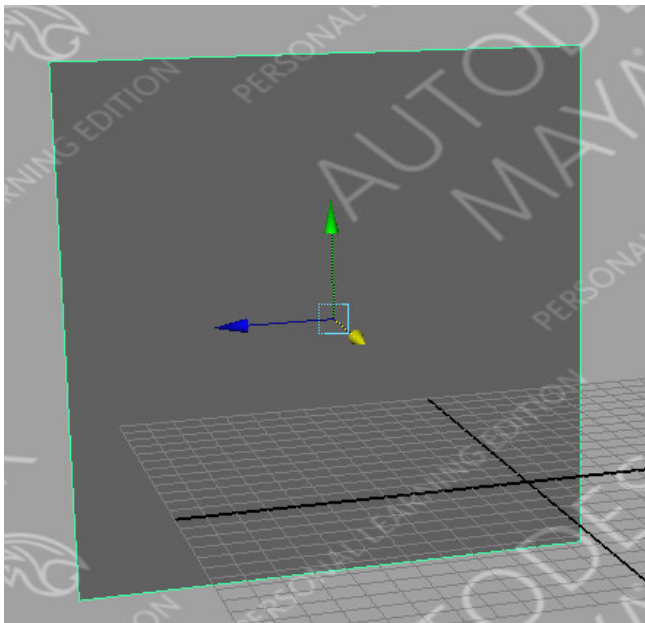
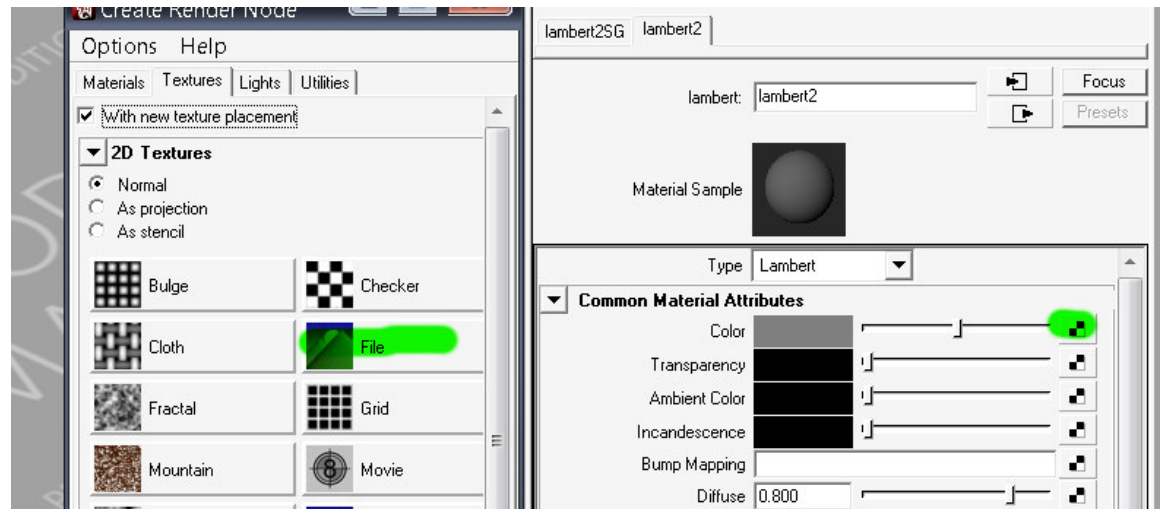


Modeling: Sofa Example Part 1

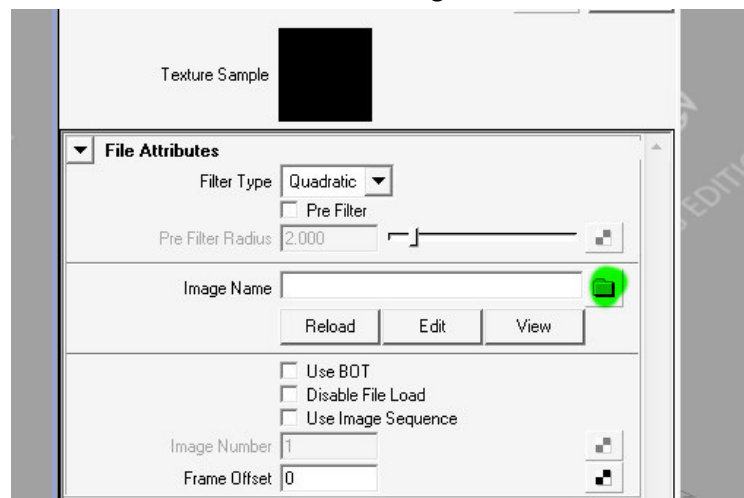
1. Main-menu File - Project –New.
 - a. Save the project as Sofa_yourname
 - b. Click Use Defaults then Accept.
 - c. Close the dialogue box.
2. From Polygons shortcut toolbar select 'Polygon Plane' tool.
 - a. Drag on the grid to create a plane of the same size.
3. On the right side of the screen select 'Rotate Z' and set it at 90.
4. Move the plane slightly off the back of the grid. (See image below).



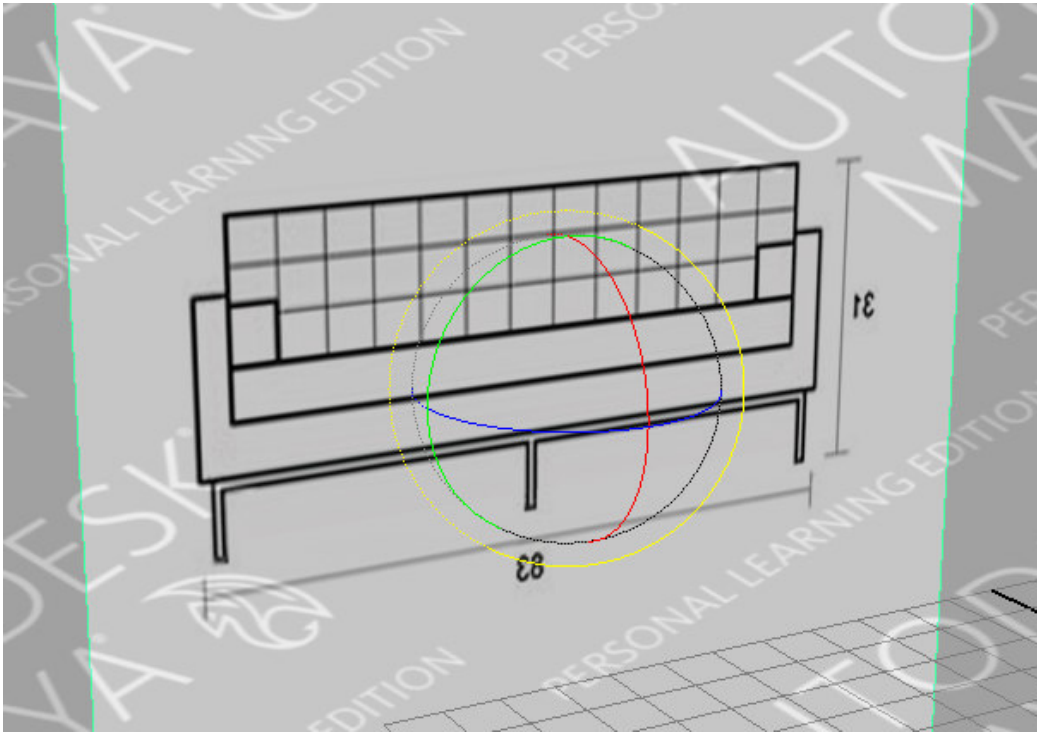
5. Right-Click on the plane, select 'Assign New Material – Lambert'
 - a. Click on the 'Checkered Box' next to 'Color'. This brings up the materials dialogue.
 - b. In the Materials Dialogue select 'File'



6. On the right side of the screen locate 'File Attributes' .
 - a. Click on the folder icon next to 'Image Name' .

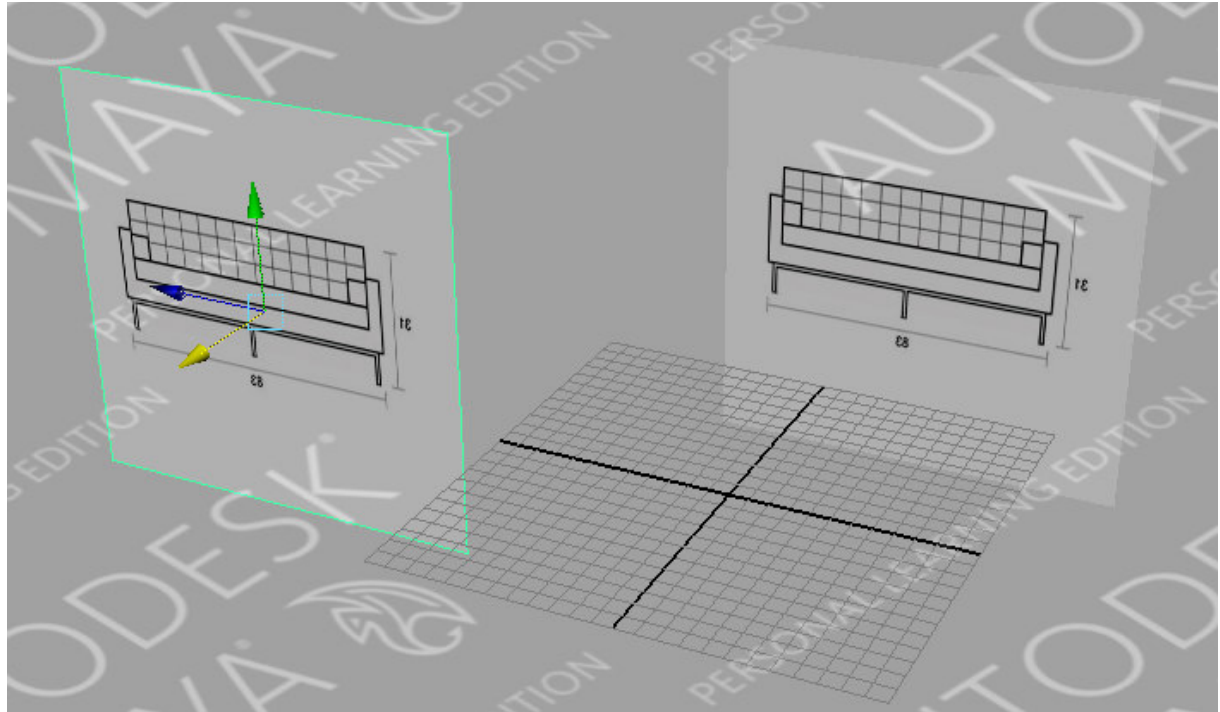


- b. Browse to find the sofa_front.jpg in your 'Source Images' folder of the project.
 - c. The image will come in sideways. Press the 'E' key for the rotate tool.
 - i. Hold down the 'J' key and rotate on the y axis 90° (See image below).



