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Creating a Nintendo Gamecube with the Perspective Grid

Hello, and welcome to my tutorial on how to create a Gamecube with the Perspective Grid! This tutorial will be a step by step guide teaching you the different methods of rotating and distorting circles as well as drawing rectangles to create a Gamecube. You can use the colors provided in the guide, or just pick your own! DISCLAIMER: Many times during this tutorial, I'll be using the terms circle, rectangle, and straight line when they are diagonal due to perspective.

File settings and Dimensions

Dimensioning

Width: 1000 px

Height: 1000 px

Unit: Pixels

1 Artboard

Advanced Tab Settings

Color Mode: RGB Color

Raster Effects: High (300 ppi)

Preview Mode: Default

PRESET DETAILS

Width

| 1000 px | Pixels ⌄ |

Height   Orientation   Artboards

| 1000 px | [icon] [icon] | ⌃ 1 ⌄ |

Bleed

Top   Bottom

| ⌃ 0 px ⌄ | | ⌃ 0 px ⌄ |

Left   Right

| ⌃ 0 px ⌄ | | ⌃ 0 px ⌄ | 🔗

⌄ Advanced Options

Color Mode

| RGB Color ⌄ |

Raster Effects

| High (300 ppi) ⌄ |

Preview Mode
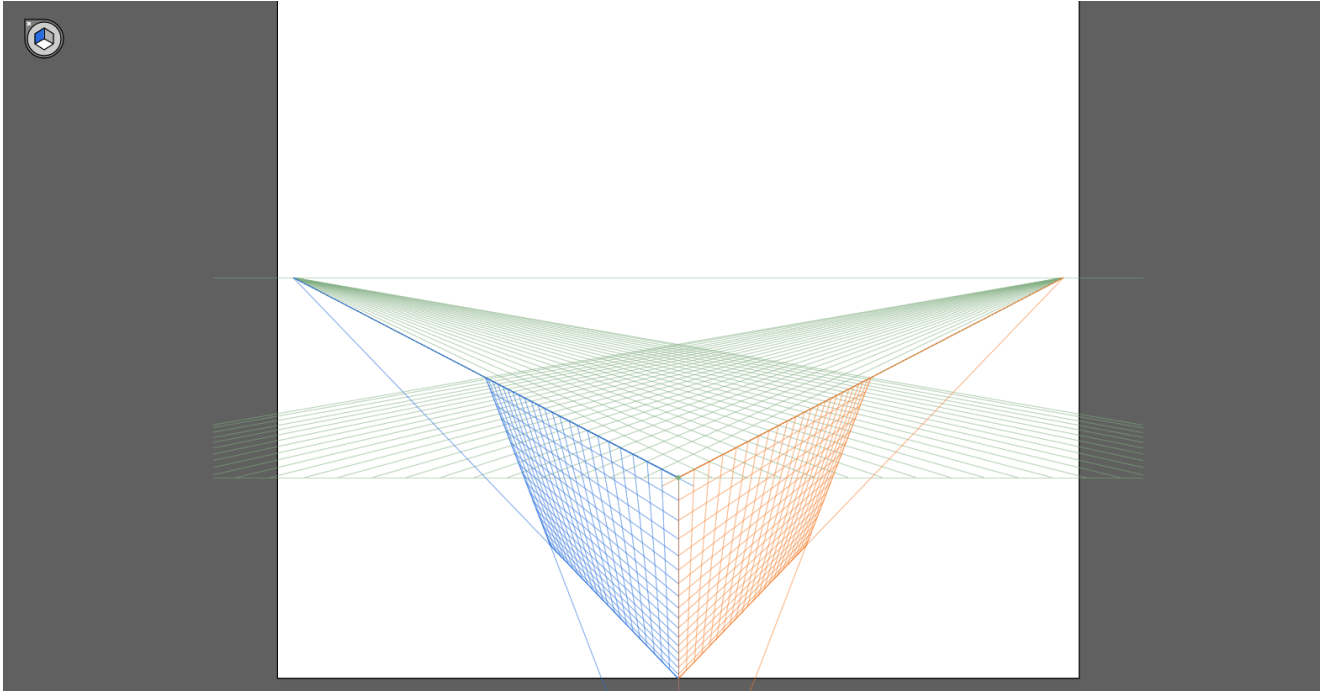
| Default ⌄ |

More Settings
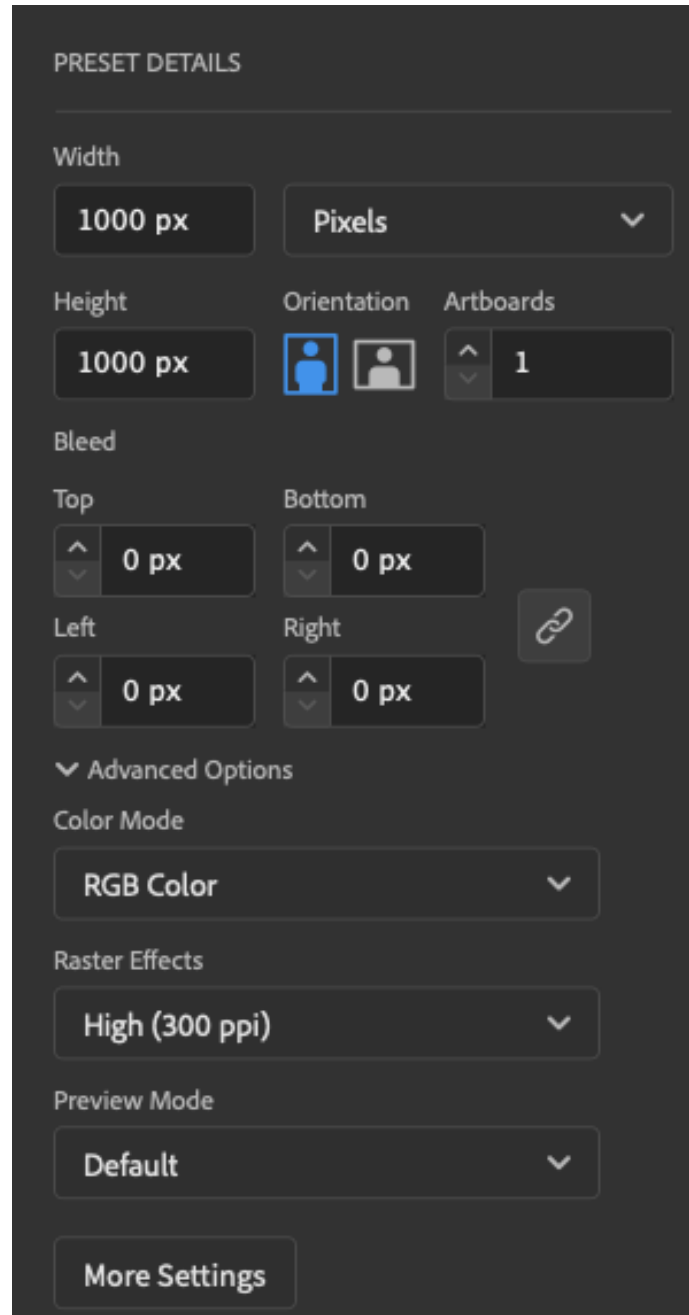
Step 1. We'll begin by setting up our layout, by going to View>Perspective Grid>Show Grid. Then, we'll go back to Perspective Grid and go Perspective Grid>Three-Point-Perspective>{3P-Normal View]
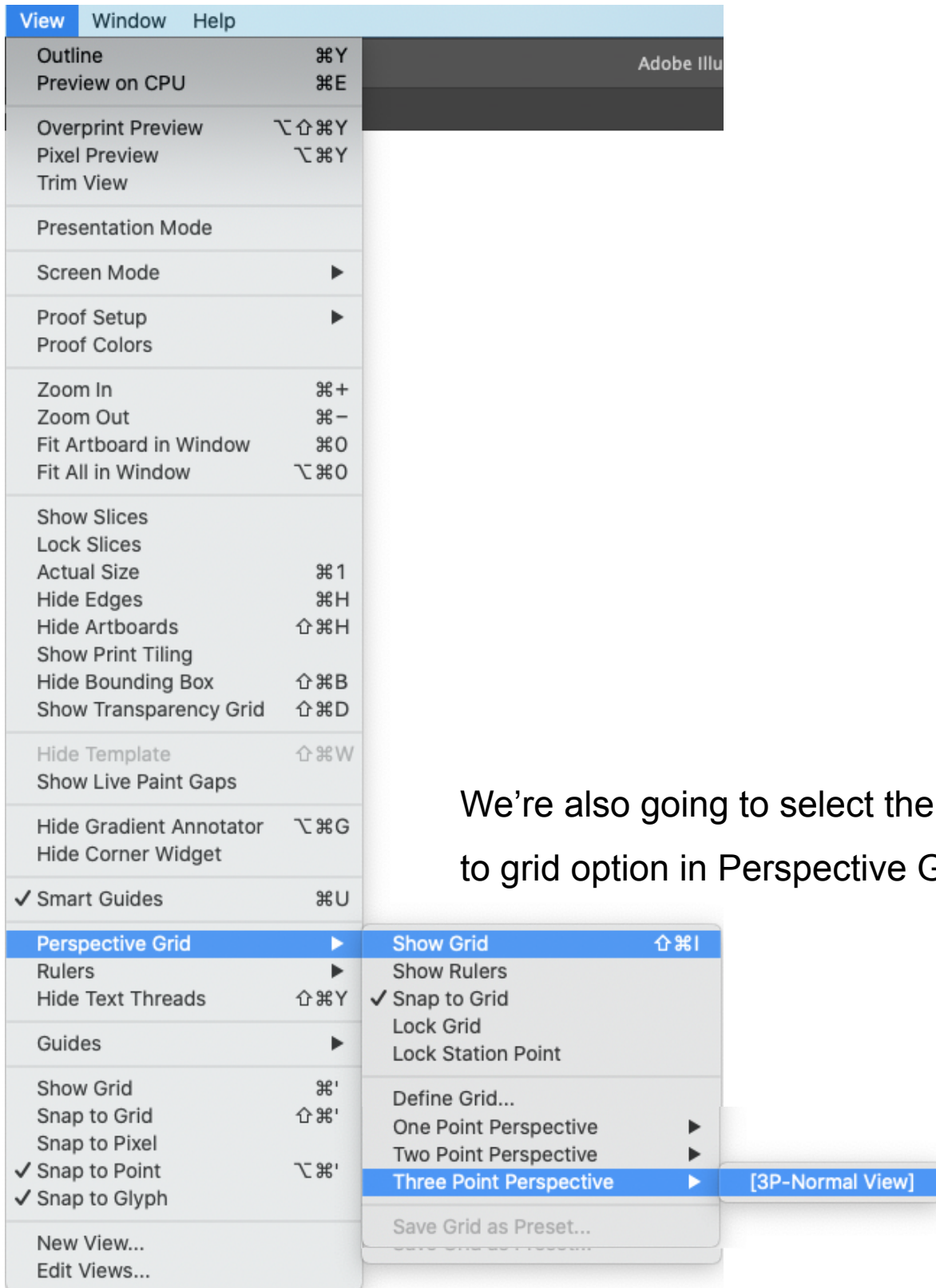
We're also going to select the snap to grid option in Perspective Grid.

The resulting view should look like the screenshot below.

