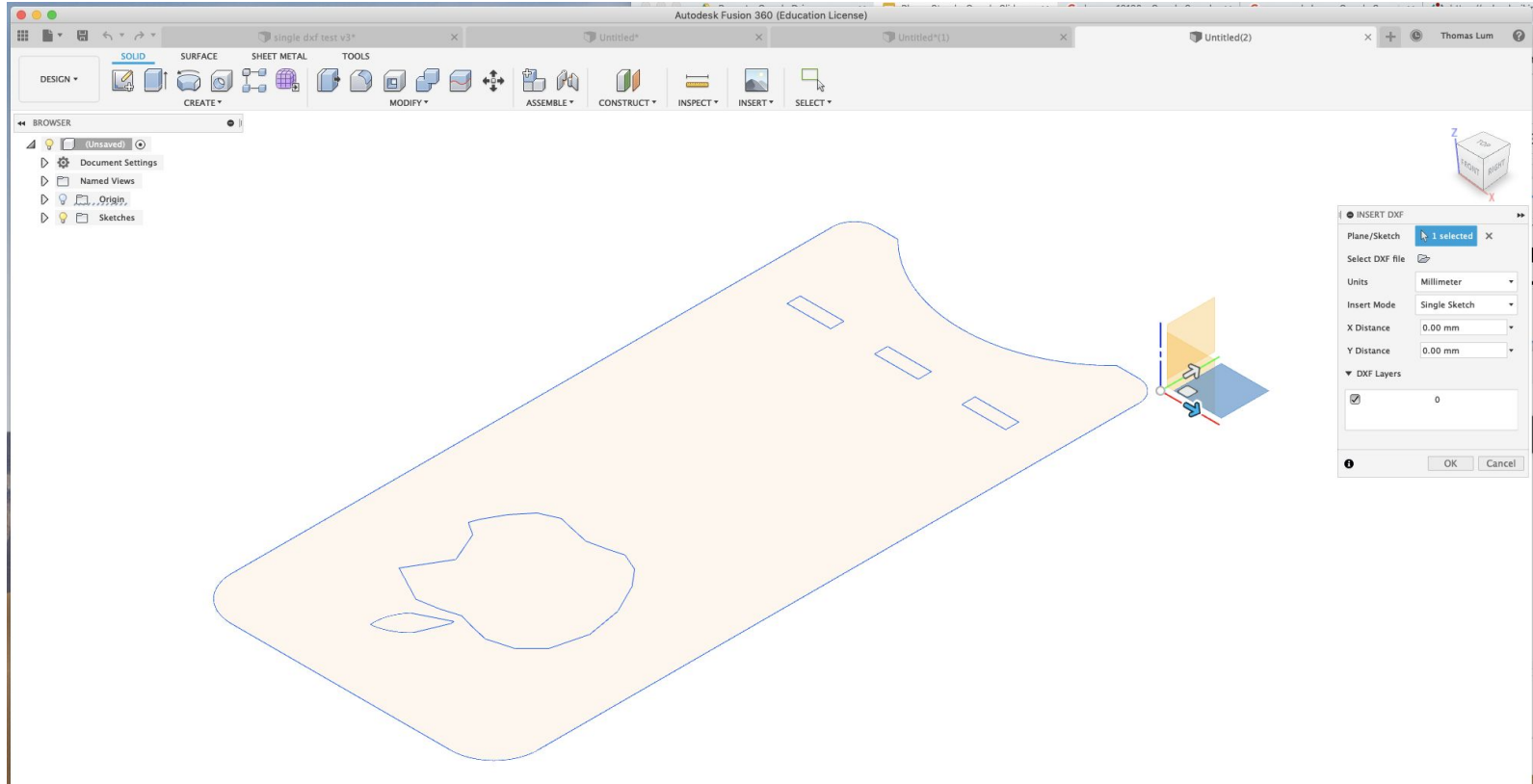
The .dxf file you saved is what we will use to cut the shape out on the laser cutter. To confirm you got something, start a new design and select "Insert dxf" from the menu bar. Select the XY plane and the dxf you just saved.
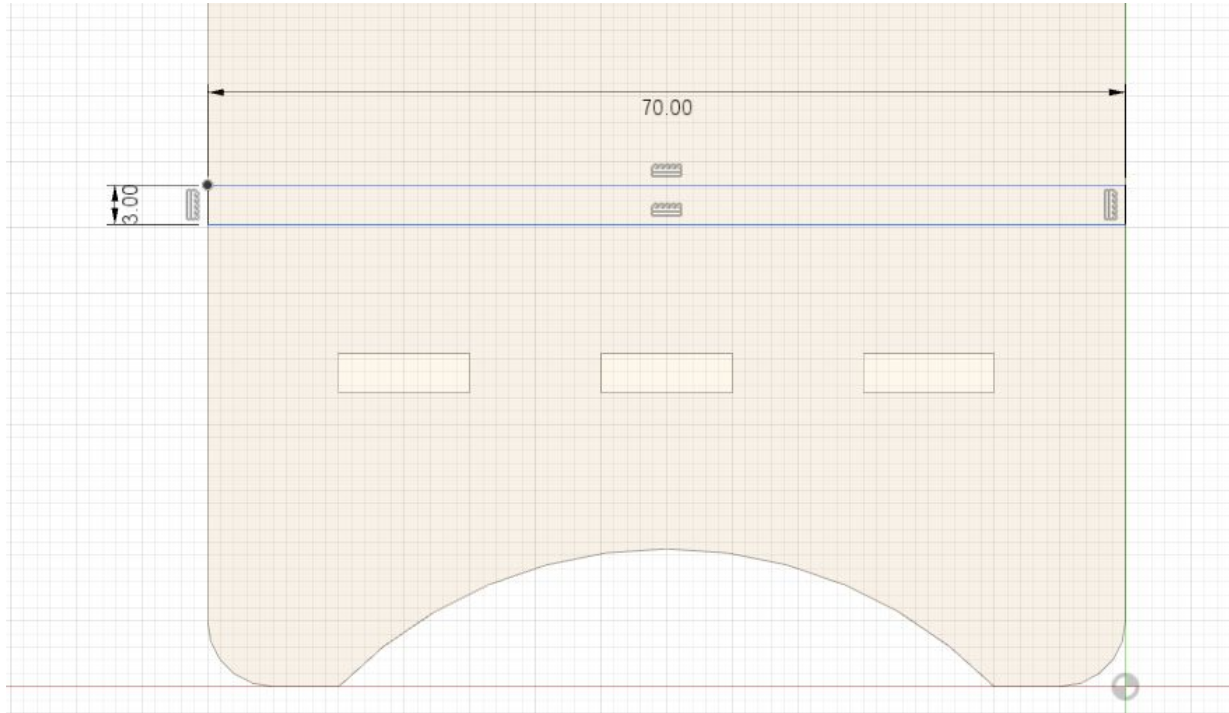
You can delete the dxf only design once you confirm the export worked correctly.