Create Duplicate Plane

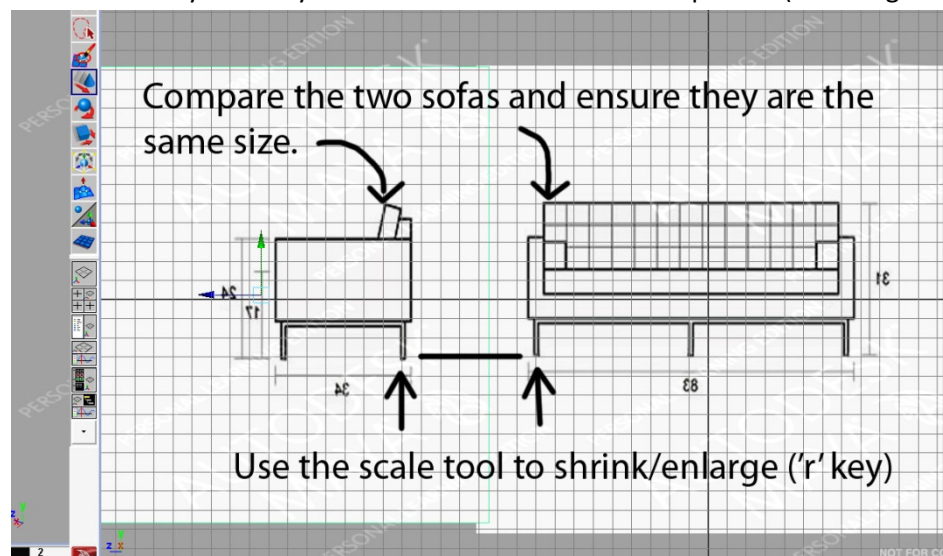
7. Select the plane.
 - a. Hold down Ctrl-D which will duplicate the object.
 - b. Use the move tool to move the duplicate object off to the side.



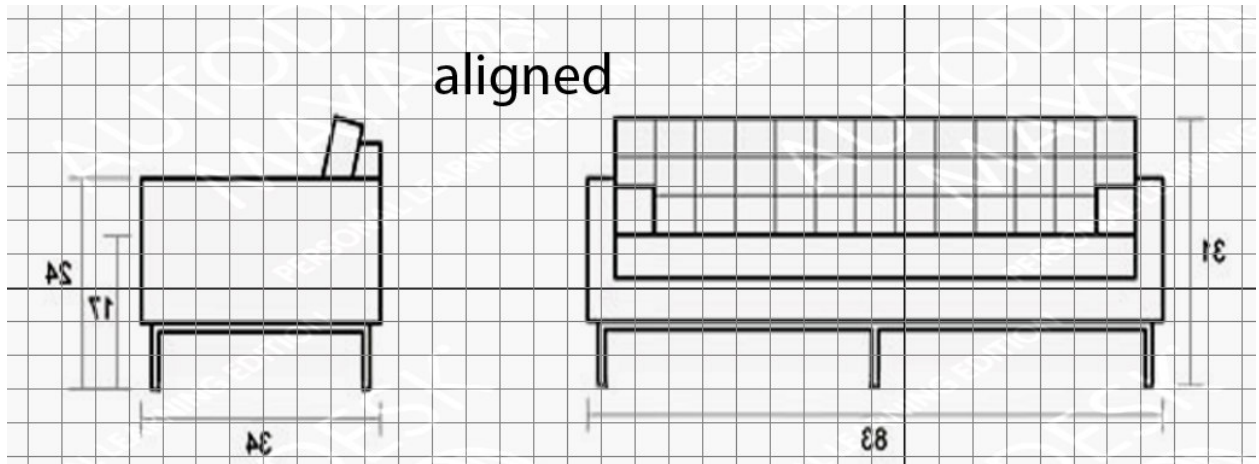
8. Right-Click on the duplicate plane, select 'Assign New Material – Lambert'
 - a. Click on the 'Checkered Box' next to 'Color'. This brings up the materials dialogue.
 - b. In the Materials Dialogue select 'File'
9. On the right side of the screen locate 'File Attributes' .
 - a. Click on the folder icon next to 'Image Name' .
 - b. Browse to find the sofa_side.jpg in your 'Source Images' folder of the project.

Align the Planes

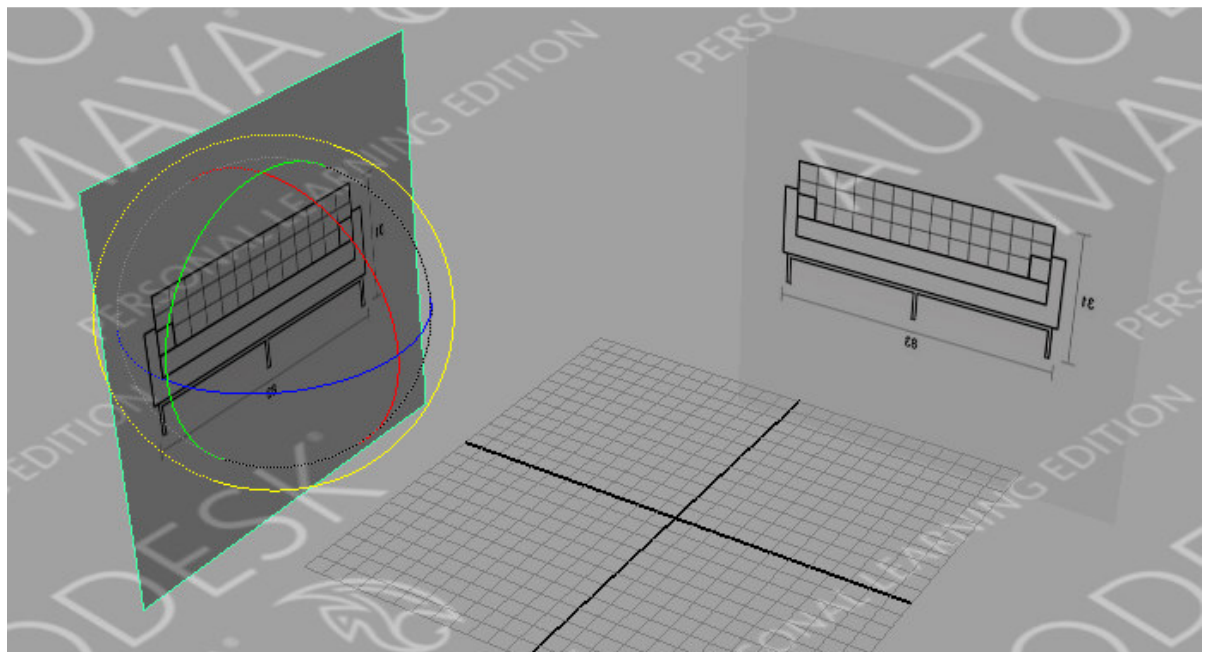
10. Use the space bar to access the 'Side' view. Maximize the side view.
 - a. Press the '6' key so that you can see the materials on the planes. (See image below)



11. Use the scale tool on the duplicate plane (side of the sofa) in order to ensure that all of the grid lines line up so that the two images are of the same size. (See image below).

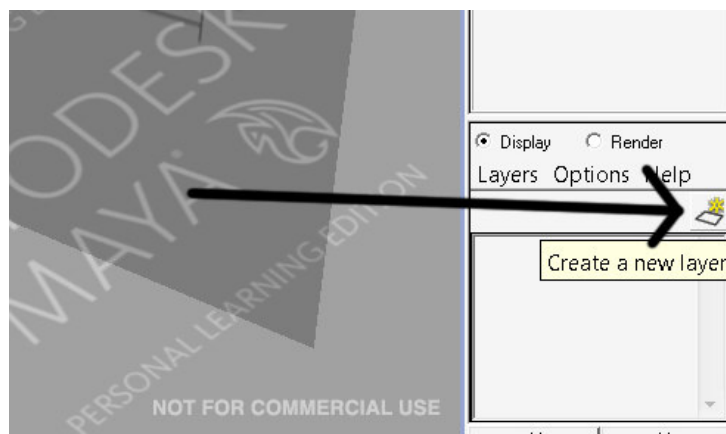


12. Move back to the 'Perspective view'.
- Select the rotate tool and rotate the new object so that it is perpendicular to the original. (See image below).



