Problem 1
What problem is a z-buffer intended to solve?

Problem 2
OpenGL provides direct support for transmitting triangles (GL_TRIANGLES) and lines (GL_LINES) to be rendered, but it also provides more complex options such as GL_TRIANGLES_STRIP and GL_LINES_LOOP, which do not provide functionality that cannot already be achieved with GL_TRIANGLES and GL_LINES. What role do these more complex options serve?

Problem 3
Express the (2D) operator $\begin{pmatrix} 1 & -1 \\ 1 & 1 \end{pmatrix}$ as a composition of simpler operations: rotations, translations, scales.

Problem 4
Devise a transform, written as a product of homogeneous translation, rotation, and scale matrices, which will transform the points $(-1, -1)$, $(0, 0)$, $(1, -1)$ into the points $(-1, -1)$, $(-2, 2)$, $(1, 1)$.

Problem 5
In the second lab, you drew lines with DDA. In doing this, you compared the slope of the line with 1. What is significant about 1? Why not 2, 3, or $\frac{1}{2}$?