Computer Organization and Architecture, Exam #3 Review

1. Moore's Law (CPU speeds, memory speeds, memory sizes)
2. Memory hierarchy
3. ROM, PROM, EPROM, EEPROM, flash memory
4. RAM, SRAM, DRAM
5. Modern sizes (RAM, HD, VRAM, CPU speeds, #cores)
6. Bus, CPU, RAM, cache - diagram of connectivity
7. CAS latency, modern speeds/sizes
8. locality principles of execution
9. temporal locality
10. spatial locality
11. Caches: hits, misses, hit ratio, program use
12. Associative Mapped cache (valid, dirty, tag)
13. Associative memory
14. Replacement Policies
15. Direct Mapped Cache (slots, tag)
16. Cache Math (hit ratio, effective access time)
17. Virtual Memory
18. Pages (fault,, frame, table)
19. TLB