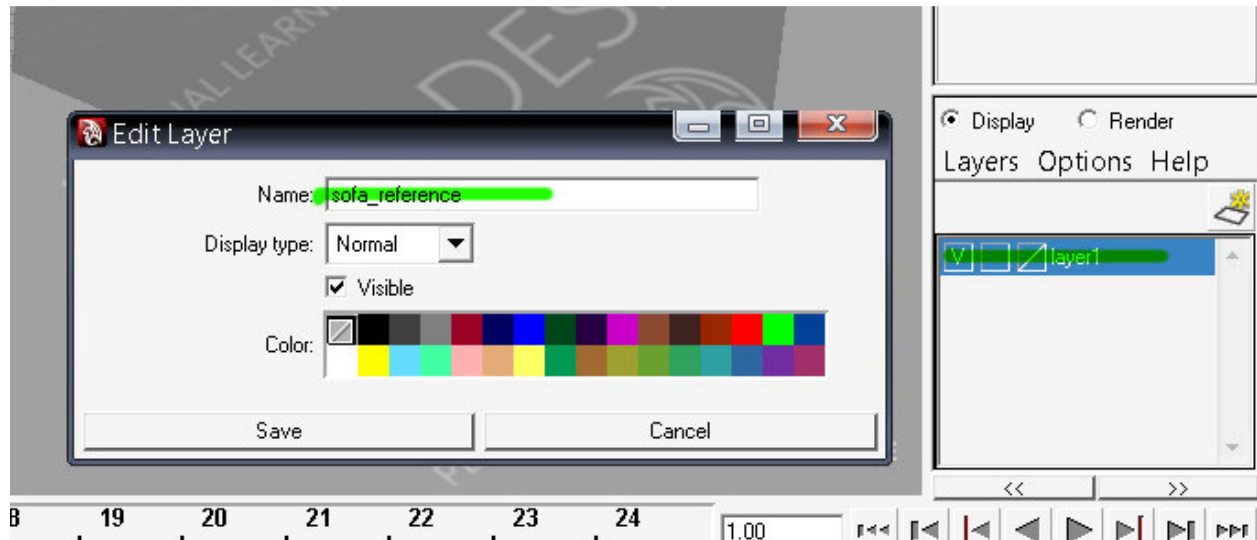
Locking the Planes

13. Press Ctrl-A. This will bring up the channel properties.



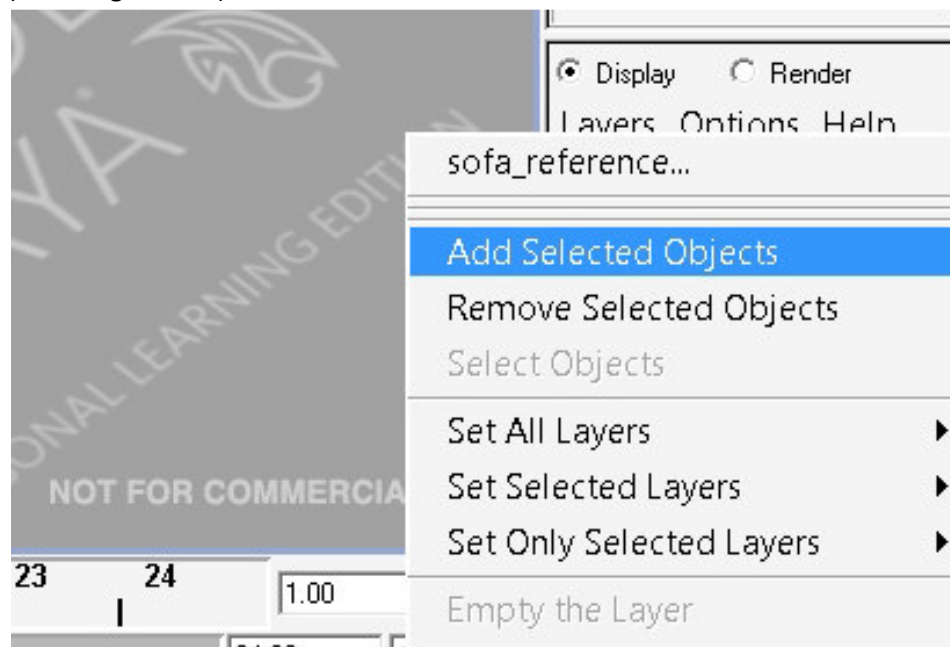
- Select the 'Create New Layer' button. (See image below).

- b. Double Click on the new layer name in order to rename it as 'sofa_reference'. (See image below).

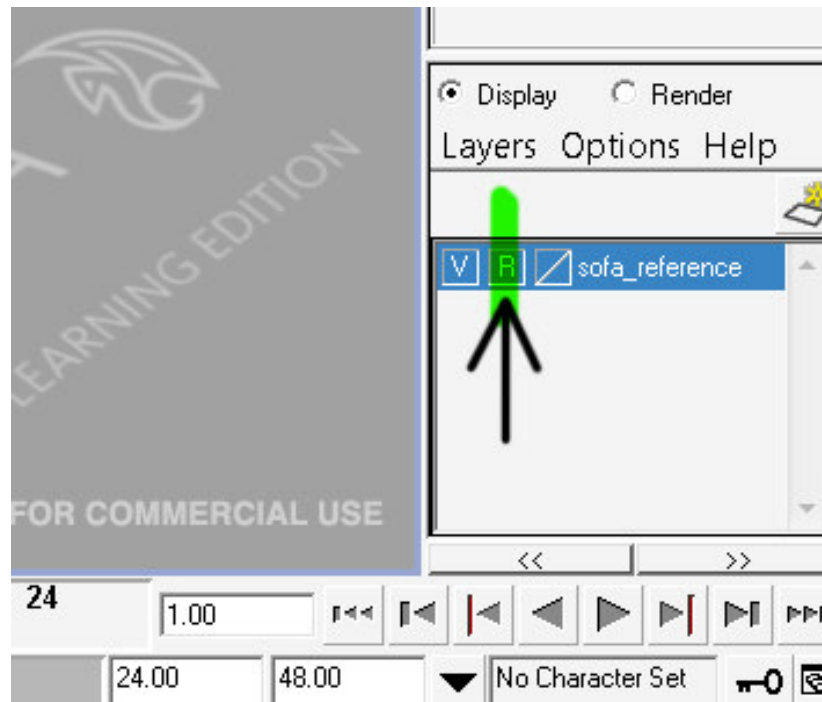


14. Drag Select both planes.

- a. In the Layers Dialogue Right-Click on the layer name then select 'Add Selected Objects'. (See image below).



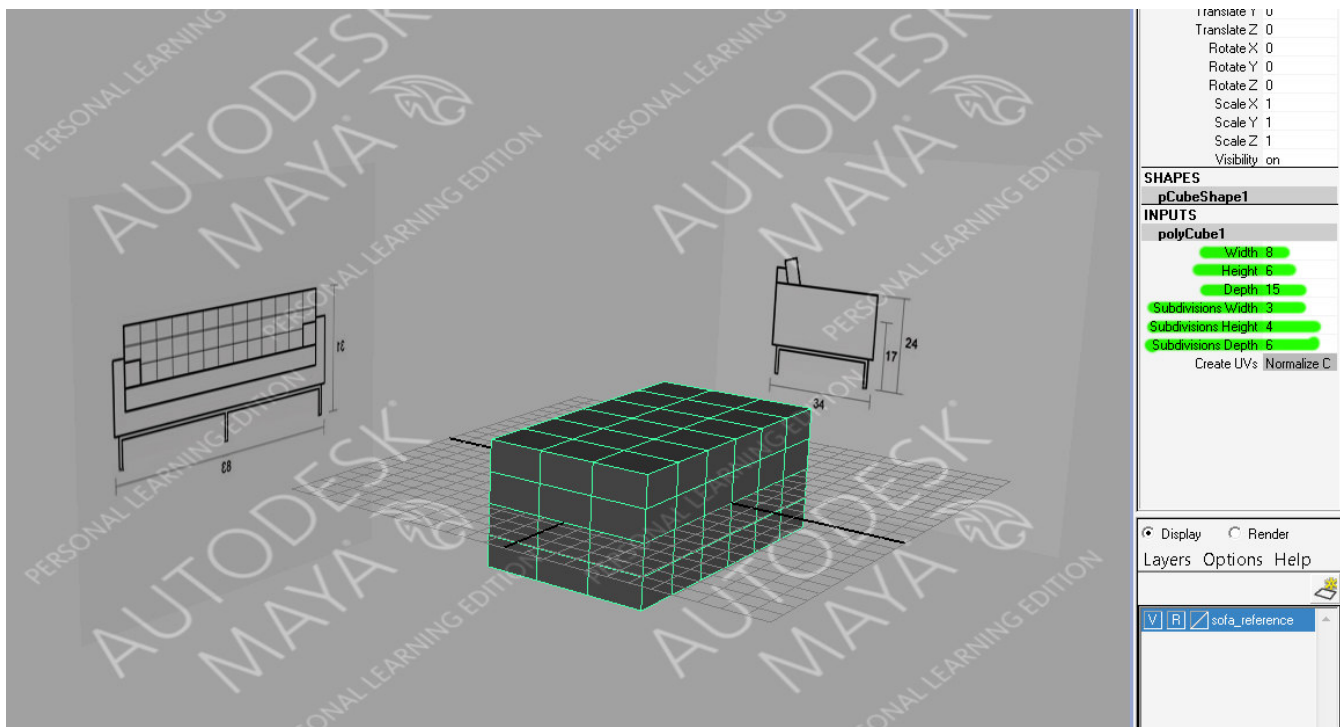
- b. In the Layers Dialogue, click in the box to the right of the 'V' box (visibility) until an 'R' appears. (The 'T' means template. The 'R' means reference.)(See image below).