Step 2. Starting from the middle of the 3 sides, draw out an angled surface along the middle edges, making it by 8 blocks tall by 12 blocks long. Copy Paste it (Ctrl-C>Ctrl-F or Command-C>Command-F) and use the mirror tool to flip it horizontally. Then line it up to the right side of the original shape as pictured below.
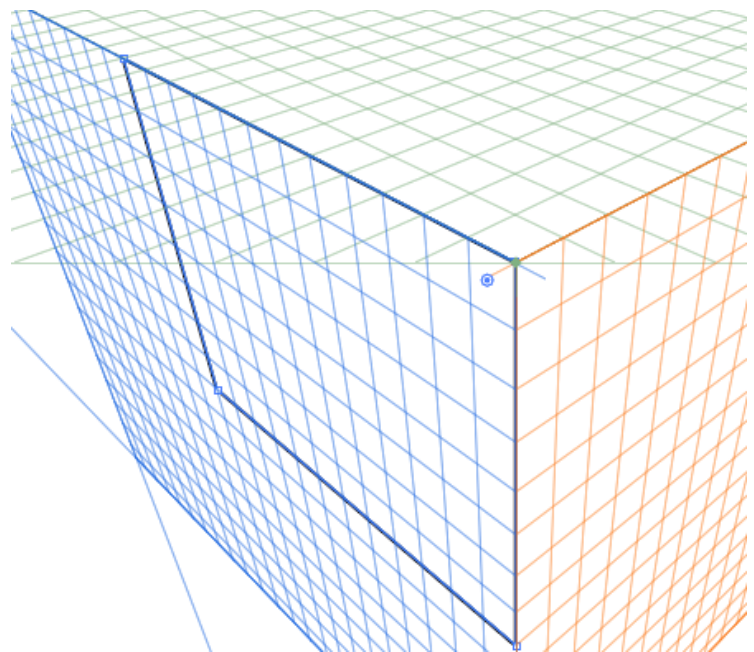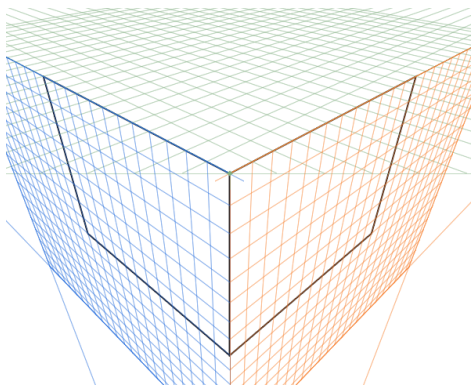
Create a 3rd side by making lines that connect the top corners with each other while going along the grid, like in the picture below.
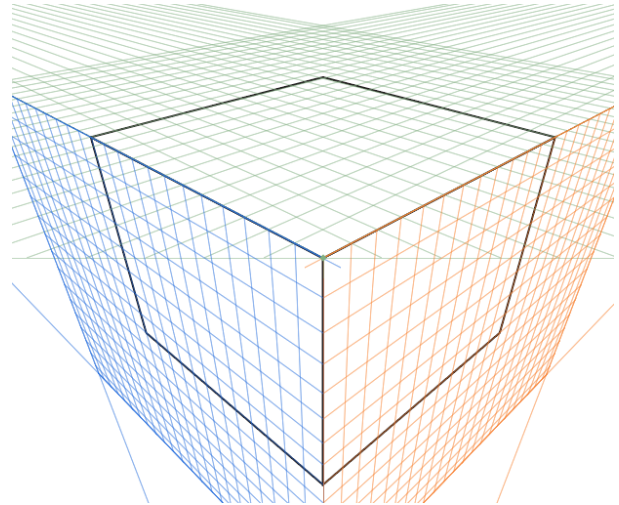
Step 3. From each side of the top, create a line that extends 3 blocks into the middle.The lines should be positioned 5-6 blocks out from the center corner. Note that they will not all be the same visual length, due to perspective. Then, create a box that connects the 4 lines as pictured below.
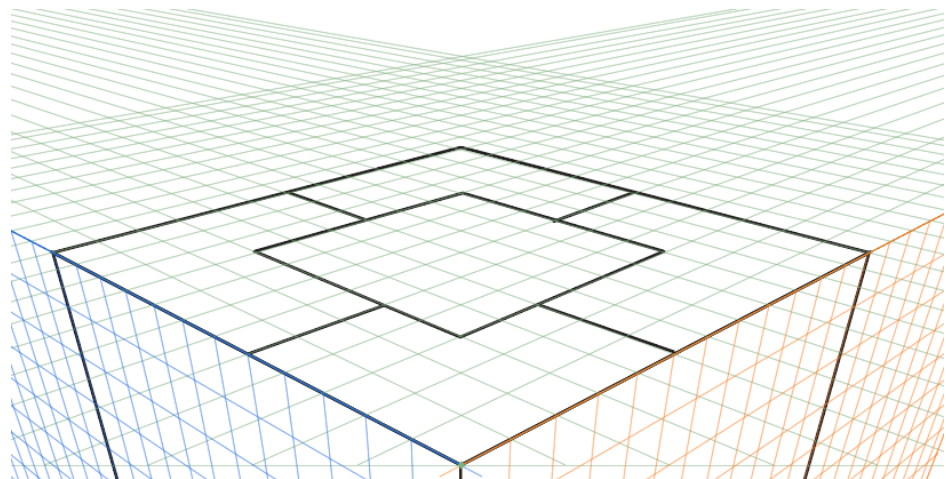
Delete the 4 3 block lines we just made. Then, draw a line from the leftmost corner of the small box to the point pictured below, then to the bottom corner.
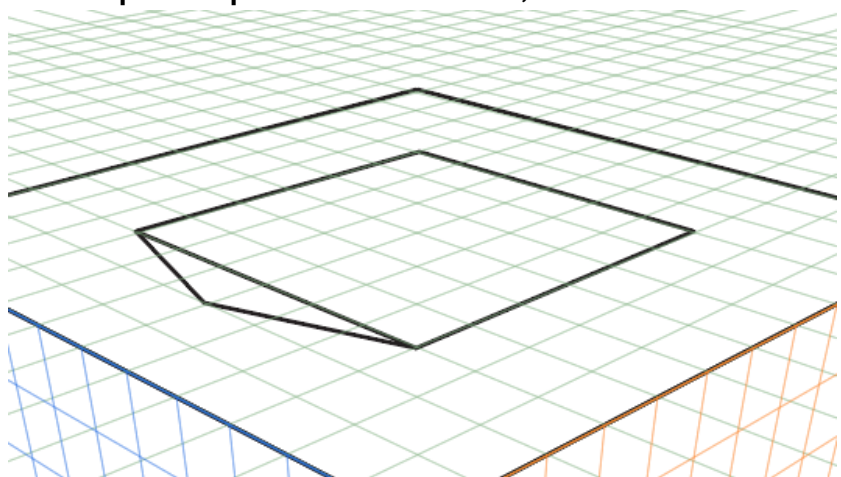
Step 4. Using the Ellipse tool (L), Click drag from the corner you created up-right until the circle lines up with all 4 sides of your box. it should look like the picture below. Lastly, delete the box and triangle around it so its just the circle.
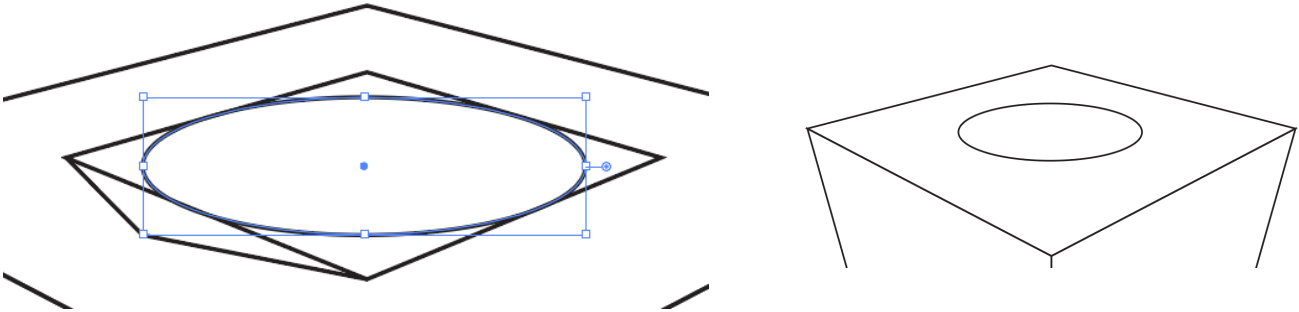

