(1)

A) 24 bytes data memory

1 long integer occupies 8 bytes of memory
1 reg integer occupies 4 bytes of memory

arr[3] will fit in the 24 byte data memory

B)

arr[0] = 0x0000000001234567
arr[1] = 0x00000000ABCDEF01
arr[2] = 0x000000000A1B2C3D

RISC-V: Little Endian Rep

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
67	45	23	01	00	00	00	00	01	EF	CD	AB	00	00	00	00	3D	2C	1B

19	20	21	22	23
0A	00	00	00	06

(2) x10 = x8 + x9

0(x23) = 01 23 45 67
+ 16(x23) = 0A 1B 2C 3D
x10 = 0B 3E 71 A4