- c. You will notice that you can no longer select your planes. You have locked them from being edited.

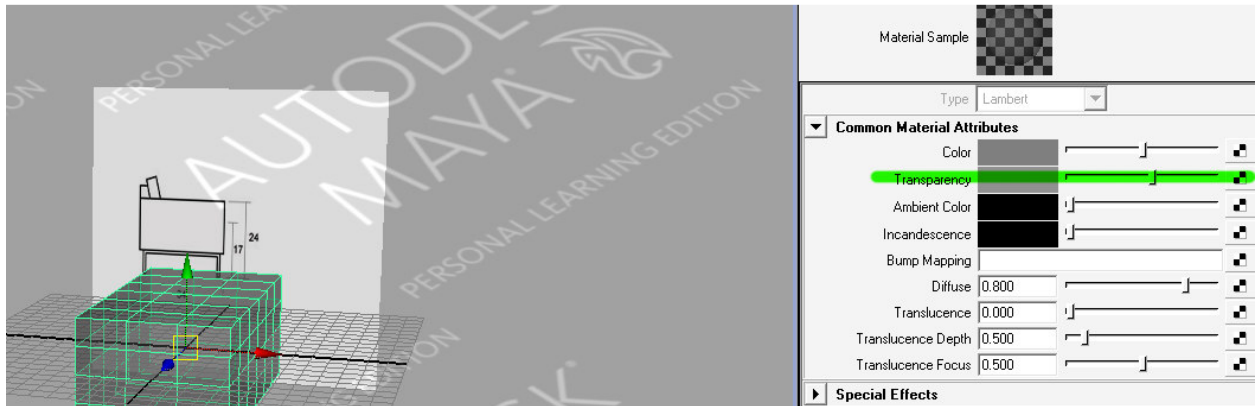
Building Cube

15. Main menu – Create – Polygon Primitive – Interactive Creation (This removes the check mark).
16. From the Polygons shortcut bar select the 'Polygon Cube' and click once on the middle of the grid. This will build you a cube dead center of your grid.
17. Resize the cube as per the dimension in the image below.



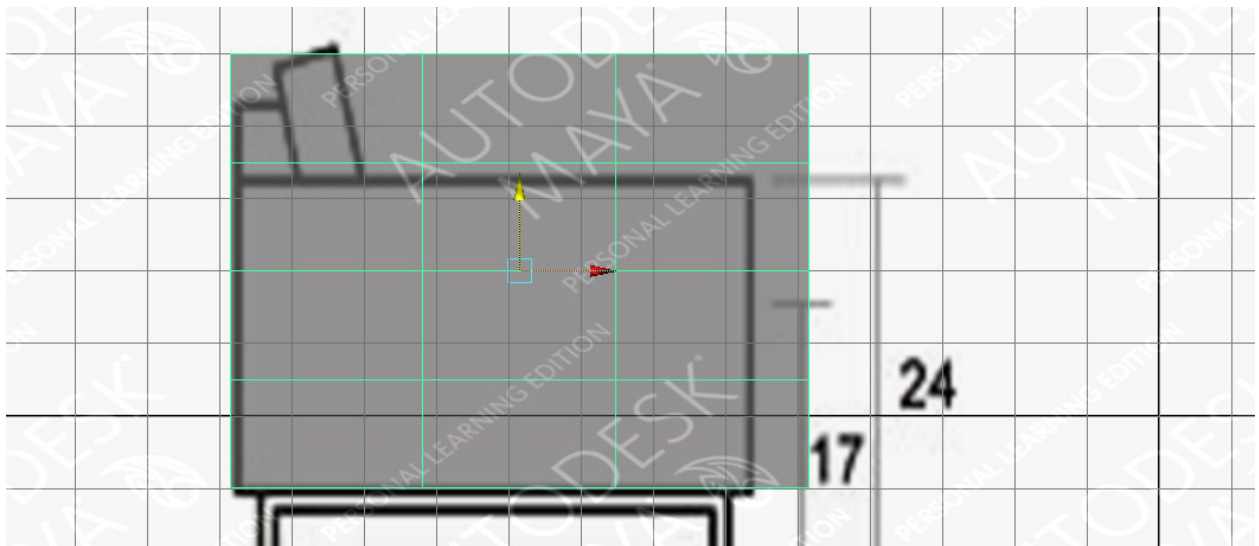
18. Ensure object is selected. Press Ctrl-A – the attributes dialogue appears on the right of the screen.

19. Move the 'Transparency Slider' to half way. (See image below).

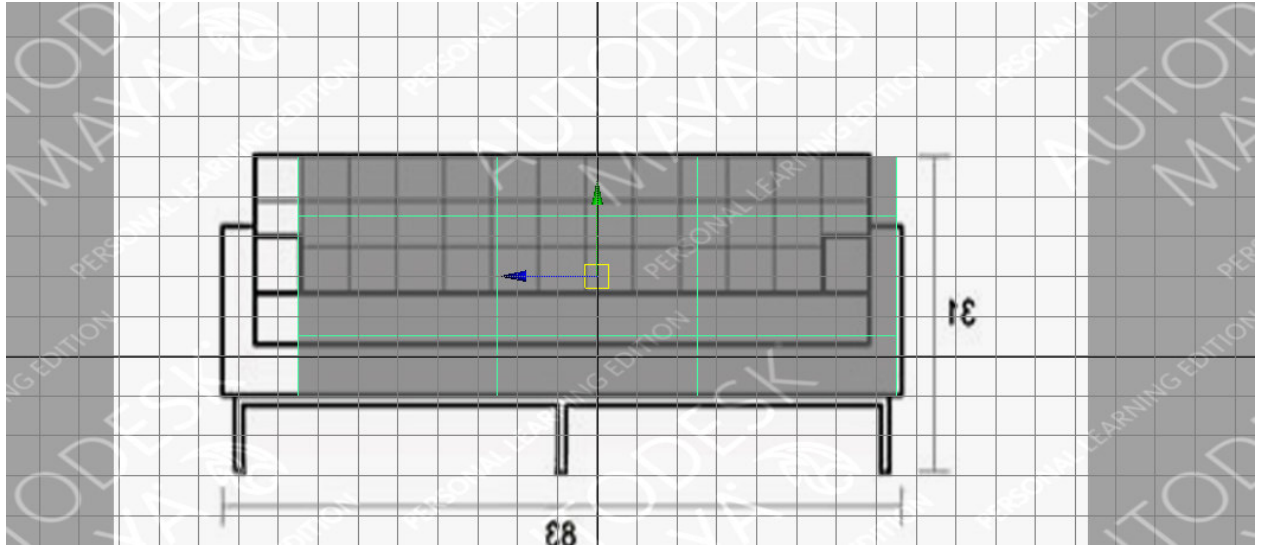


20. Change your view to the 'Front' view.

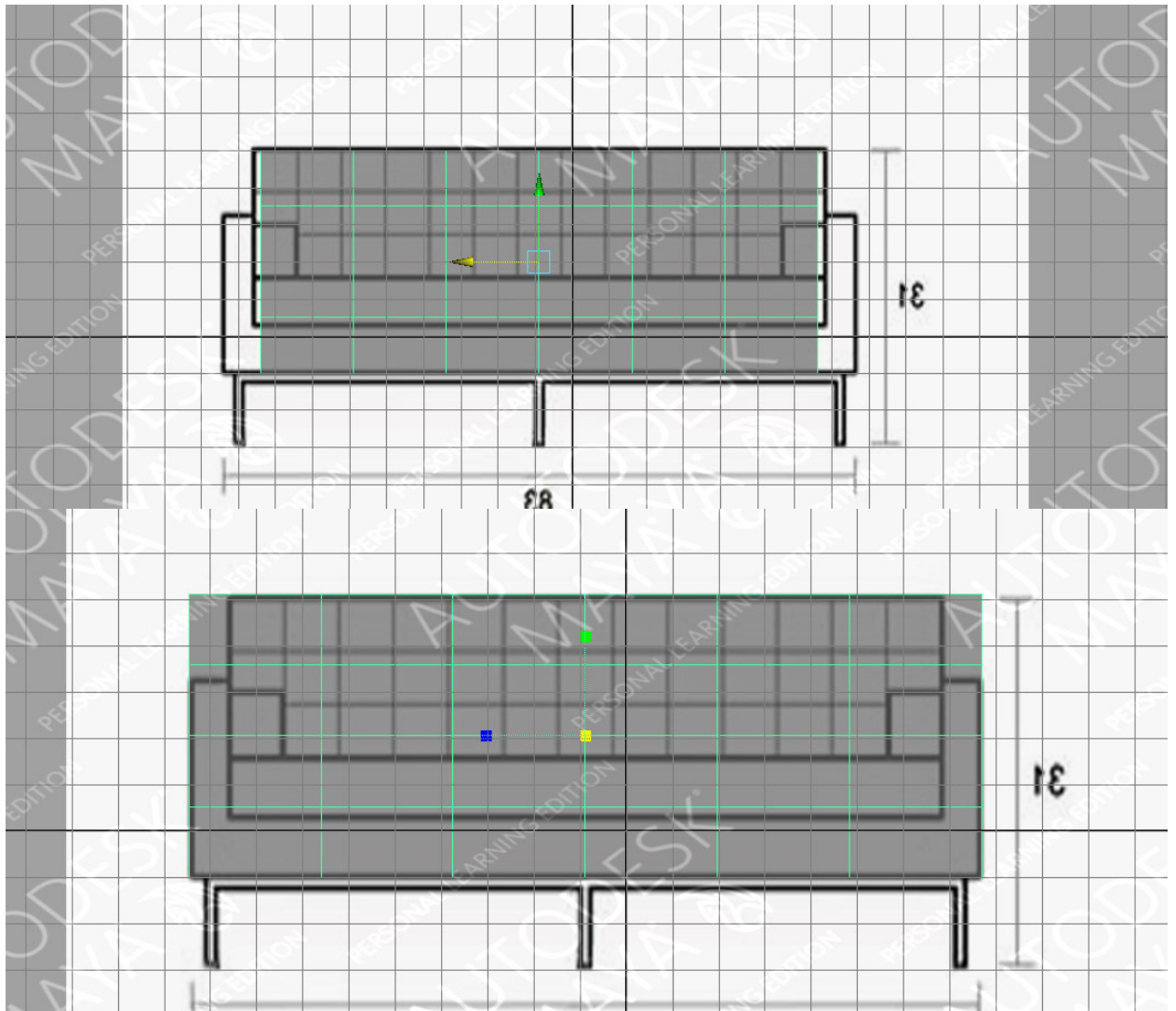
21. Align the cube over top to the side of the sofa. (See image below)