Step 5. create another box on the top side as pictured below, with all sides 1 block shorter except the top right. Then, select the object you just made and create anchor points 1 block away each way from the leftmost corner and the bottom corner. Then select each corner and move them inwards to appear like the next picture.
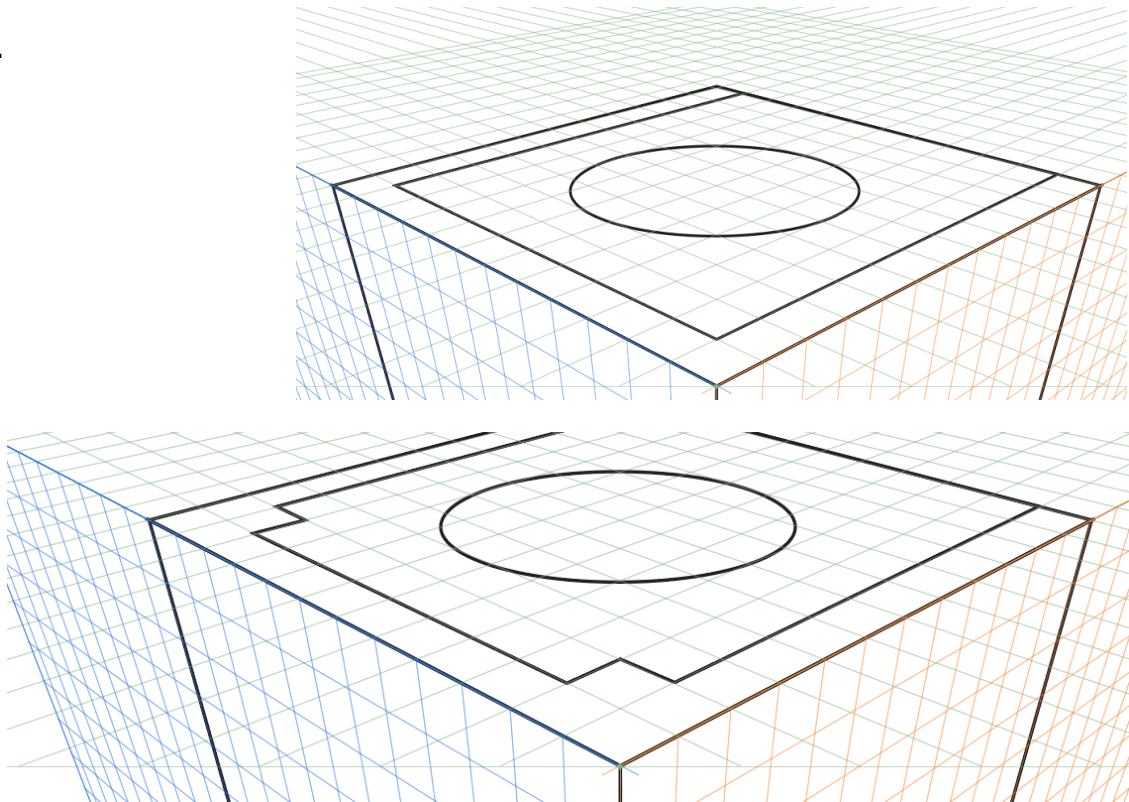
Using the Direct Select Tool (A), select the 2 corners you just edited. Go to the properties panel on the right, then go under Convert and select the second icon, the one pictured below.
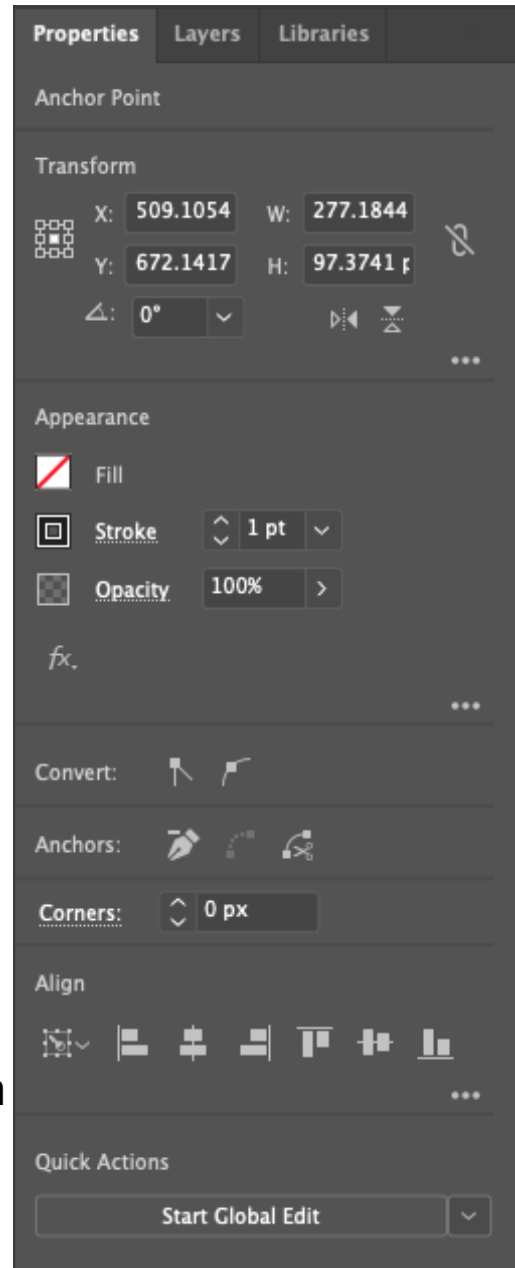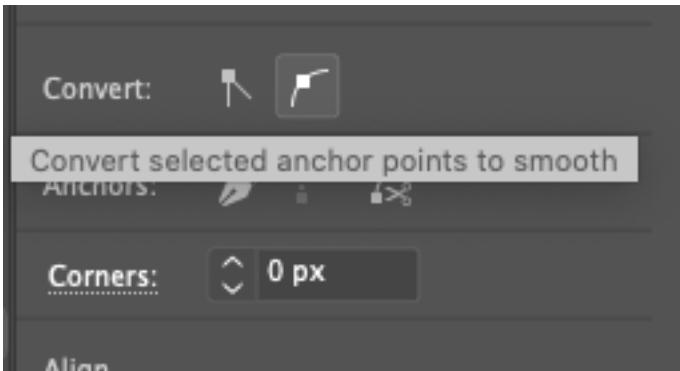
Its a bit hard to get exact, but move the left anchor point inwards and the bottom anchor point downwards, and adjust the curve with the round parts that appear when you direct select the points. (Pictured below)
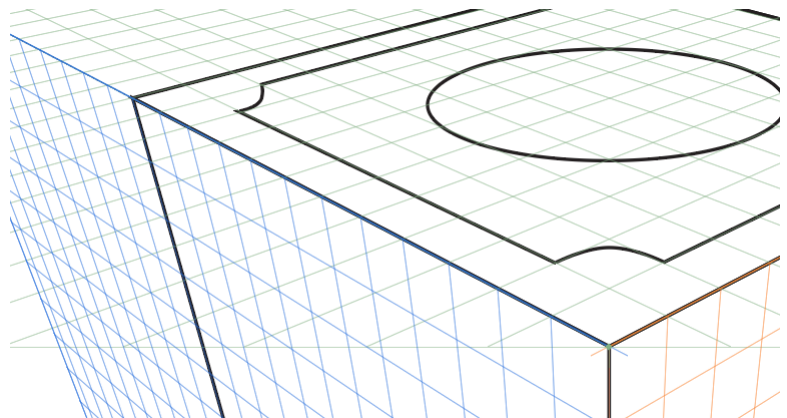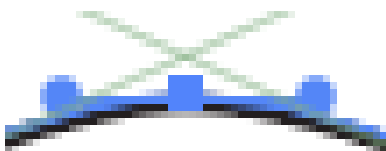
While we're at it, create another slot using the same process in the far back by creating 3 anchor points, extending the middle one by one block, then converting the selected anchor points to smooth.
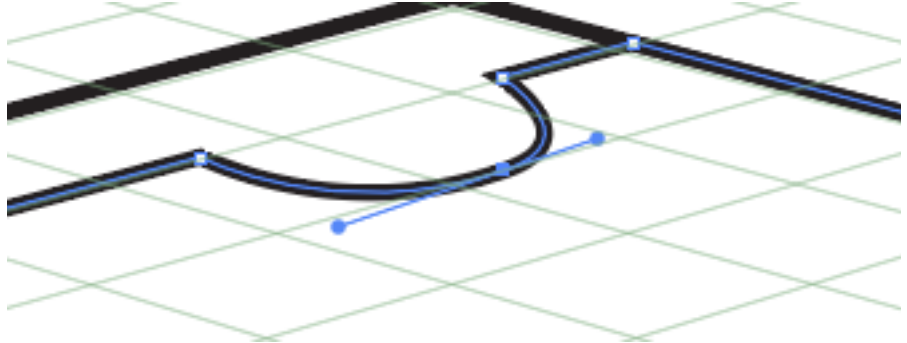