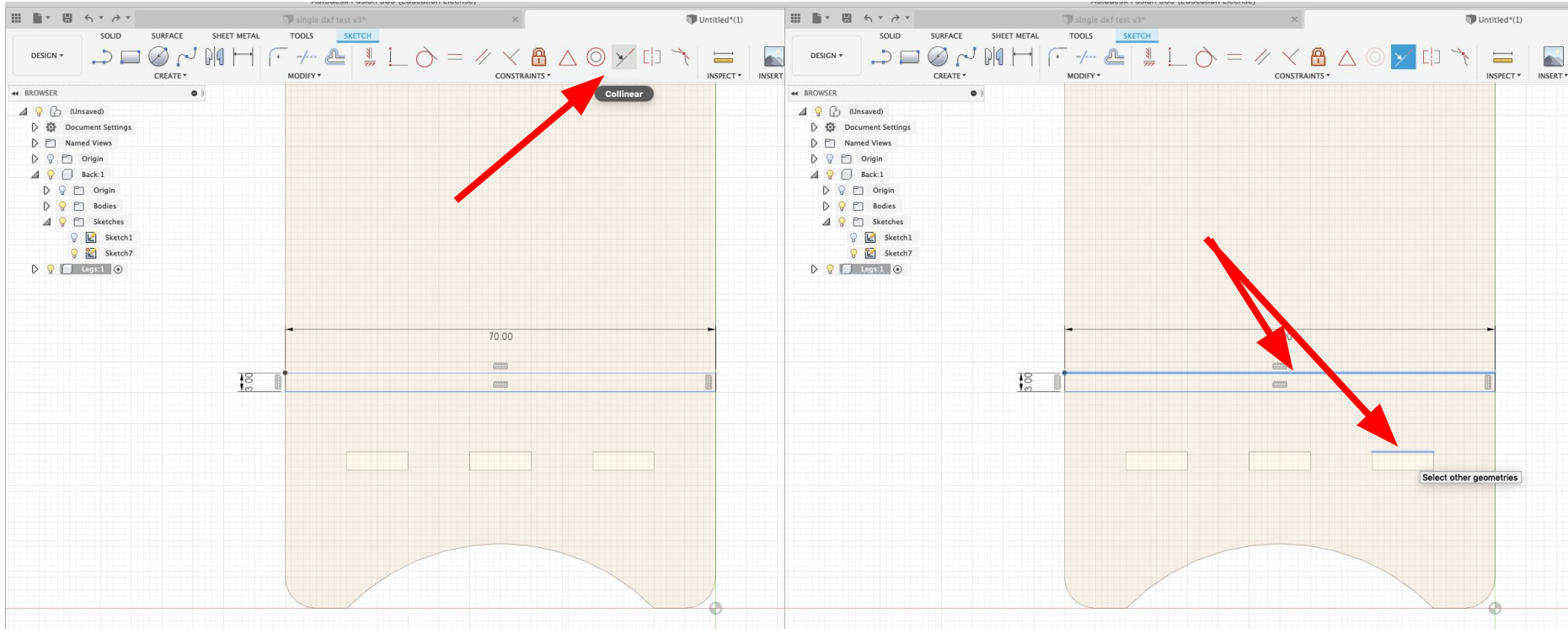
Activate the legs component and start a new sketch on the back of your back plate component.