22. Switch to the 'Side' view and do the same for the front of the sofa. (See image below)

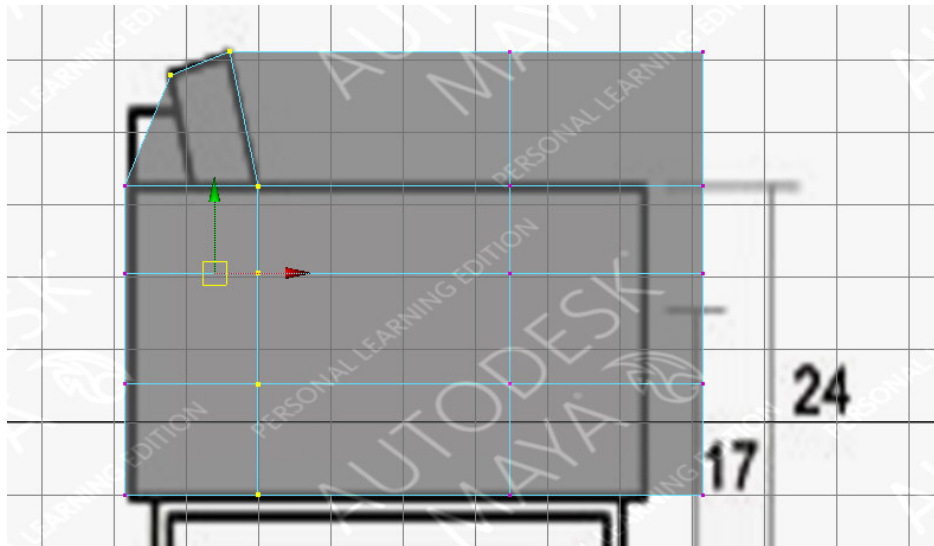


23. Scale both objects to the size of the sofa (do not include the legs). (See images below).



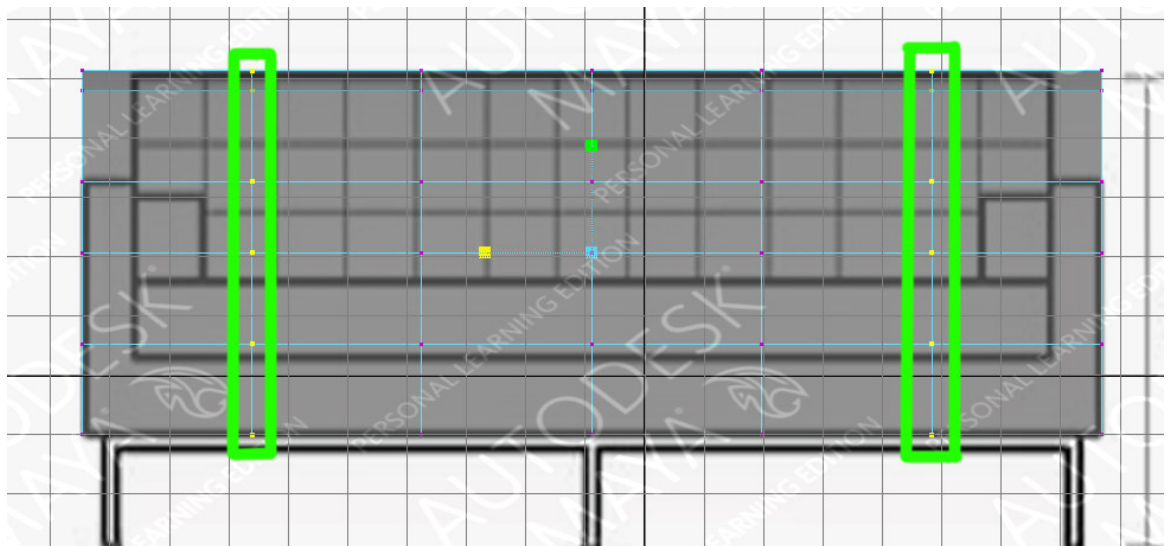
Adjust Vertices

24. Move back to 'Front' view.
 - a. Switch to 'Vertex' mode
 - b. Use the move tool to move the vertices as per the image below.

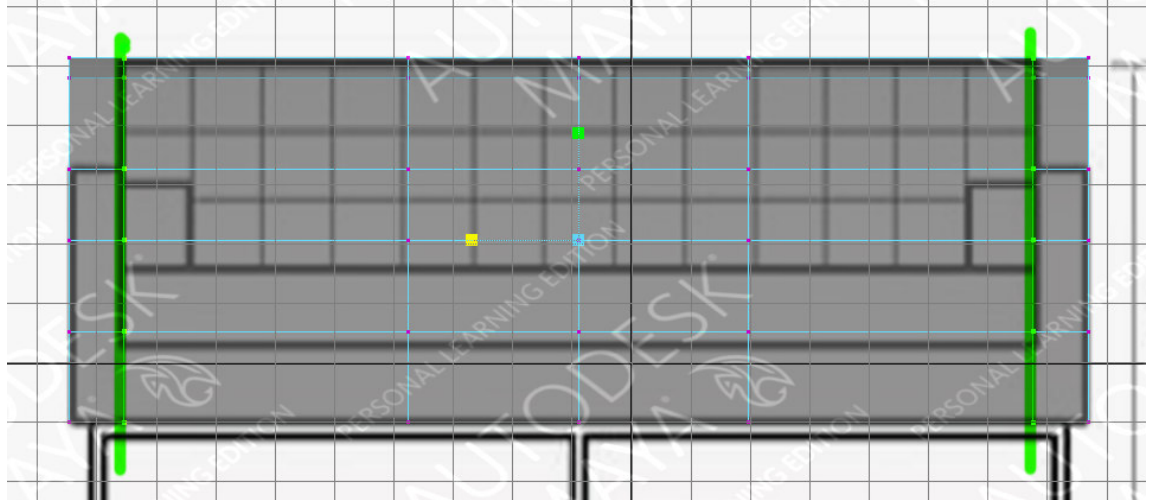


25. Move to the 'Side view.

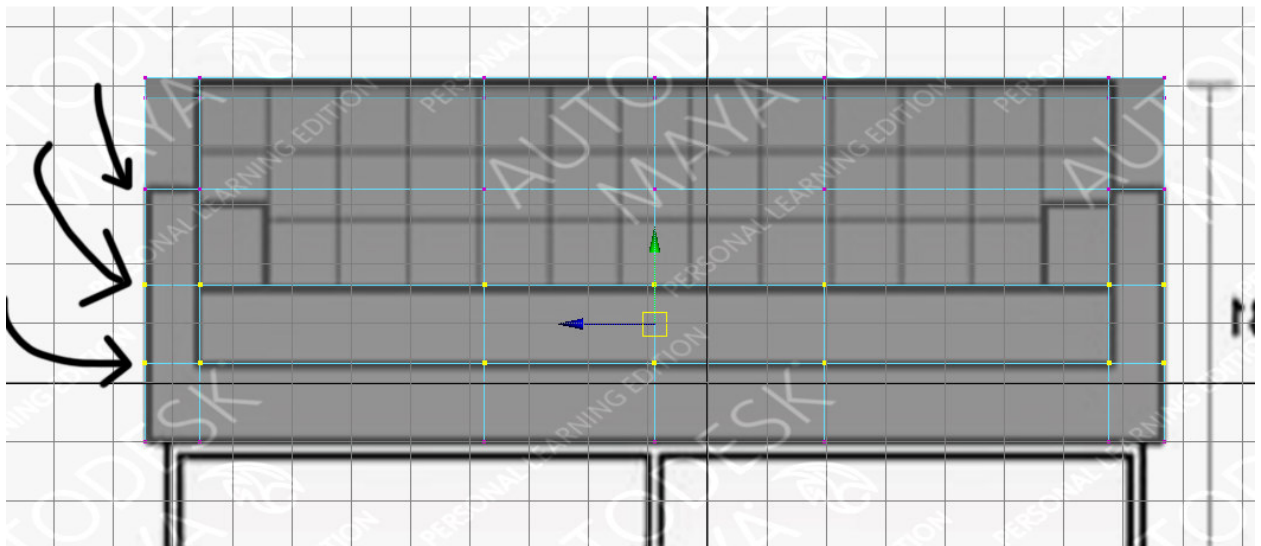
- a. Hold down the 'Shift' key and drag select the 2 vertices rings as indicated on the image below.



- b. Move those out to align with the arm rests. (See image below).



