

1) What is the term used to describe the parallel computing cores found on modern graphics

hardware? Not sure what the question is referring to: Rasterization Pipeline, or Graphical Processing Unit

2) What does the term host mean as related to graphics hardware? The CPU including threads and memory available to it

3) What does the term device mean as related to graphics hardware? The GPU including threads and memory available to it.

4) In a graphics hardware system, what is the graphics context? The mapping between the operating system, the hardware driver, the hardware, and the windowing system.

5) Why is programming OpenGL considered heterogeneous multiprocessing? Because you are programming instructions for both the CPU and GPU simultaneously.

6.b) If you didn't know much about git or have never used the UMN github, who helped you and what did they teach you about git? Robert Degree, taught me how to fork, and clone repositories.

7) How is the notion of the framebuffer from the first assignment applied or used in OpenGL?

My Framebuffer class was used to store the RGB, and dimensions which would be used by OpenGL to write to an output.

8) How do you clear out the OpenGL display buffer to zero?

```
glClearColor( 0.0f, 0.0f, 0.0f, 1.0f);  
glClear( GL_COLOR_BUFFER_BIT );  
This is 'zeroing out' to black.  
To clear the buffer display to all red:
```

```
glClearColor(255.0f, 0.0f, 0.0f, 1.0f);  
glClear( GL_COLOR_BUFFER_BIT );
```

9) How many times does the OpenGL code provided change the state of the glClearColor?

It is synchronized to the windowing system's refresh(60x/sec)

10) Modify code to display different colors while the program executes.

See github project

submission: `git@github.umn.edu:braba006/OpenGL_Lab1.git`