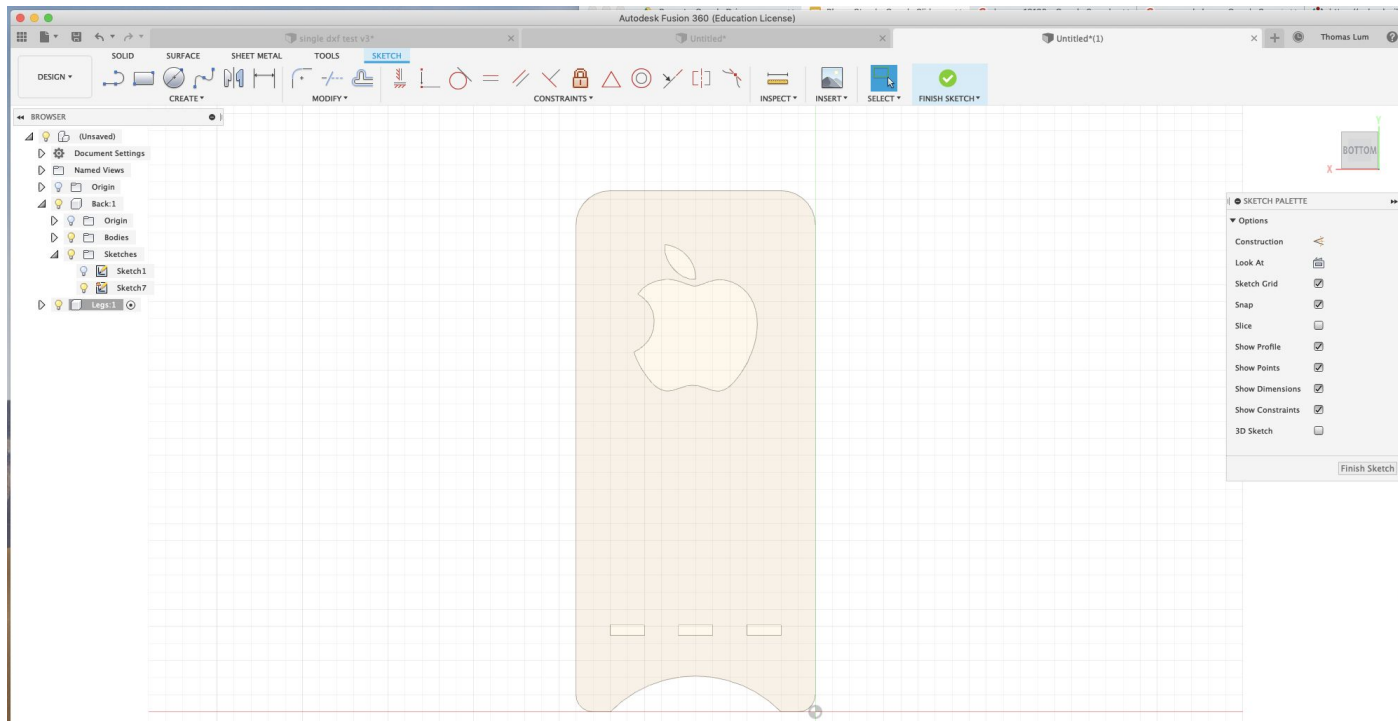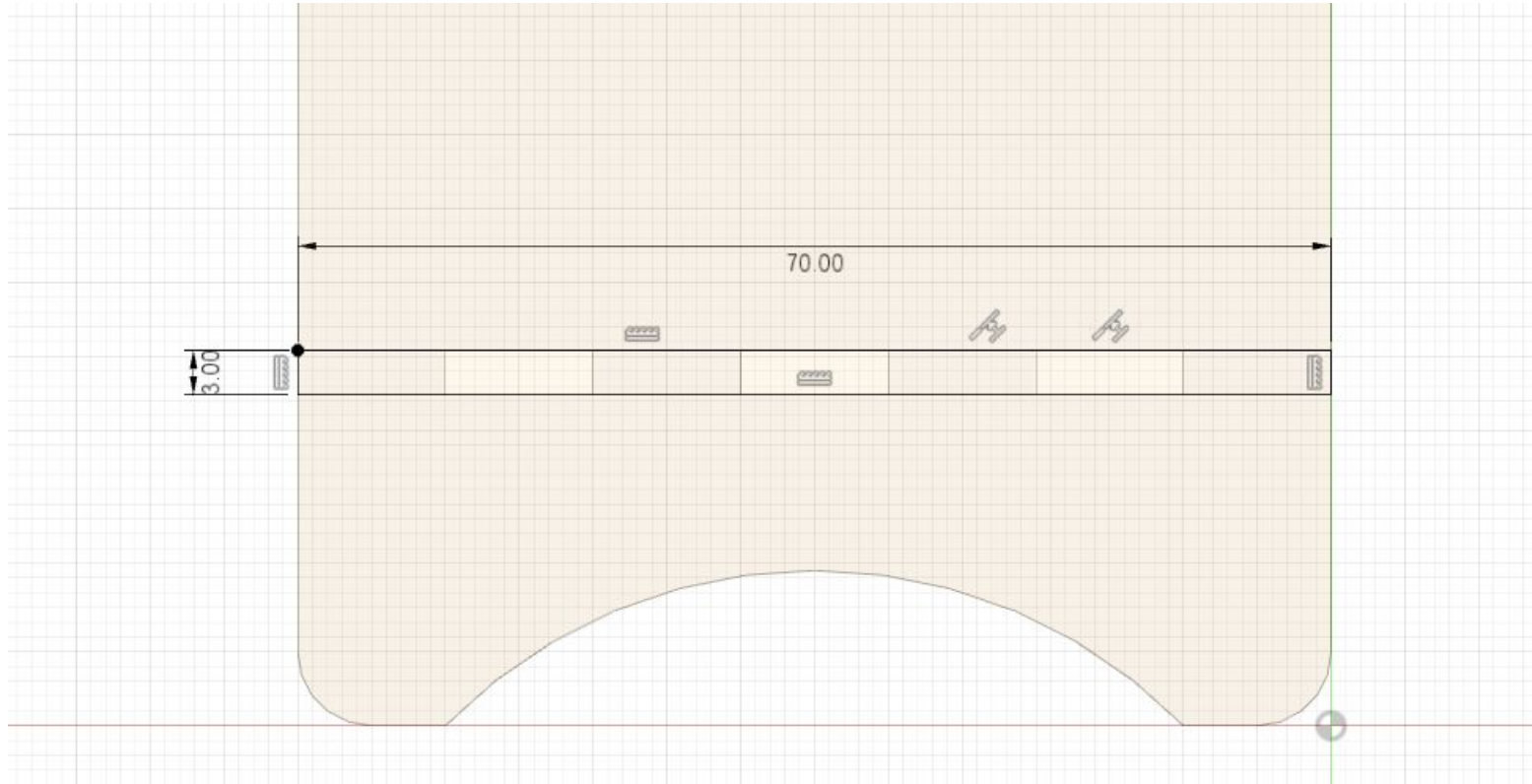
Create a 2-point rectangle 3mm x 70mm. The left and right sides should line up with the sides of the back.
