Jacob Lipton
CPSC 3300
October 2, 2019

Task A

1. The metric FLOPs/Byte is a standard measurement of computer performance, stating the amount of floating-point operations performed per second with regards to bytes/memory bandwidth and throughput.
2. The 3 purple lines are the levels of throughput for the different levels of memory in the machine, the L1 cache, the L2 cache and the DRAM. L1 is 120.2 GB/s, L2 is 100.5 GB/s, and DRAM is just 11.5 GB/s.
3. The blue line is the theoretical (or measured) ceiling for GFLOPs/sec based on the machine's memory throughput and processing speed. Its value is 23.0 GFLOPs/sec.
4. This graph tells us how fast the machine is able to compute operations for a program based on where the data is stored in memory, and what the ceiling for its performance is in terms of GFLOPs per second.