Nathan Bernard 9/5/17

Computer Graphics Homework 1

1. Ivan Sutherland created Sketchpad, essentially the first CAD program, which was also the first non-procedural, object oriented, and graphical program. He is also known for his work on the Cohen–Sutherland algorithm which is used for line clipping in graphical applications.
2. 1. 42
   2. 42
3. 1. 0x-1y-1z+2=0
   2. (1,1,1)
4. <http://homepages.rpi.edu/~bernan/f16/computer-graphics/hw1/index.html>
   1. Files changed:
      1. square.html -> index.html, additional shader added for black areas
      2. square.js -> b.js, several changes, multiple sets of vertices, 2 programs
5. The biggest advantage to the nonphysical pipelined approach is its speed. It is fast enough to create images in real time, which is useful for interactive software and video games. Its main disadvantage is that it cannot reproduce the same level of realism that a physical model can. It is not as good at modelling the interactions between surfaces and light as approaches such as ray tracing.
6. 1. 0.00000000762 (7.62\*10^-9) seconds per pixel
   2. 0.000000109 (1.09\*10^-7) seconds per pixel