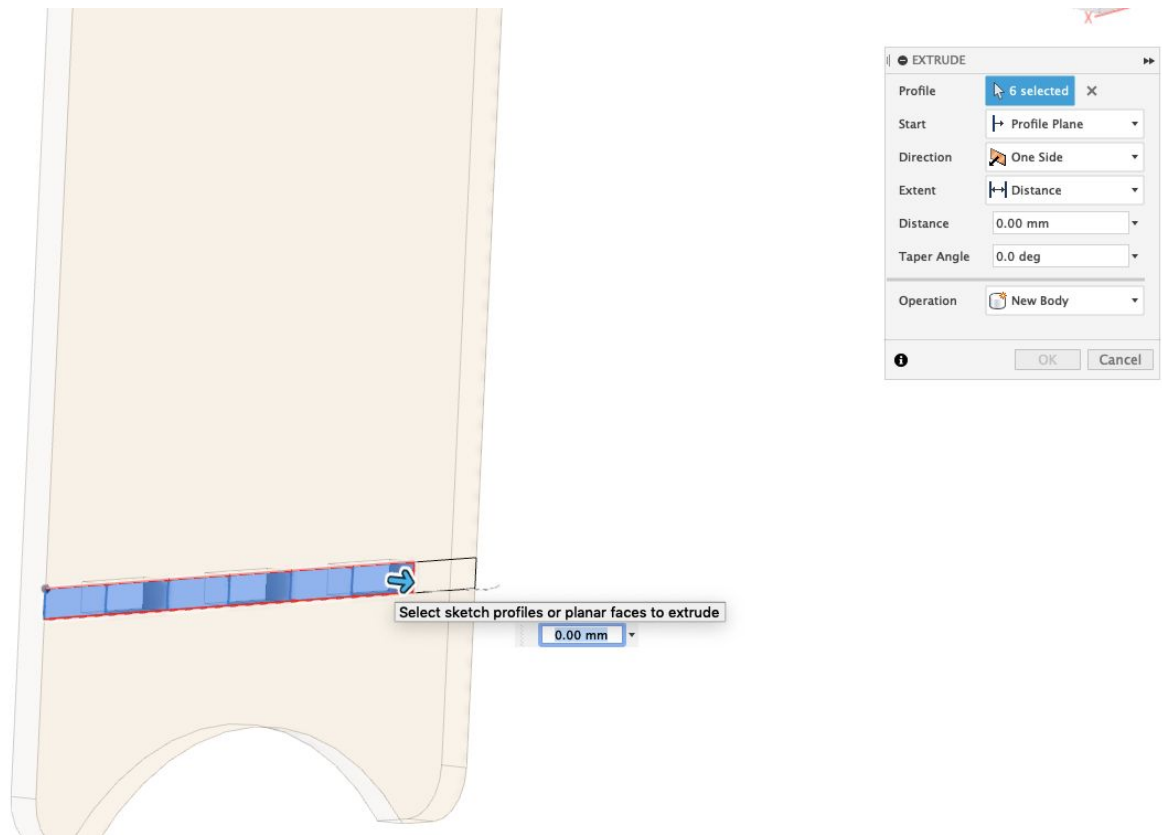
Using the collinear constraint, select the top of the long rectangle and the top of a small rectangle we cut into the back plate.
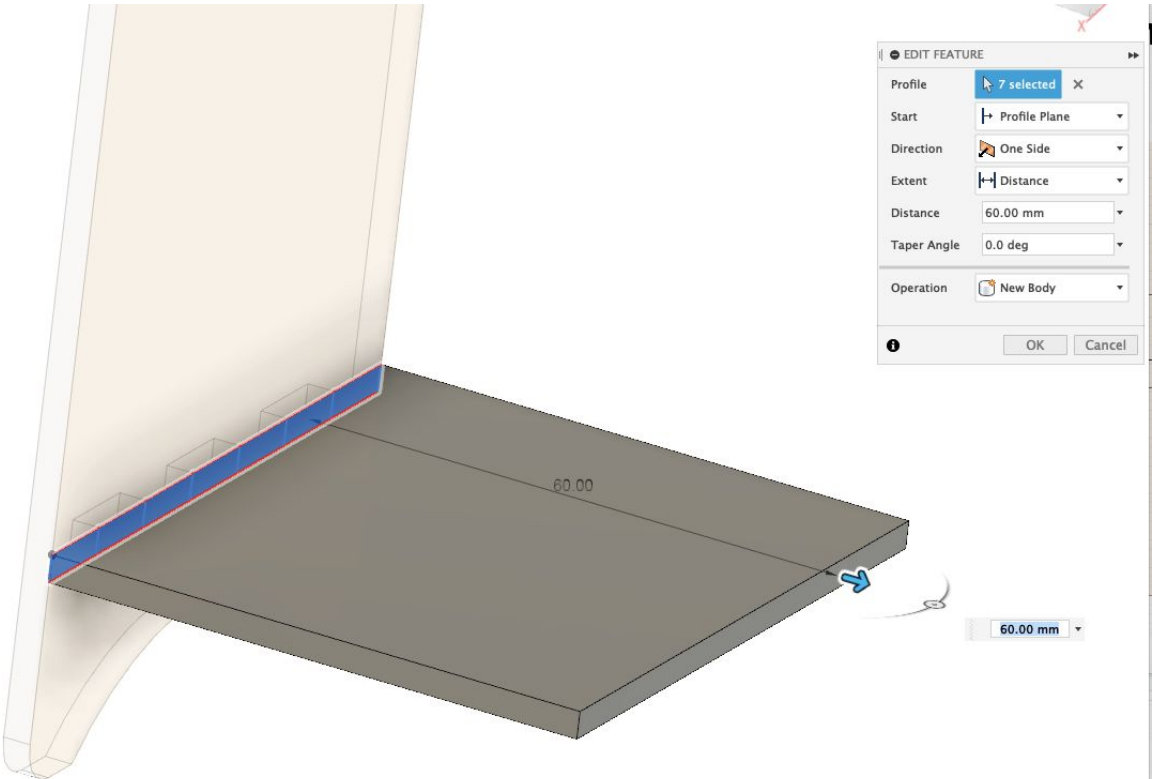
The long rectangle should snap into place and line up with the notches in the back plate.

Stop sketch and then select the "Extrude" command. You will need to select all 7 small rectangles and pull them out 60mm.