Step 6. Copy paste the big circle in the middle and resize it accordingly to fit in each of the areas shown below. Note that they may need to be scaled down as well as made taller.
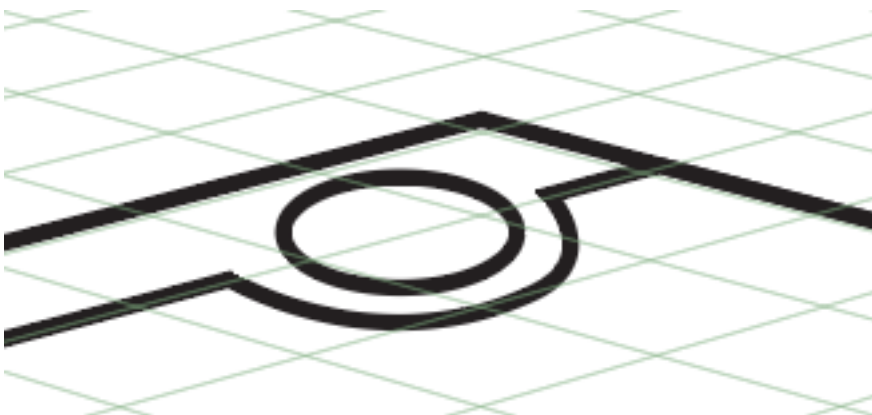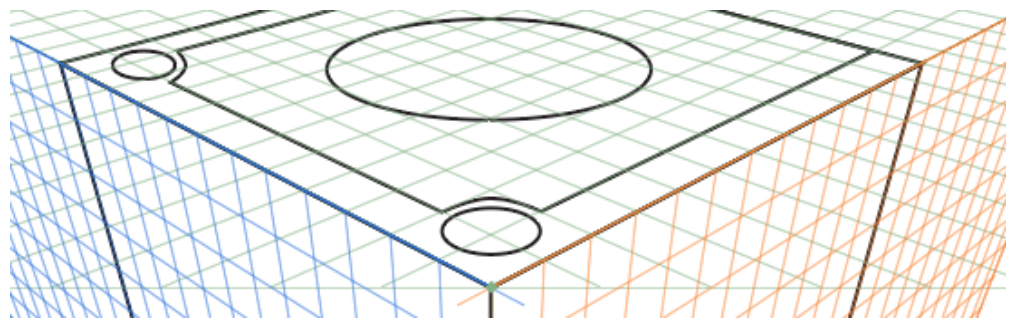
Step 7. Draw a line 2 blocks up from the bottom corner to the far right side, and then add 2 boxes, one being 2 by 1 and a half and one being 1 and a half by 1 and a half. the result should be as shown in the image below.
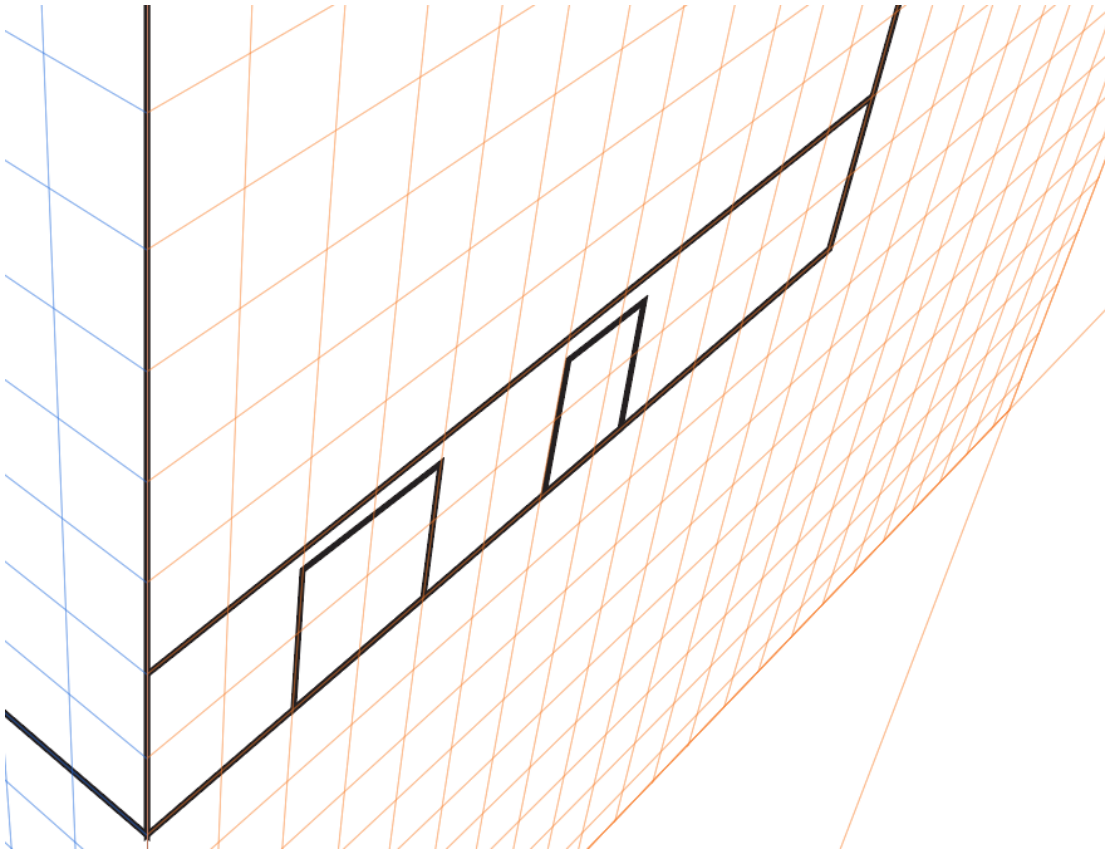

