**COMPUTER GRAPHICS**

**SUMMATIVE ASSIGNMENT**

# Question 1a

We represent a 3D mesh as a collection of triangles. This is because we know that 3 points will always form a triangle, even in 3D space. However, this means that each point on the mesh will correspond to multiple triangles (presuming that the mesh is connected). Therefore, if we just list the vertex data in the vertex buffer object (VBO) then we will need to repeat the data for each position for each triangle. By using an index buffer object (IBO), we instead define the data for each vertex only once. We then use the IBO to reference these position for each triangle, greatly reducing the amount of memory needed to store the VBO.

# Question 1b

TODO

# Question 1c

TODO

# Question 1d

i)

TODO

ii)

TODO