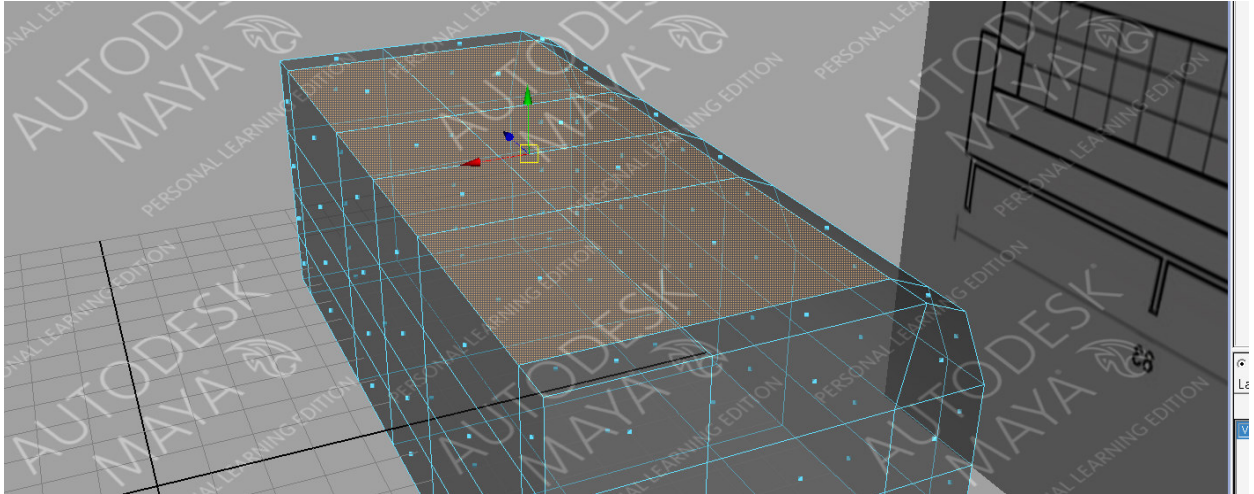
26. Ensure remaining vertices rings are aligned as per the image below.



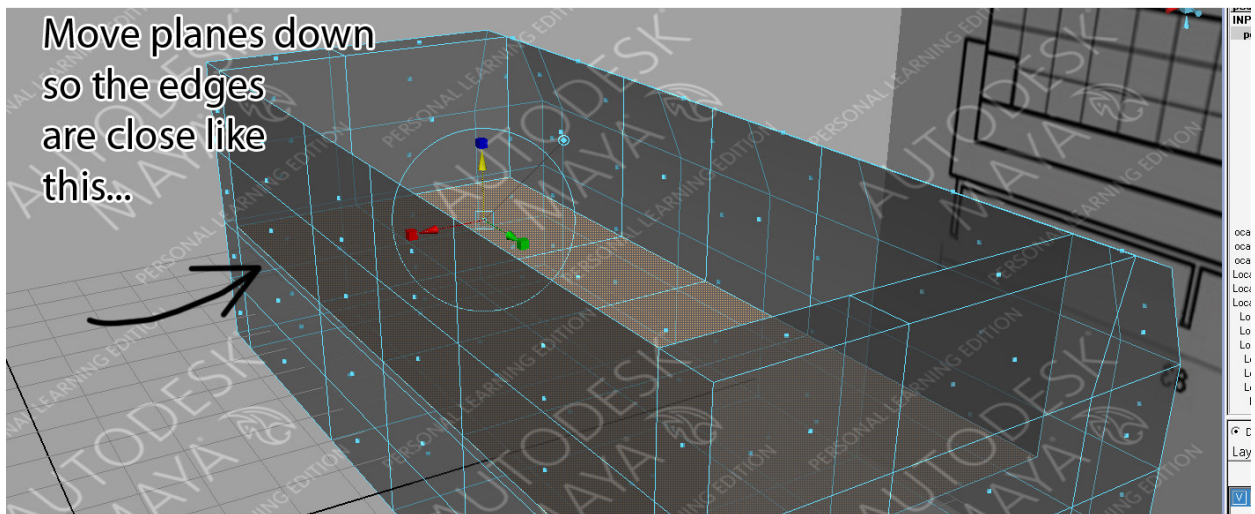
Extrude Faces

27. Switch to 'Face' mode.

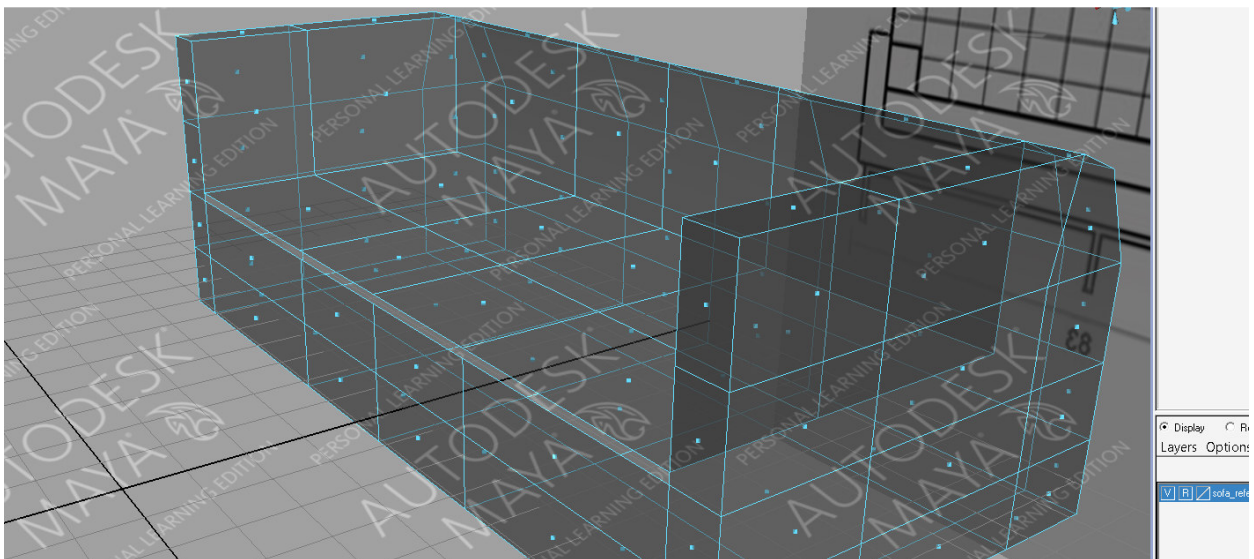
28. Select the top faces of the object. (See image below).