We're also gonna set up for the next step by creating a rectangle and creating 2 lines half a block into the sides. It'll look like the image on the right when you've done that. When drawing your 2 lines in the rectangle, make sure to draw both of them either down>upwards or up>downwards, make sure they're both made in the same direction or the next part will work wrong.
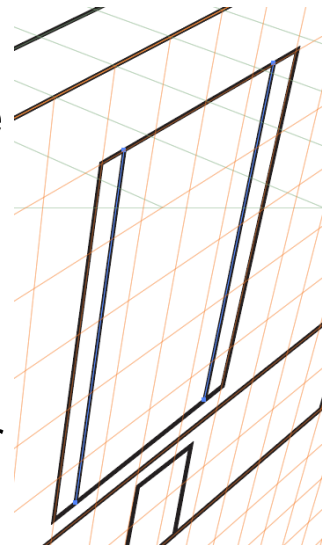
Select both of the rectangles and go to Object>Blend>Blend Options, select Specified Steps and enter the details below.
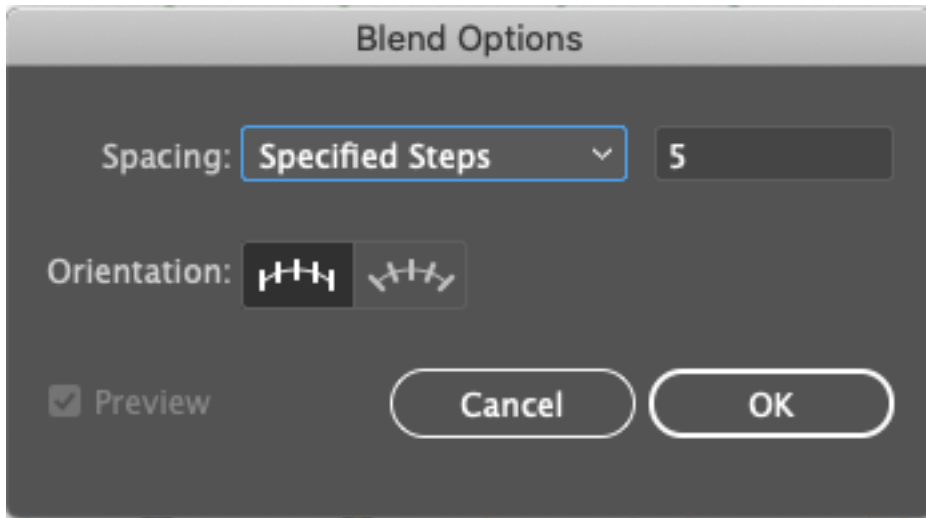
Then, do Object>Blend>Make. We're gonna do the same thing vertically, except we dont need to change the specified steps or settings because its the same amount. Again, be sure to draw both lines the same way left to right or right to left to avoid it looking like the image in the bottom left. You want the end result to look like the bottom right image.
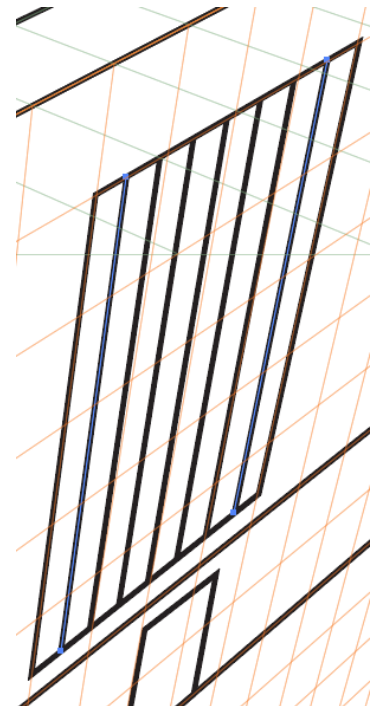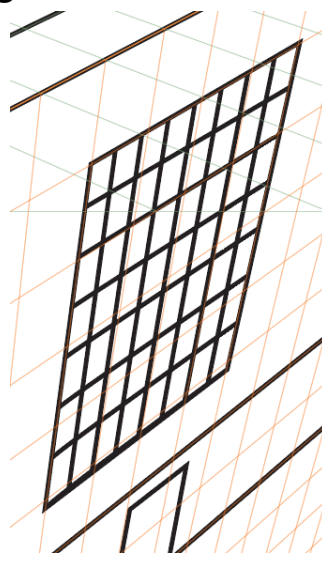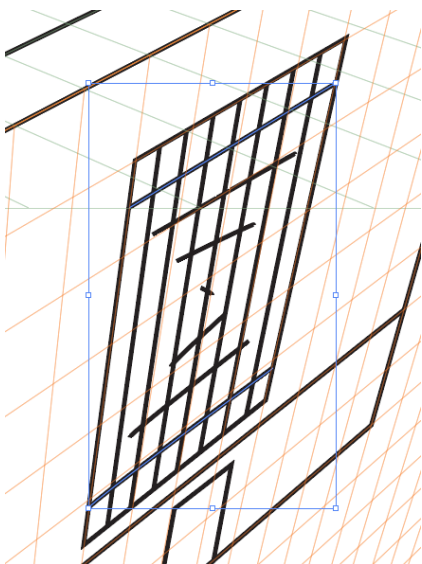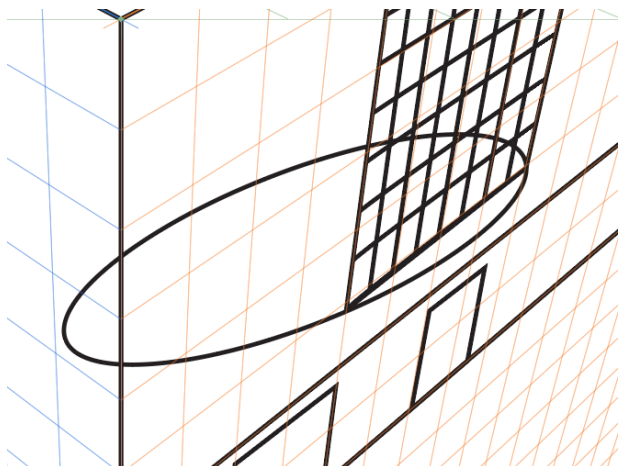
Step 8. Copy and Paste the circle from the top of the console, and rotate it 21 degrees in the Properties panel on the right. Then, line it up as shown in the screenshot below. Select it, then switch to the