

# Homework 4

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4.3 The program counter doesn't include a count. It has the address of the next instruction. So the *instruction pointer* is more insightful.

4.8 (a) 8 bits.

(b) 7 bits.

(c) 3 bits.

4.9 Load the next address of the instruction to the PC.

4.19 (a) MAR: x2 ; MDR: 01010000

(b) MDR: 00111001

5.1

name	type	address mode
ADD	operate	1. register addressing for destination 2. register addressing for destination
JMP	control	register addressing
LEA	data movement	immediate addressing
NOT	operate	register addressing

5.4 (a)8 bits;(b)6 bits;(c)6.

5.9 The third instructions 0000 0000 0000 0000 can be used as NOP.

The ADD sets the CC's.