Directions: Work only on this sheet (on both sides, if needed). MAKE SURE TO COPY YOUR ANSWERS TO A SEPARATE SHEET FOR SENDING ME AN ELECTRONIC COPY LATER.

On all Tests, 32-bit word size on Intel machines running Linux is assumed unless otherwise stated.

1. (25) When an interrupt occurs, there will be a slight delay before the currently-running program is suspended, because the circuitry does not check for interrupts until after Step ____________.

2. (25) During bootup, the OS places the addresses of the device drivers into an entity known as the ____________, and points ____________ to that entity.

3. (25) Consider the keyboard device driver, pp.168-169. Suppose we wish to determine whether this is a key press or a key release. Show the instruction we'd put at done to start determining this. (NOT a MOV instruction.)

4. (25) Consider the primes counter, pp.201-203. Most of the values of work printed out will be 0 if ____________ is ____________. (Place a program variable in the first blank, and either “large” or “small” in the second. Just give answers that work, not all possible answers.)

Solutions:

1. C
2. interrupt vector table; IDT
3. cmpb $128 , %cl
4. n is small (or nthreads is large)