Pen tool (P). Using the pen tool, △: 21° ⌄ add 2 anchor points where the shape connects with the corners of the grid shape. Then, using the Direct select tool, delete all parts of the shape except for the curved line between the anchor points you just made. From here, Copy and Paste the line, then arrange it 1/2 of a block down from the previous line. Connect the two lines at the ends. The result should be as pictured at the bottom.
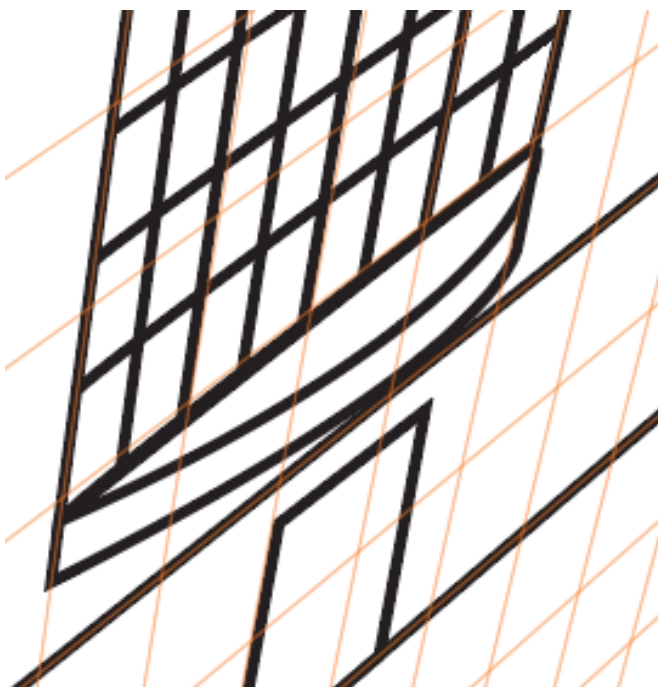
Step 9. Copy and Paste the top circle again, then rotate it 90 degrees. Line it up as shown below. Where the circle lines up 1 block downwards and one block to the left of the center corner, add an anchor point. Add another anchor point to the circle 2 blocks up and 1 block to the left of the bottom-most corner. Using the Direct Select tool, remove all other parts of the circle except the part between the anchor points you made earlier.
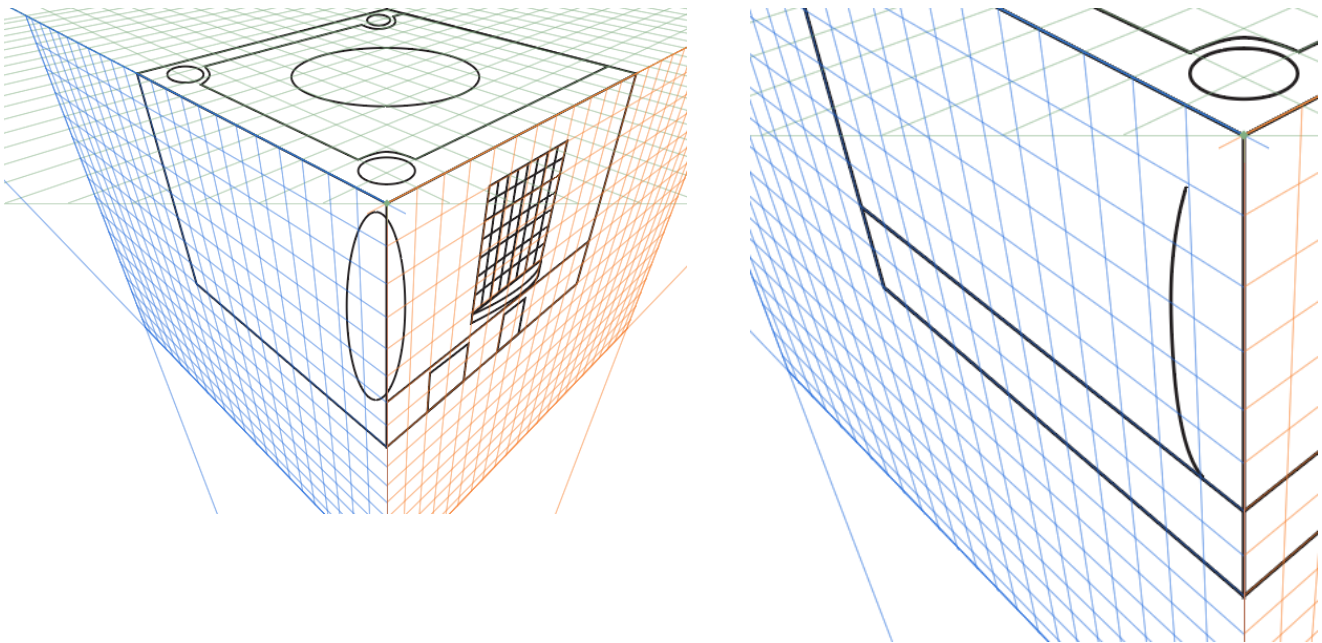

While we're at it, create a straight line 2 blocks up from the bottom left edge that goes across the entire side, like shown in the right image. Back to the curved line from before, Copy and Paste it on the far left side, 1 and a half blocks from the leftmost edge. Then, connect the top point to the bottom point with a straight line.