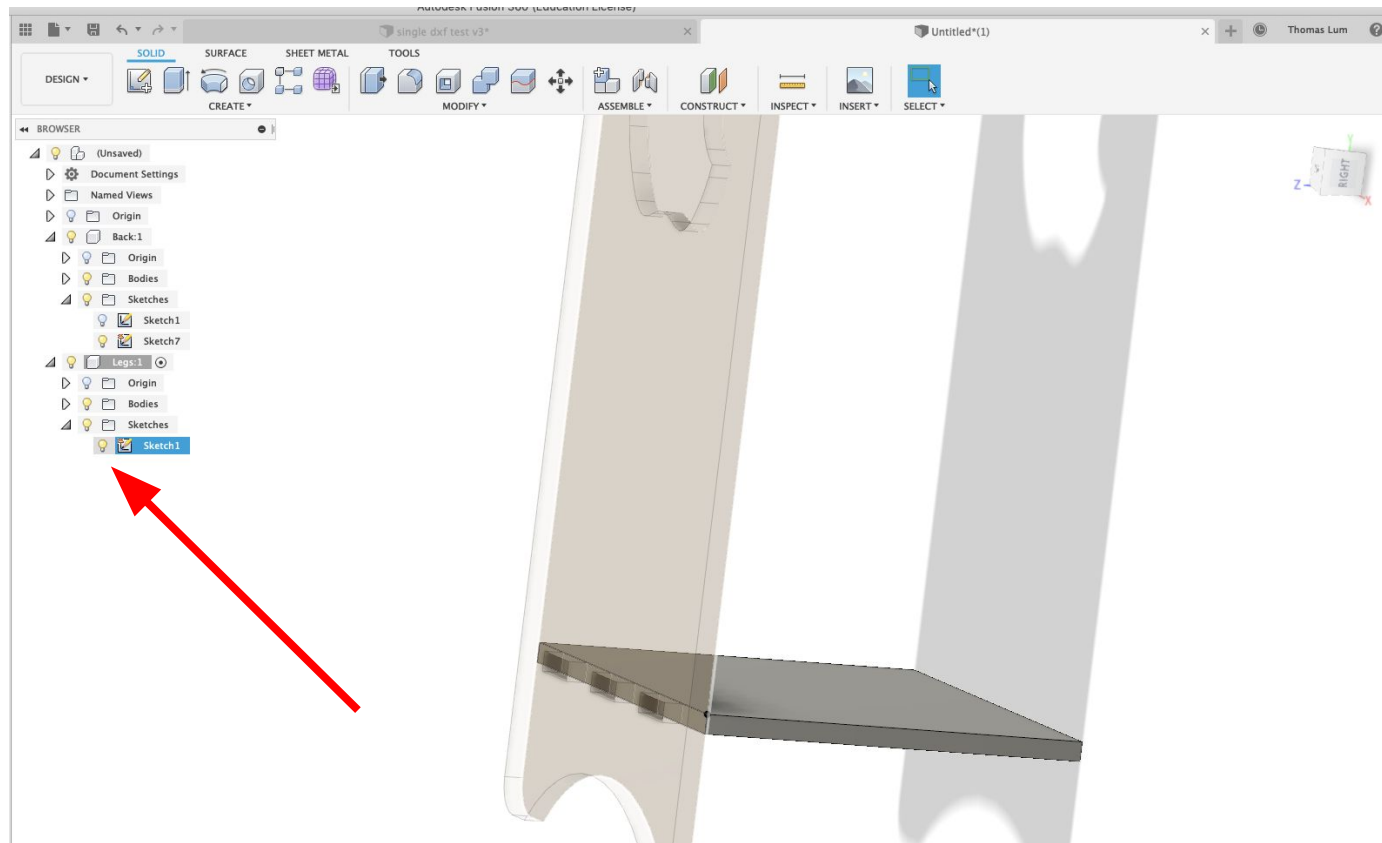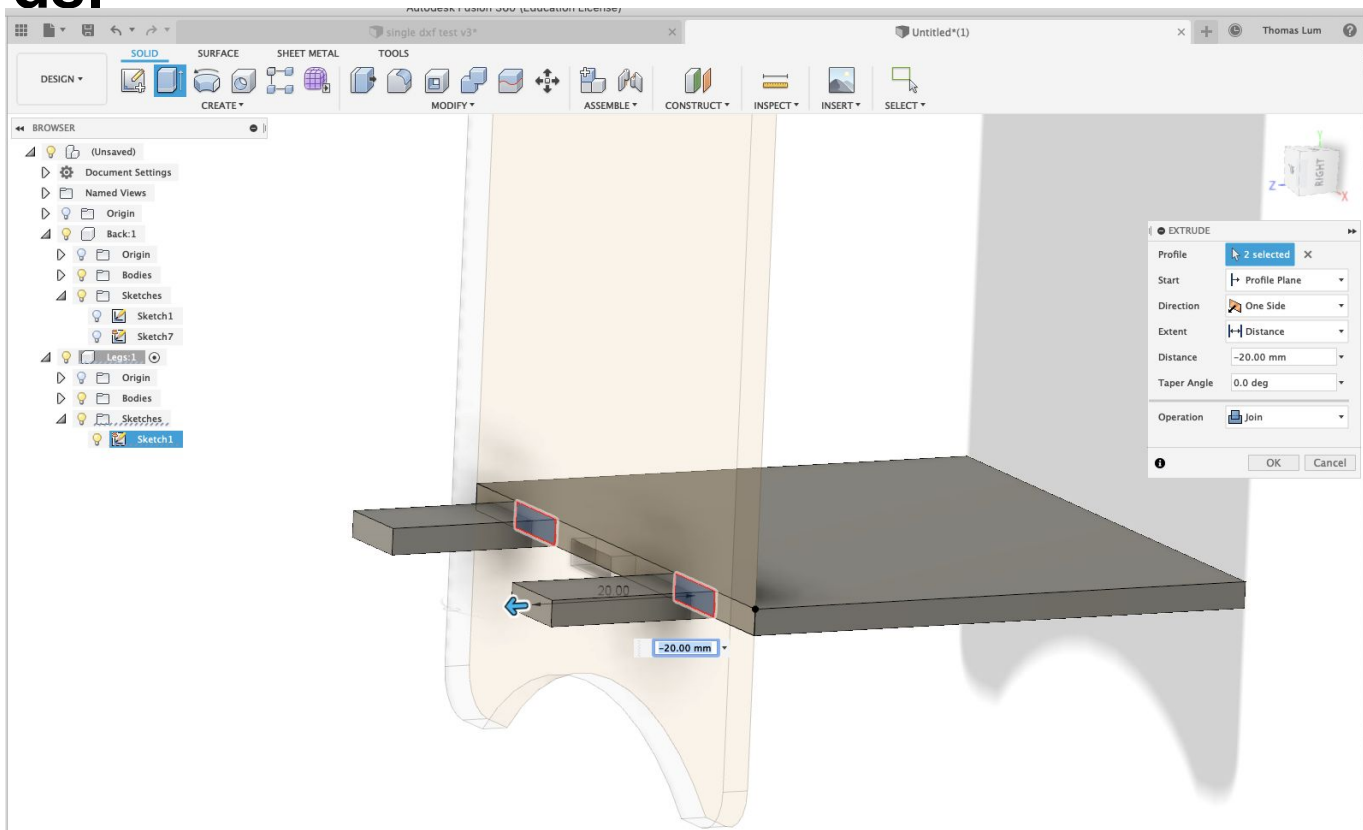
Completed view.

