

4.

lw x30, 8(x12)

orold x30, x30, x5

orold x31, x12, x6

sl x30, 0(x31)

x12  $\rightarrow$  A[]x30  $\rightarrow$  px5  $\rightarrow$  ax6  $\rightarrow$  bx31  $\rightarrow$  q

p = A[8];

p = p + a;

q = A[] + b; A[b]

A[w] = p

A[b] = A[8] + a;

5

opcode = 0x3  $\rightarrow$  0000011  $\rightarrow$  LOADfunct3 = 0x2  $\rightarrow$  010  $\rightarrow$  ~~sl~~ lwrs1 = 27  $\rightarrow$  11011  $\rightarrow$  x27rd = 3  $\rightarrow$  00011  $\rightarrow$  x3imm = 0x4 0000,0000,0100  $\rightarrow$  4

0000 0000 0100 1101 1010 0001 1000 0011  
 imm rs1 funct3 rd opcode

lw x3, 4(x27)