29. Use the 'Extrude' tool from the Polygon shortcuts toolbar. Extrude the faces down as per the image below.

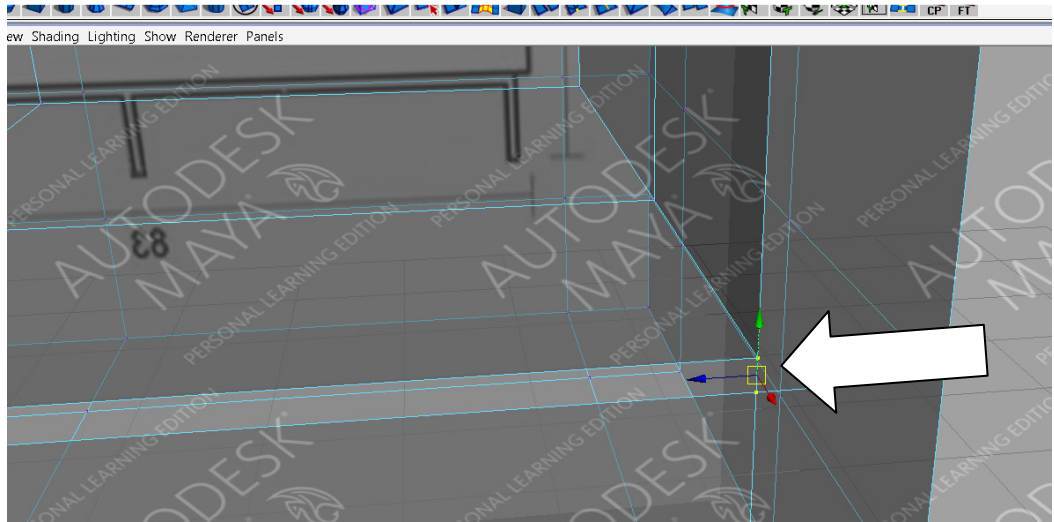


30. Select the left over vertical faces and delete them. (See image below).

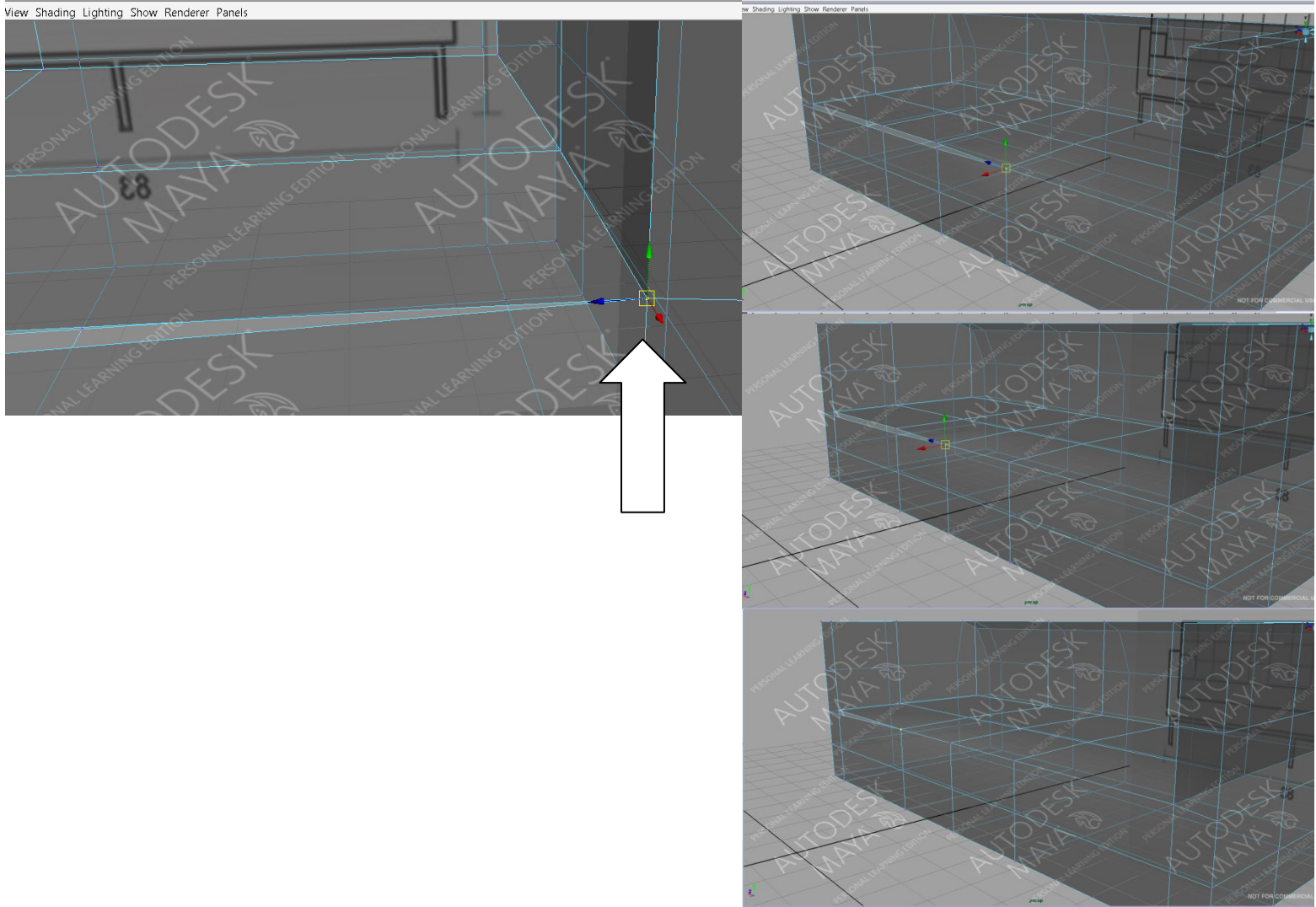


31. Switch to 'Vertex' mode.

- a. Select the vertices along the front edge of the sofa where we deleted the faces. (See image below)

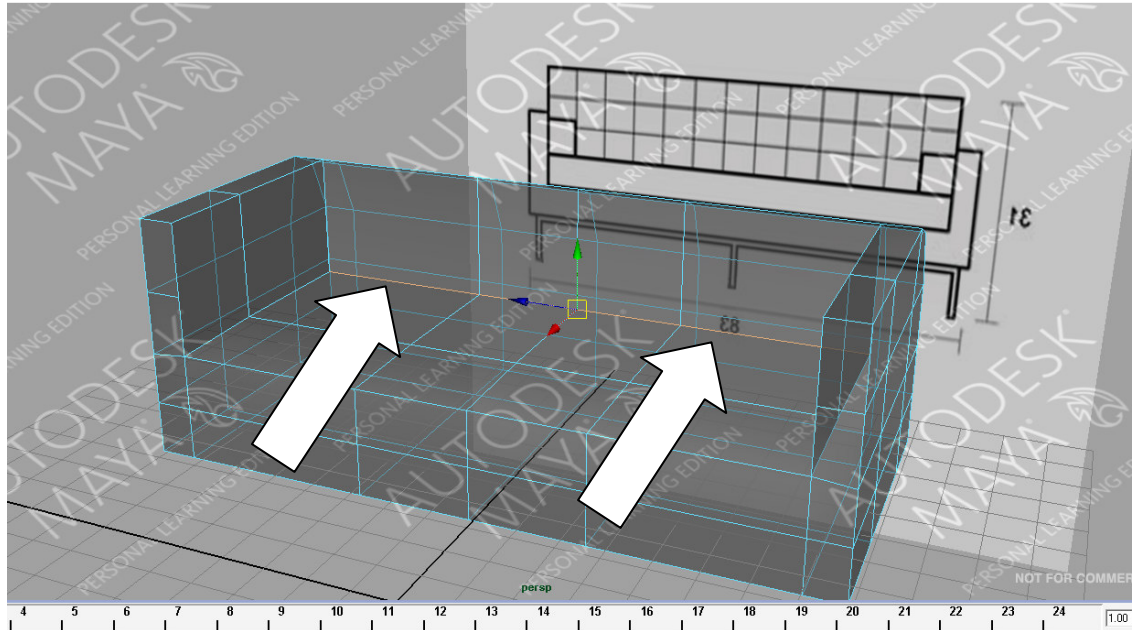


- b. Select 'Edit Mesh – Merge' for each set of vertices along the front of the sofa. (See images below) This will give us one seamless edge.



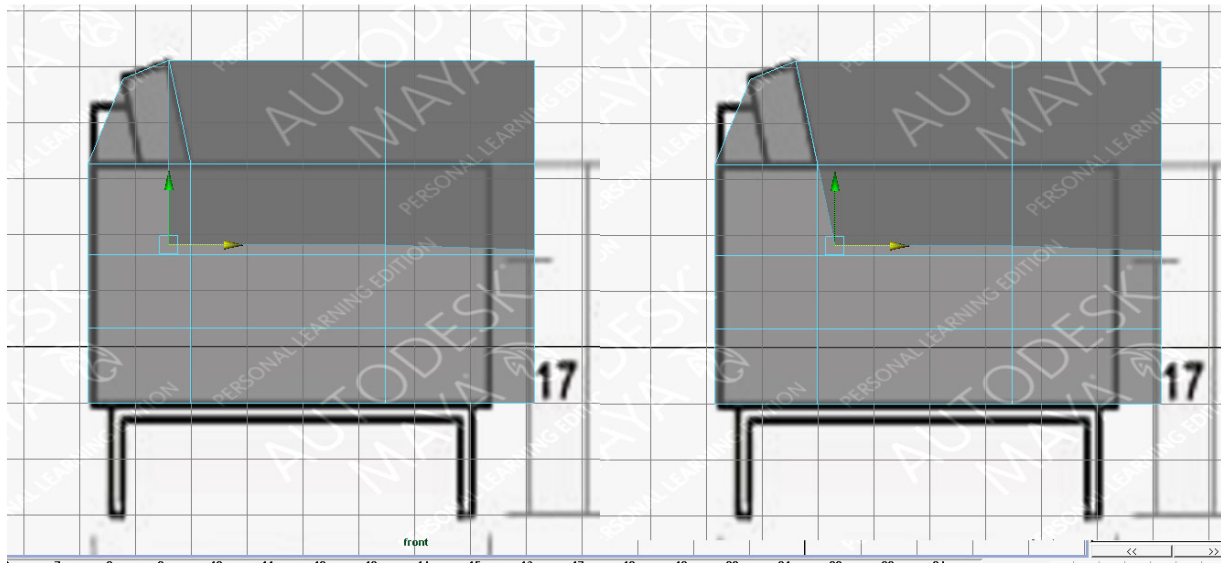
32. Move to 'Edge' mode.

- a. Select the edges at the bottom back of the sofa. (See image below).



33. Move to side view.

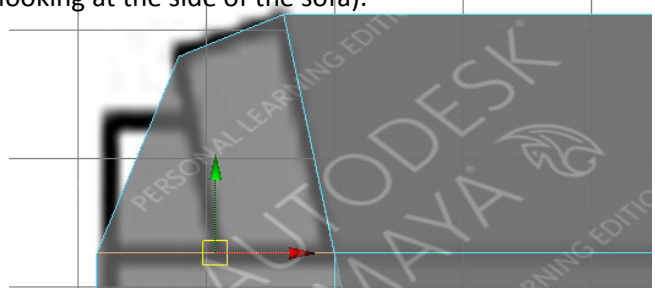
- a. Use the move tool to align the edges as per the image below.



Adjusting Back of Sofa

34. Ensure you are in 'Front' view (you will be looking at the side of the sofa).

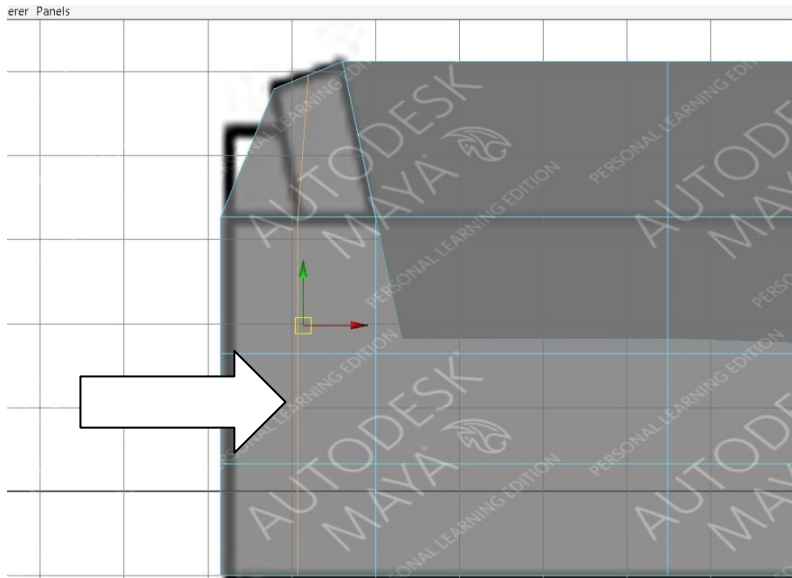
35. Right-click choose 'Edge' mode.



