**Vector Addition**

How many floating operations are being performed in your vector add kernel? EXPLAIN.

*There is only one floating point operation per kernel execution. This occurs when we add the two inputs and then set them to the output.*

How many global memory reads are being performed by your kernel? EXPLAIN.

*There are two global memory reads. One from the first input and one from the second input.*

How many global memory writes are being performed by your kernel? EXPLAIN.

*There is is one global memory write occuring when assigning the output value.*

**Color Space Conversion**

How many floating operations are being performed in your color conversion kernel? EXPLAIN.

*There are 5 floating point operations, they occur three times in total when scaling the RGB values and then there are two additional addition operations when getting the final gray-scale value.*

Which format would be more efficient for color conversion: a 2D matrix where each entry is an RGB value or a 3D matrix where each slice in the Z axis represents a color.

A 3D matrix where each slice represents a color, this is because threads can access sequential memory locations for the RGB values so less global memory accesses occur.

How many global memory reads are being performed by your kernel? EXPLAIN.

*There are three global memory reads in my kernel implementation, one for each different colored pixel value.*

How many global memory writes are being performed by your kernel? EXPLAIN.

*There is one global memory write when we set the output matrix.*