A)

i) fColor = vec4(0.0, 0.0, 1.0, 1.0);

ii) fColor = vec4(1.0, 1.0, 0.0, 1.0);

iii) The GPU (as this code is run on the fragment shader, which is part of the GPU)

B)

i) gl.clearColor(0.0, 0.0, 0.0, 1.0);

ii) When line 157 is commented out, the background color disappears (and just appears as white). This is because line 154 specifies what color to use to clear all pixels, while line 157 is the actual call to clear all pixels in the framebuffer; without this call, the color we specified on line 154 will not show up (as we aren't clearing any pixels).

C) The triangle disappears (the only thing on the screen is the background color).

D)

- For gl.LINES, it draws a single line between the first two points ((0.0, 0.8) and (-0.4, -0.2)). This is because LINES require 2 points, so it ignores the 3rd point as there is not a 4th point for it to draw a line between.

- For gl.LINE_STRIP, it draws two lines (one between (0.0, 0.8) and (-0.4, -0.2), and the other between (-0.4, -0.2) and (0.4, -0.2)) This is because LINE_STRIP draws a line between point 1 and point 2, then point 2 and point 3, etc. for all given points.

- For gl.LINE_LOOP, it draws three lines (one between (0.0, 0.8) and (-0.4, -0.2), one between (-0.4, -0.2) and (0.4, -0.2), and one between (0.4, -0.2) and (0.0, 0.8)). This is because LINE_LOOP does essentially the same thing as LINE_STRIP, except it draws an additional line between the first point (0.0, 0.8) and the last point (0.4, -0.2), completing the loop.

E) Lines 4-27

F)

i) The coordinate range for both the X and Y axes that are visible on the screen is [-1.0, 1.0] (any value between -1 and 1, inclusive).

ii) If a coordinate is outside these bounds, the program will still draw whatever shape you specify, but the coordinate outside these bounds will not be visible on the screen; if you draw a shape like gl.TRIANGLES that fills in the space between the lines with the color of the lines, this colored space will still be visible (it will just cut off at values greater than 1.0 or less than -1.0).