David Olumlua
CSC 322
Activity 2

1.

$$\begin{bmatrix} \cos(\pi/4) & 0 & -\sin(\pi/4) \\ -(\sin(\pi/4))^2 & \cos(\pi/4) & -\sin(\pi/4)\cos(\pi/4) \\ \cos(\pi/4)\sin(\pi/4) & \sin(\pi/4) & (\cos(\pi/4))^2 \end{bmatrix}$$

2.

$$\begin{bmatrix} \cos(\pi/4) & -(\sin(\pi/4))^2 & -\sin(\pi/4)\cos(\pi/4) \\ 0 & \cos(\pi/4) & -\sin(\pi/4) \\ \sin(\pi/4) & \cos(\pi/4)\sin(\pi/4) & (\cos(\pi/4))^2 \end{bmatrix}$$

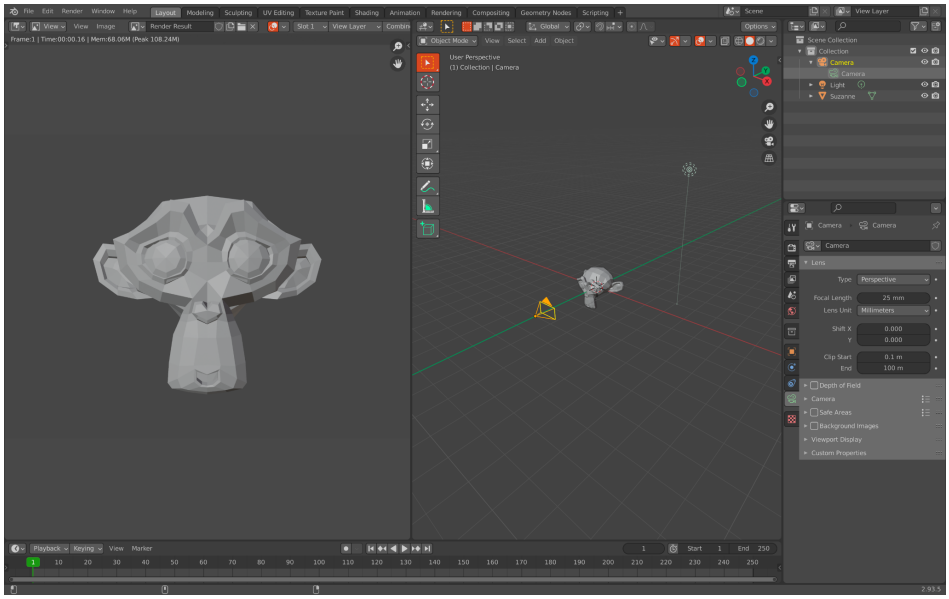
3.

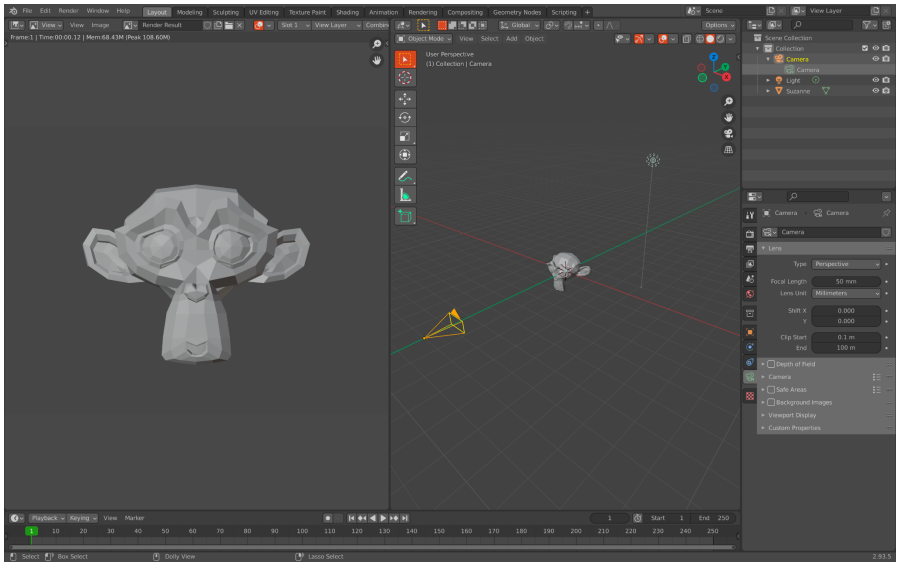
(3, -.41421, 2)

