Exercise #1 Worksheet (Individual)
CS361
Concurrent Programming

Your name: _____

1. On the space below, draw a diagram of a computer connecting the following components. The point of this exercise is to jog your memory a bit about computer architecture, not to achieve technical perfection (10 minutes)

- Dual core processor
- Memory management unit (MMU)
- registers
- L1 cache, L2 cache
- main memory
- GPU
- video card
- The Internet
- Hard disk drive
- Display
- Printer
- Instruction look-ahead unit

- Add any explanatory notes that you feel will help the reader achieve a good understanding of your diagram.

2.

Archaeologists on Mars have uncovered the following stone tablet written by the ancient Martian computer scientists:

A * A = A
A * B = B
B * A = B
B * B = B

They are certain that this is a table explaining Boolean Logic, and that they symbols A,B are for True and False (but they're not sure which is which). However, they are certain the Martians used two different symbols A and B to mean *different* truth values.

Which of the following logical operations could * be? Select all that are valid possibilities.

- [ ] * could be $\wedge$
- [ ] * could be $\vee$
- [ ] * could be $\equiv$
- [ ] * could be $\Rightarrow$
- [ ] * could not be any of the above.

Scoring: .

1 point each for making a reasonable attempt on problems 1 and 2.