Chapter 1 Questions

1.12

Multiprocessor systems are multiple cores on a single chip, and clustered systems are multiple chips working together. For a clustered system to work efficiently, it should be connected via physical hardware, and it should be running multi-threading code (as should most systems, I suppose).

1.23

Campus student union – LAN

Several campus locations across a statewide university system - WAN

A neighborhood -LAN

1.24

Mobile devices need to be more efficient with their computing so not to consume very much battery life. The amount of power is as far off of computers, but the battery needs to last as long as possible. Additionally, the architecture is different, so it has a different development style.

1.25

P2P setups allow for equal share of the load and power between each machine, so there isn’t a “master-slave” dynamic. It also allows for freer sharing of information between devices, although with less security.

1.27

Open-source operating systems are able to be searched through for vulnerabilities. This means they can be easily found by users, either to exploit, or submit for patching. Ordinary users would see this as a downside, but people who want to read through, revise, and otherwise modify their OS would see this as an overwhelming positive. Additionally, I think that hackers would see this as a positive if they can find an exploit before its patched, but dislike the speed at which it can be patched.