Turn your view to the front of the back plate and turn on the sketch that turned off once you completed your Extrude command.
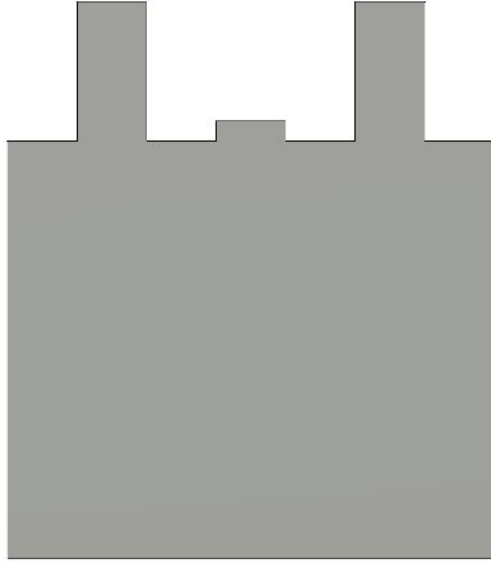
Extrude the left and right rectangles that go through the back notches out -20mm. It's negative since you are going backwards.
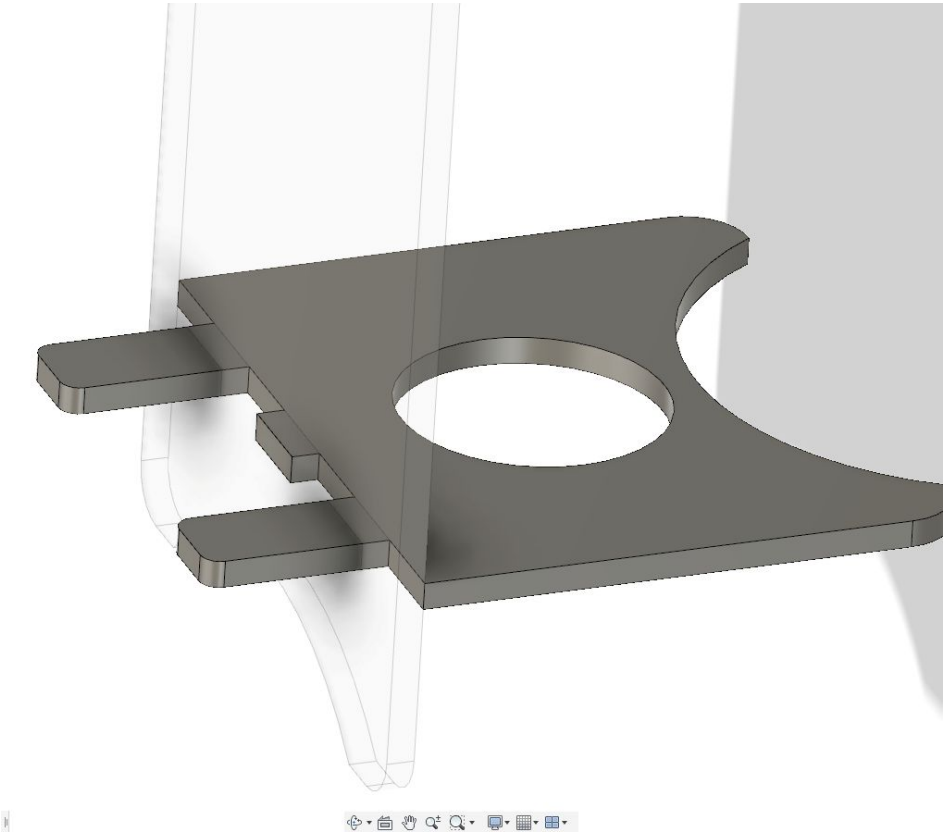
Extrude the center rectangle -3mm. We don't want it to go out past the back plate since you may want to plug your phone in.
