NO. Lian

DATE. / /

Binary

Q1. a. 120 → 0000 0000 0000 0000 0000 0000 0111 1000

2	120	0
2	60	0
2	30	0
2	15	1
2	7	1
2	3	1
	1	

= 0x00000078

b. -25 → 1111 1111 1111 1111 1111 1111 1110 0111

= 0xFFFFFFE7

2	25	1
2	12	0
2	6	0
2	3	1
	1	

00110+1

=00111

c. 0000 0000 0000 0000 0000 0000 0000 0110

=6

0xfffffff9 = -6-1 = -7

Q2 a. 0xFFFFFFE7

memory[0] = 0xff memory[1] = 0xff

memory[2] = 0xff memory[3] 0xe7

b. big endian is used in MIPS

Big endian is an order in which the most significant value in the sequence

little endian : : least : :

Q3 a. g = g - A[3] - 23;

```
lw $t0, 12($s0) # load word
sub $t1, $s1, $t0 # g-A[3]
addi $s1, $t1, -23 # (g-A[3])-23
```

b. A[i+1] = g + A[i] + 1;

```
sll $t0, $s2, 2
add $t0, t0, $s0 # A[i]
lw $t0, 0($t0)
add $t1, t0, $s1 # g+A[i]
addi $t1, t1, 1 # (g+A[i])+1
sw $t1, 4($t0) # A[i+1]=
```