Karan Sikka – HW 4

1. They provide the illusion of a homogeneous environment, they simplify migration of work (migrate the entire VM), they improve fault tolerance by means of isolation.

2. Emulators have better performance than simulators, whereas simulators are better for understanding the underlying implementation. Virtualization is usually done on the same hardware architecture so many of the instructions run natively – it's therefore faster than emulation.

3. Hypervisors allow for interaction/communication between the OS and the virtualizer. It's a layer that managers the VMs use of the underlying hardware.

4. GPU computation will suffer the most since GPU stuff will be so slowed down by the CPU overhead. Device IO will be somewhat affected because of the CPU overhead. CPU will be barely affected since it runs natively.