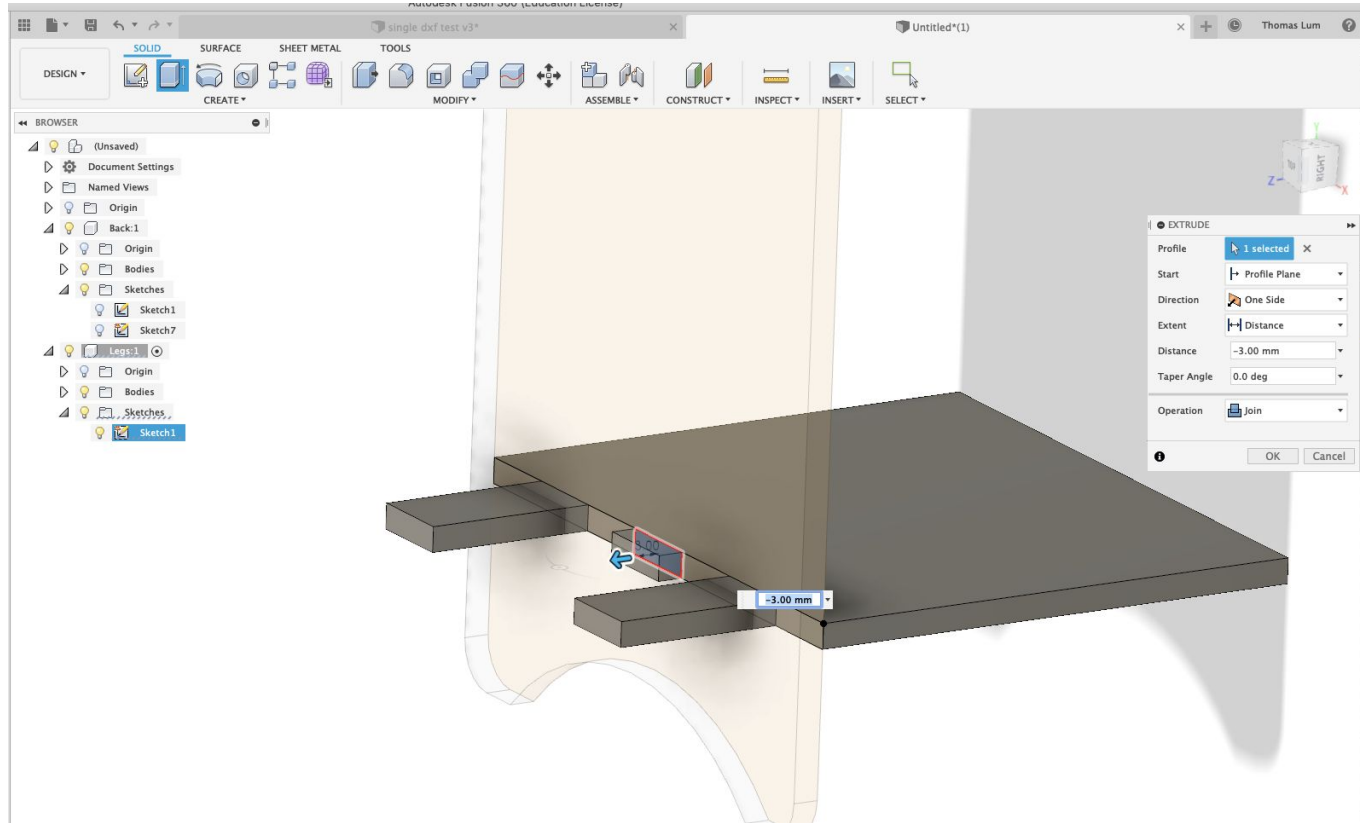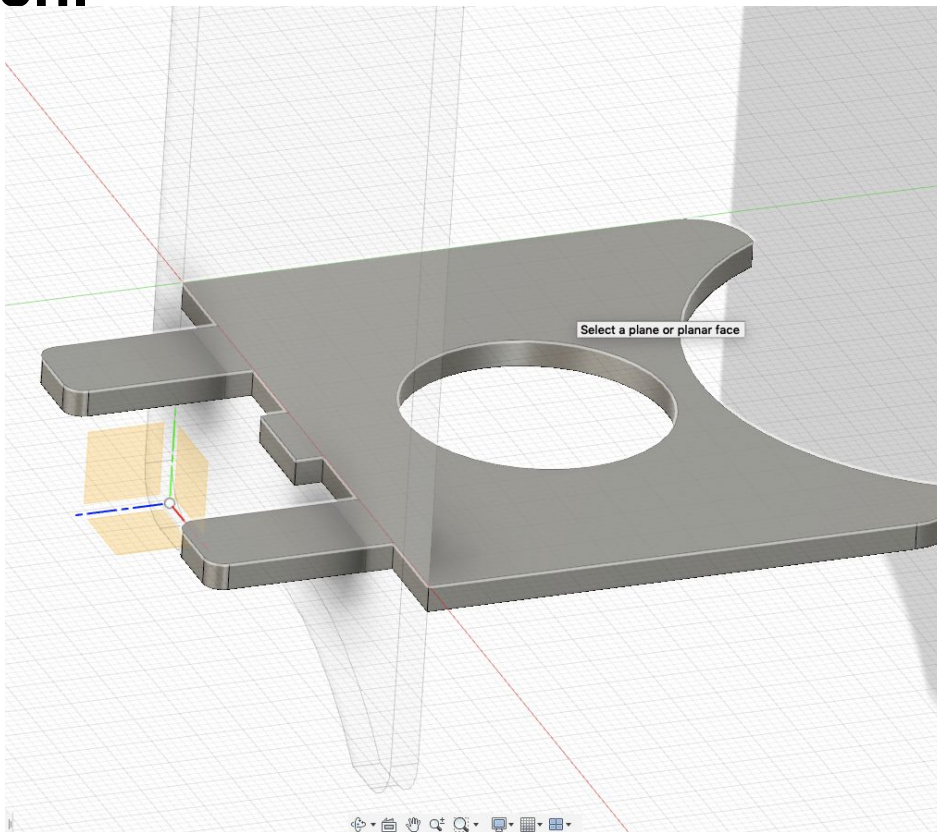
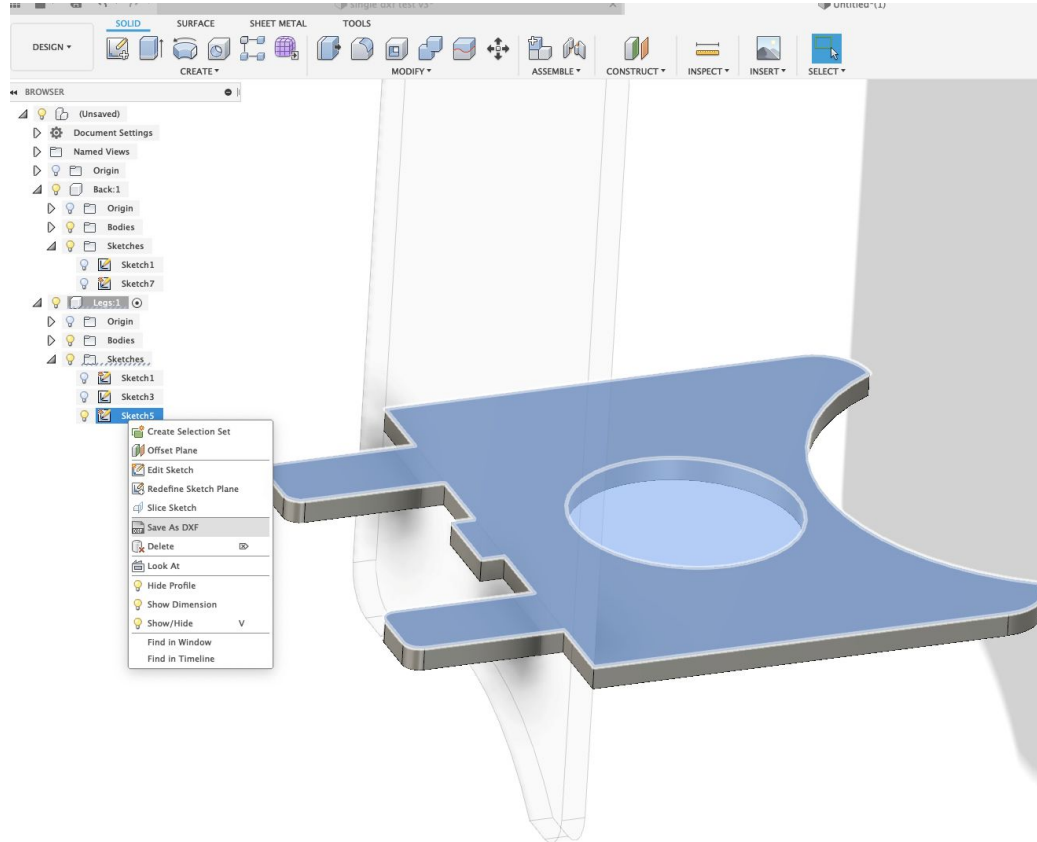**This is the basic required design for the legs component. You can add details if you wish.**
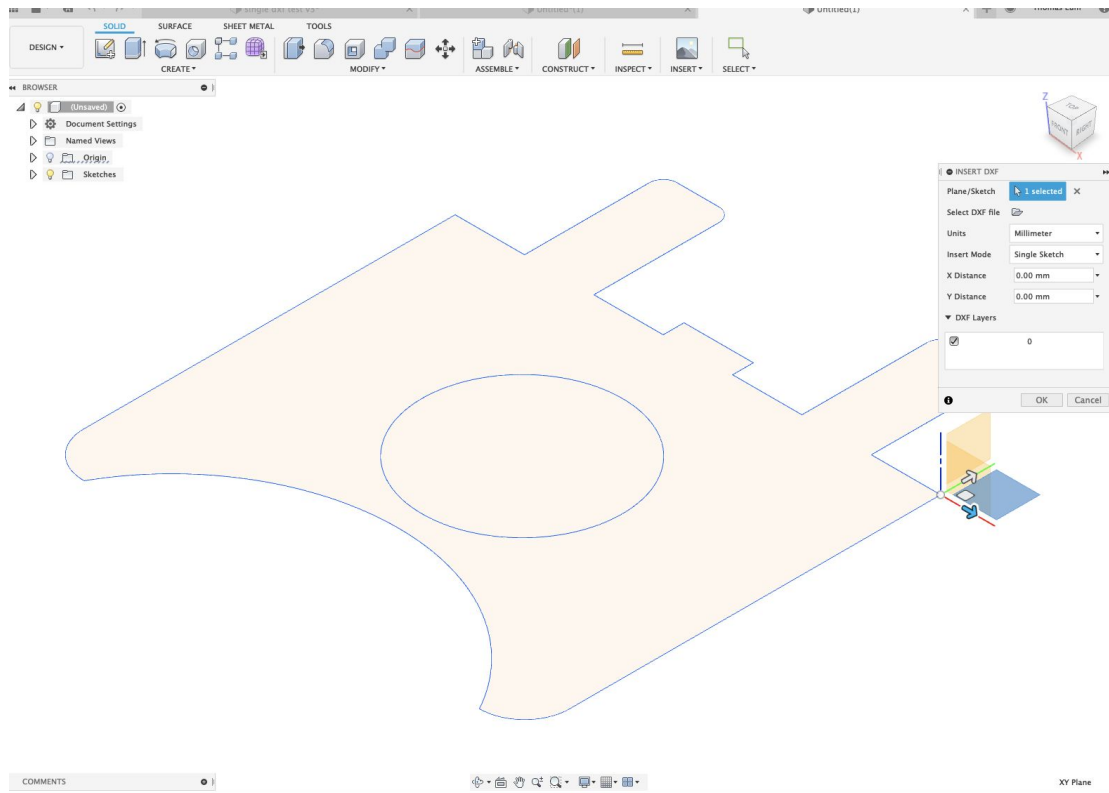
Details added:

As with the back plate, once you are finished, create a new sketch on top of the legs component and then immediately finish that sketch.

Right click on the sketch in the browser and save it as a dxf with the back plate dxf.

You can once again create a new design and insert the dxf to make sure you got what you needed.

Turn in your dxf files here:

https://goo.gl/forms/cID5LC7XXIbbQb9r1

- If you want to cut out your phone holder, stop into 127 Evans (mornings are best) and I can show you how to use the laser cutter.
- You do not have to have your design cut out if you don't want to.