

Quiz 2

1. Consider adding hardware multithreading to a core. What is the impact on throughput as measured by instruction per cycle, and what is the impact on latency as measured by the time a thread can finish a certain number of instructions?
2. Consider Amdahl's law. There is some code that consists of a sequential part and then a recursive function. How do you apply the law in this case?
3. A system shows utilization of 60% at the network interface, 60% in the memory bus, and 15% at the CPU. If you increase the capacity of the network and memory, what would be the impact on performance?