Lastly, we're going to move the 2 right anchor points we originally created half a block to the left on the side. Then, we should have a result like the image below.
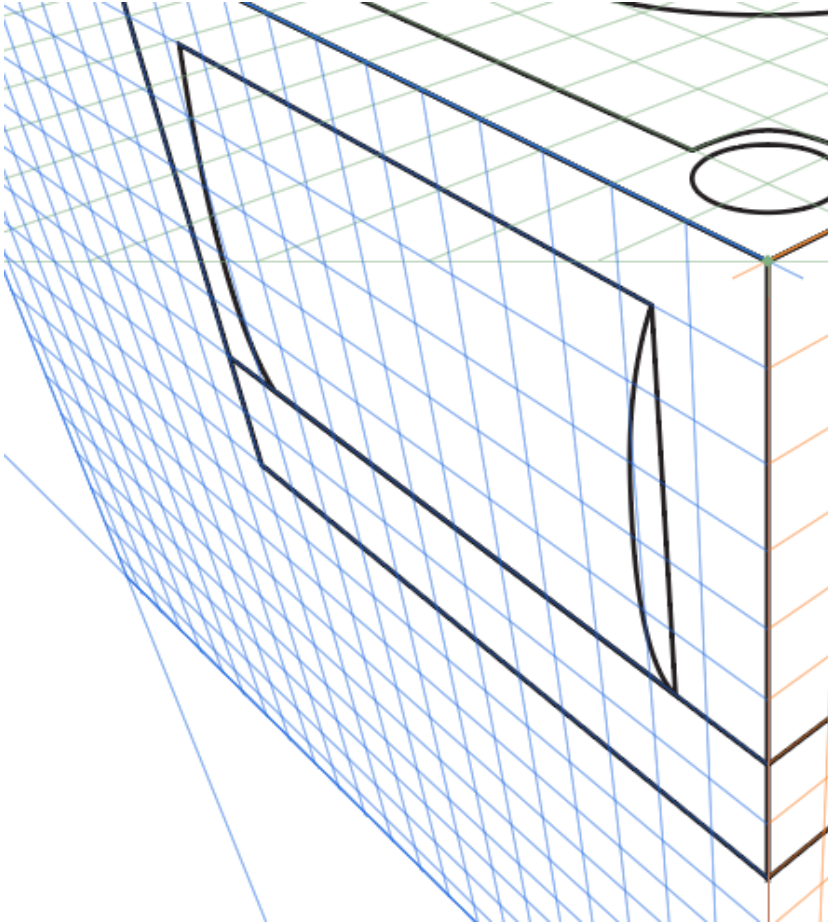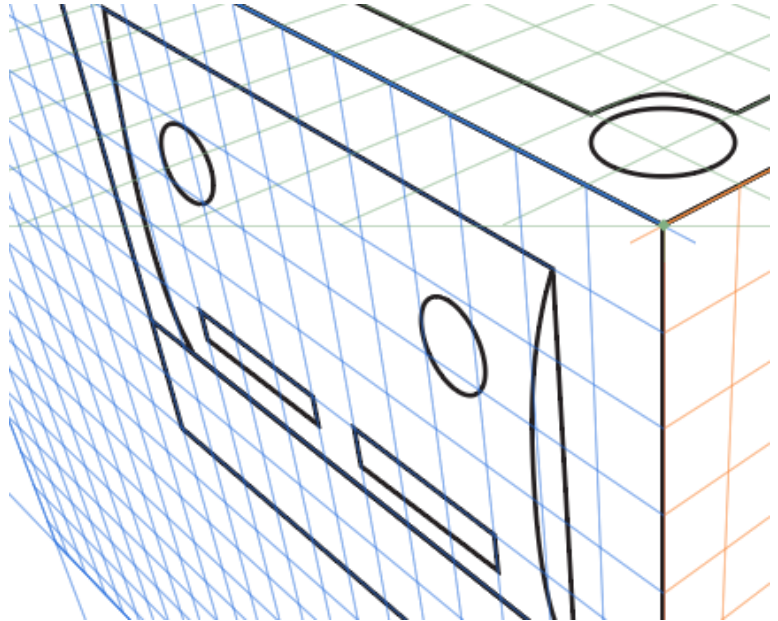

