

# EET363 Introduction to Microcontrollers

## OIT Portland West, Fall 2010

### Homework Assignment #2 Due October 14

All questions refer to the 68HCS12 microcontroller we are studying in class unless otherwise specified.

For questions 1 through 6 explain what the instruction will do (question 0 is an example):

0. *ldd 200*

*Lloads accumulator D with the contents of location 200 into the high order byte of D and the contents of location 201 into the low order byte of D.*

1. *ldaa #23*
2. *ldaa 23*
3. *ldaa 23+1*
4. *ldx \$1000*
5. *ldab 1,X+*
6. *ldab 1,X*
7. Memory location \$1000 contains an 8 bit unsigned value. What sequence of instructions will load that value into index register X?
8. Memory location \$1001 contains an 8 bit 2's complement signed value. What sequence of instructions will load that value into accumulator D?
9. *staa #10* is an invalid instruction. Why?
10. If *FOO* is a label for a variable (example "FOO: db 10") how would you load the address of the variable into index register X?