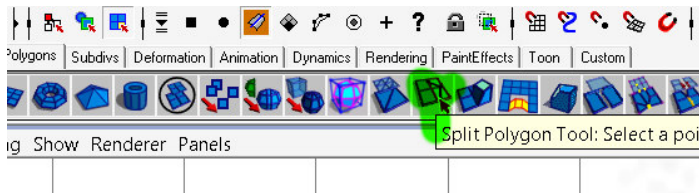
36. Select the edge as per the image below.



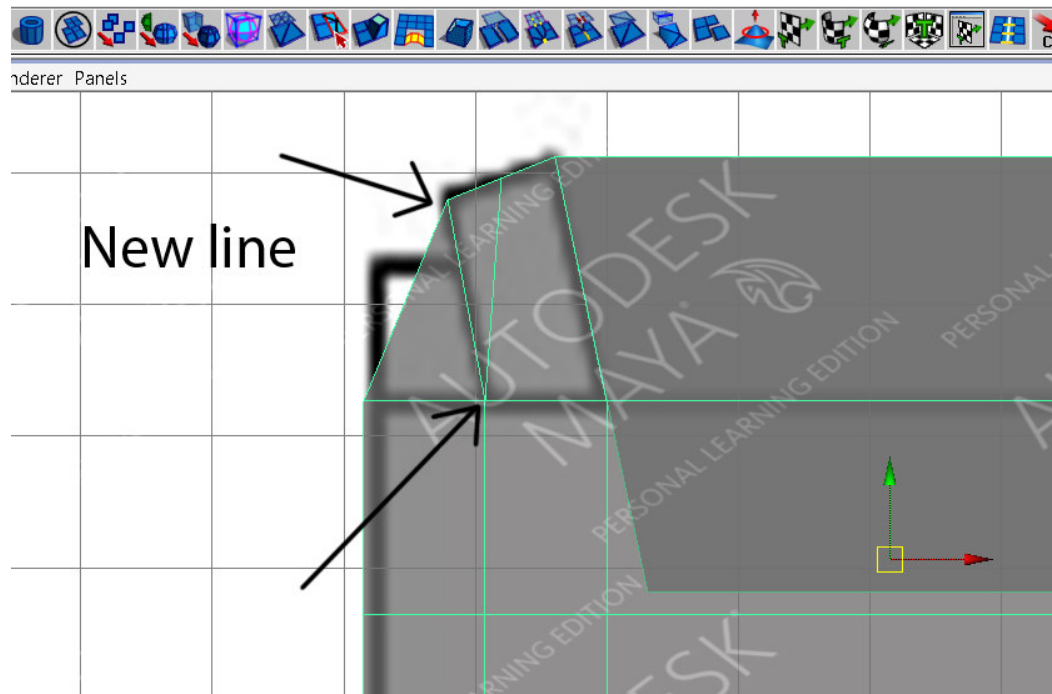
37. Ctrl – Right-Click – drag to 'Edge Ring Utilities' – 'To Edge Ring and Split (This will create a new edge that bisects the selected edge (see image below).



38. From the 'Polygon' shortcut toolbar select 'Split Polygon' tool. (See image below).

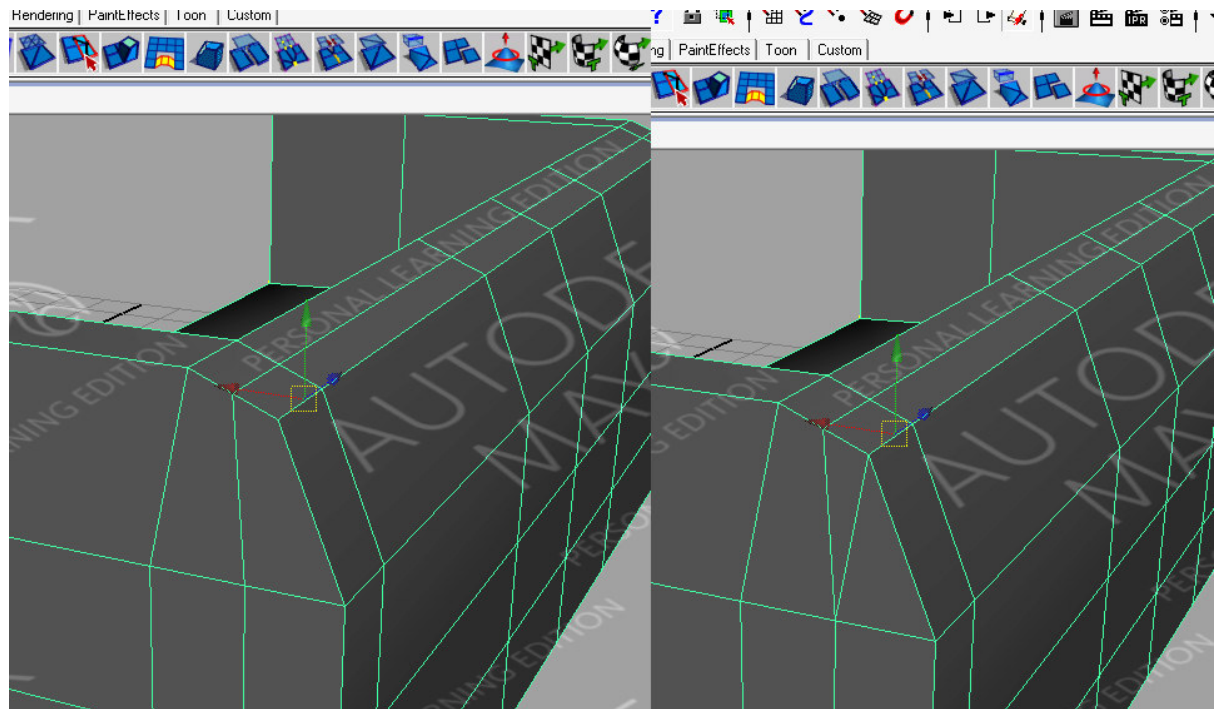


- a. Split the selected polygon as per the image below.

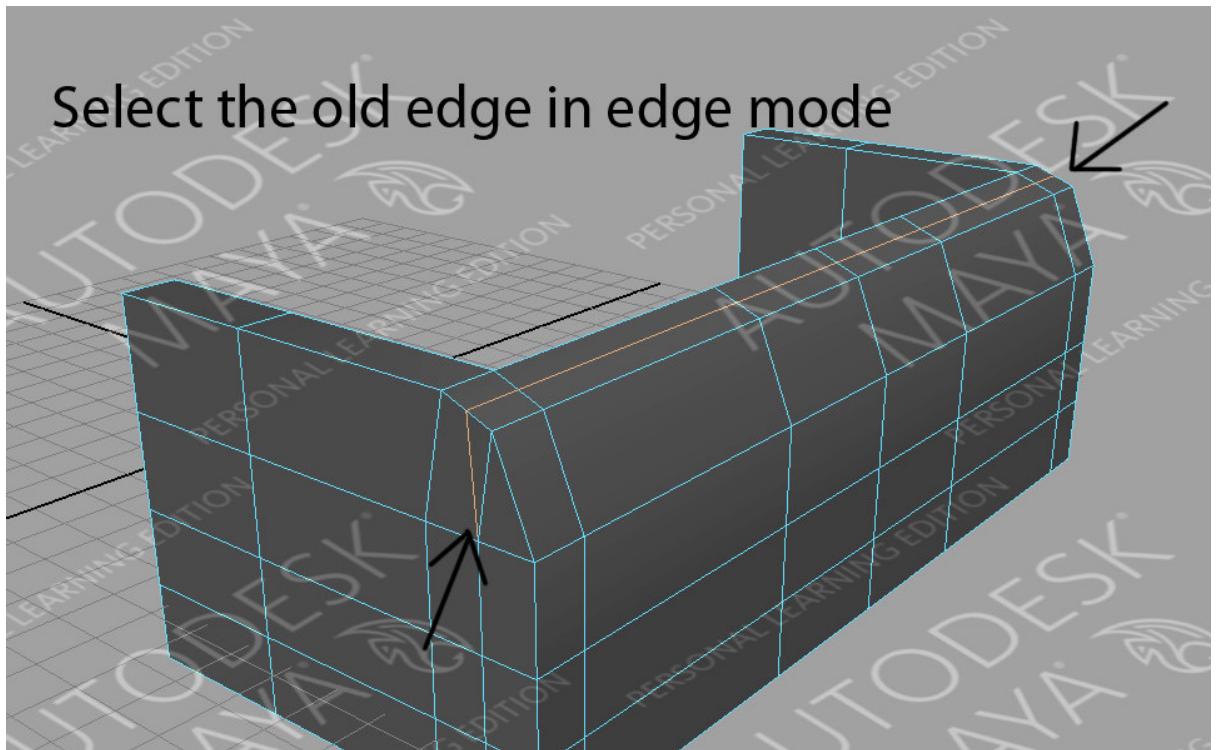


39. Change to 'Perspective' view.

- a. Using the 'Split Polygon' tool split the corresponding polygon on the other side of the sofa.



40. Using 'Edge' mode select the edges as per the image below.



41. Main menu – Edit – Delete to eliminate the selected edges. (See image below)