Step 10. Using the Pen tool, create 2 rectangles 1/2 of a block tall and 4 blocks wide spaced like in the image on the right, with 1 block between them and 1 block away from the edges on both sides.
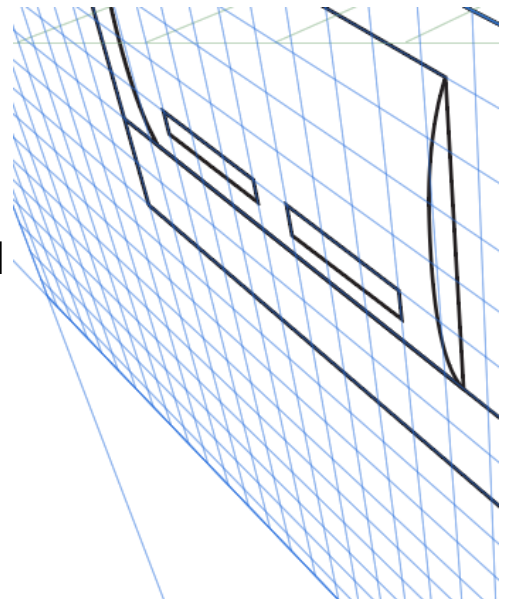
Then, we're going to Copy and Paste one of the buttons from the top side, rotate it 115 degrees, and scale it down to fit like the right circle in the image below. We're gonna Copy Paste that circle we just made next, scale it down some, and position it like the left circle in the image. Now, we're going to use the blend tool we used earlier. So like we did before, Object>Blend> Blend Options, Specified Steps box is 2, then click OK. Then we do Object> Blend>Make. We should end up with 4 total circles, these are where you plug in controllers.
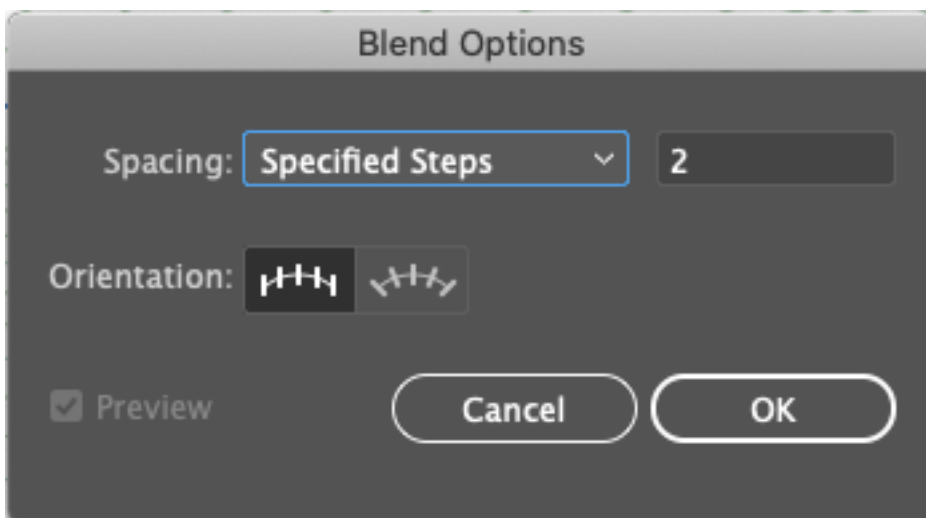
We should end up with something like the picture below, which we can now do View>Perspective Grid>Hide Grid, and also size up the whole thing.
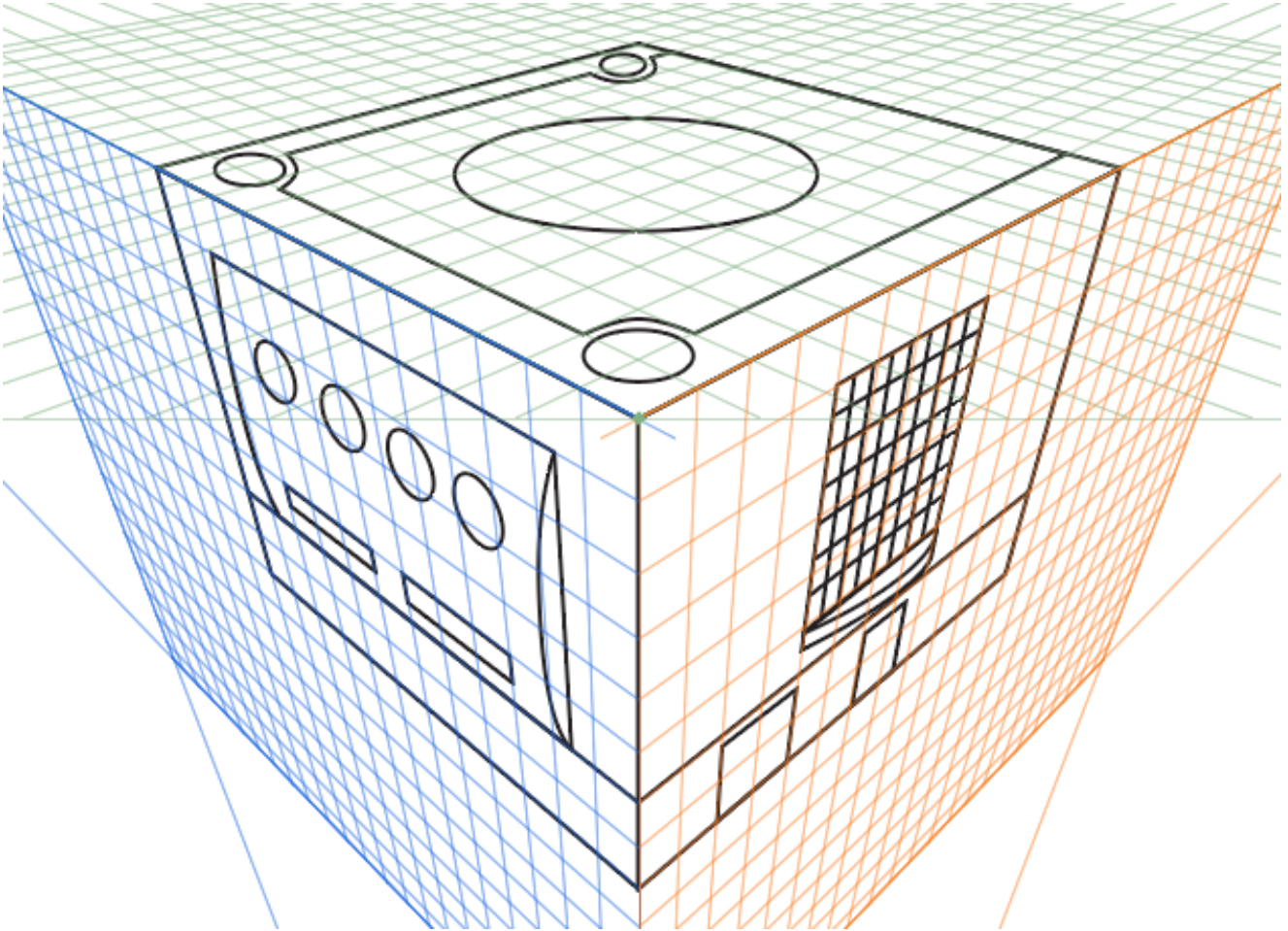

Before we go to the last step of coloring though, we're going to select everything and go to Object>Expand. Make sure the object box is checked, and click okay. this is so the things we made with the blend tool are their own objects. Oh, and when resizing everything you may find the 4 circles and the grid we made with the blend tool to have thin lines. You can just select them and make them a stroke thickness of 3 in the properties.

Step 11. We're going to end out by selecting everything, then switching to the Live Paint Bucket (K), and coloring the gamecube using either your own colors or the ones below. To color using the Live Paint Bucket, deselect the shape after clicking it with the bucket, select the tool, change the color to one of the colors below, and then click between the lines to fill. The Hue value of each color is linked below it.
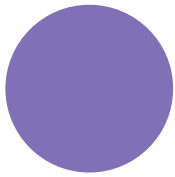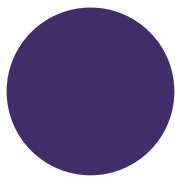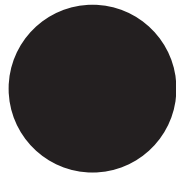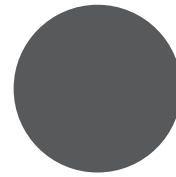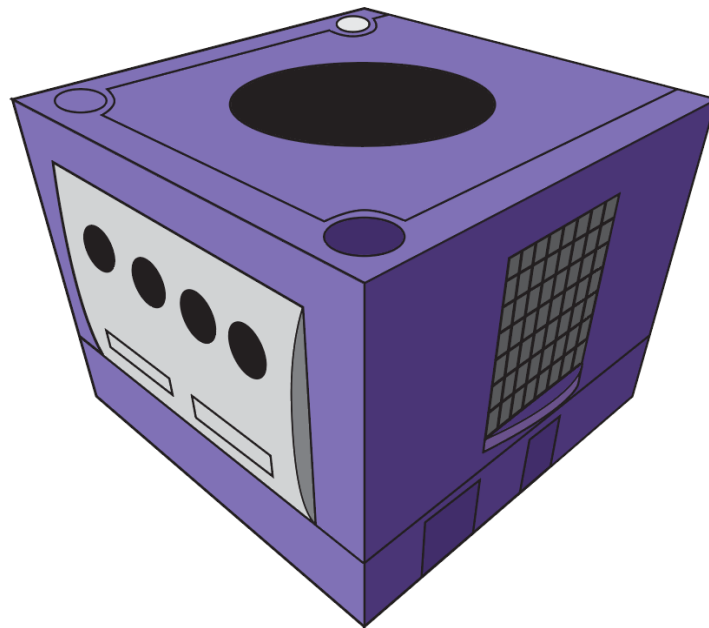
| 8071B6 | 412D6A | 231F20 | 58595B | D1D3D4 |

And Thats it, You have yourself a Nintendo Gamecube! Hope you enjoyed this tutorial.