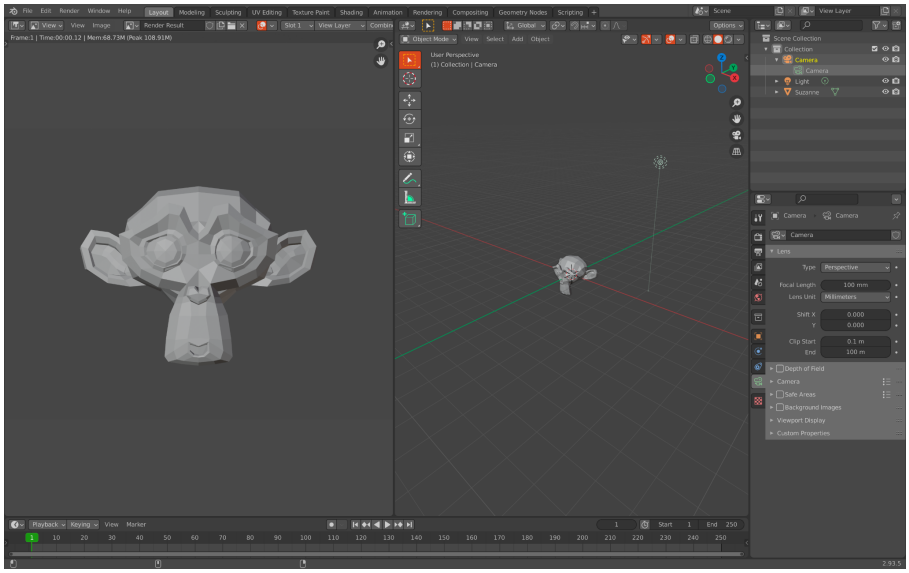
4.

(3, 0, 3)

5.

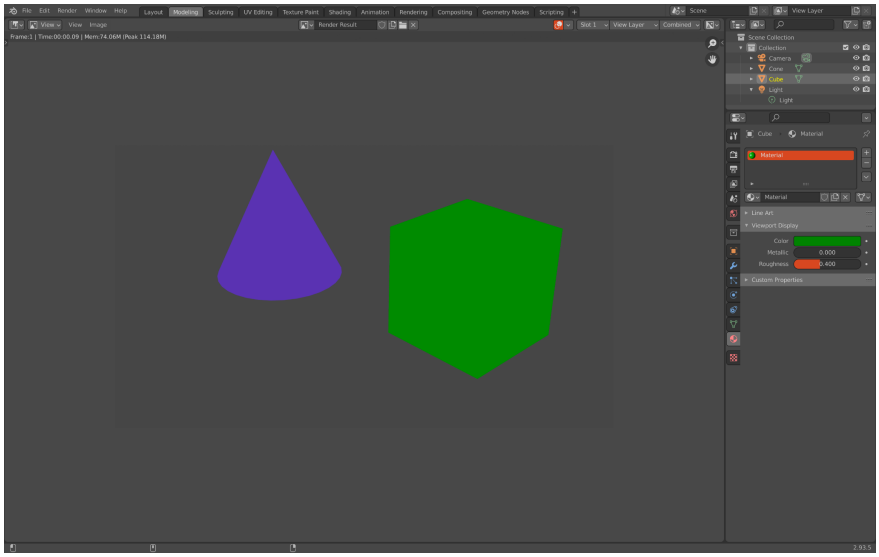






6. They are all the same picture; changing the focal length changes how much it zooms in on an object

7.


File Edit Render Window Help
Layout Modeling Sculpting UV Editing Texture Paint Shading Animation Rendering Compositing Geometry Nodes Scripting
Scene
View Layer
View View Image
Render Result
Slot 1
View Layer
Combined
Frame:1 | Time:00:00.09 | Mem:74.06M (Peak 114.18M)
Scene Collection
Collection
Camera
Cone
Cube
Light
Light
Cube
Material
Material
Material
Line Art
Viewport Display
Color
Metallic
0.000
Roughness
0.400
Custom Properties
2.93.5