Exercise-homework day 4

4.3

The Program Counter don't maintain a count of something, but it contains next instruction's address. Thus the Instruction Pointer is more insightful.

4.8

- a. 8 bits
- b. 7 bits
- c. 3 bits

4.9

Load the next instruction's address into Program Counter(PC).

4.19

a. MAR: x2, MDR: 01010000

b. MDR: 00111001

5.1

ADD: operate; register addressing for destination and source 1; register or immediate addressing for source 2

JMP: control; register addressing

LEA: data movement; immediate addressing

NOT: operate; register addressing

5.4

- a. 8 bits
- b. 6 bits
- c. 6 bits

5.9

- a. Not same as NOP. Add R1, R1, #0.
- b. Not same as NOP. BRnzp #1
- c. Same as NOP.

ADD differs from a NOP is that it sets the CC's.