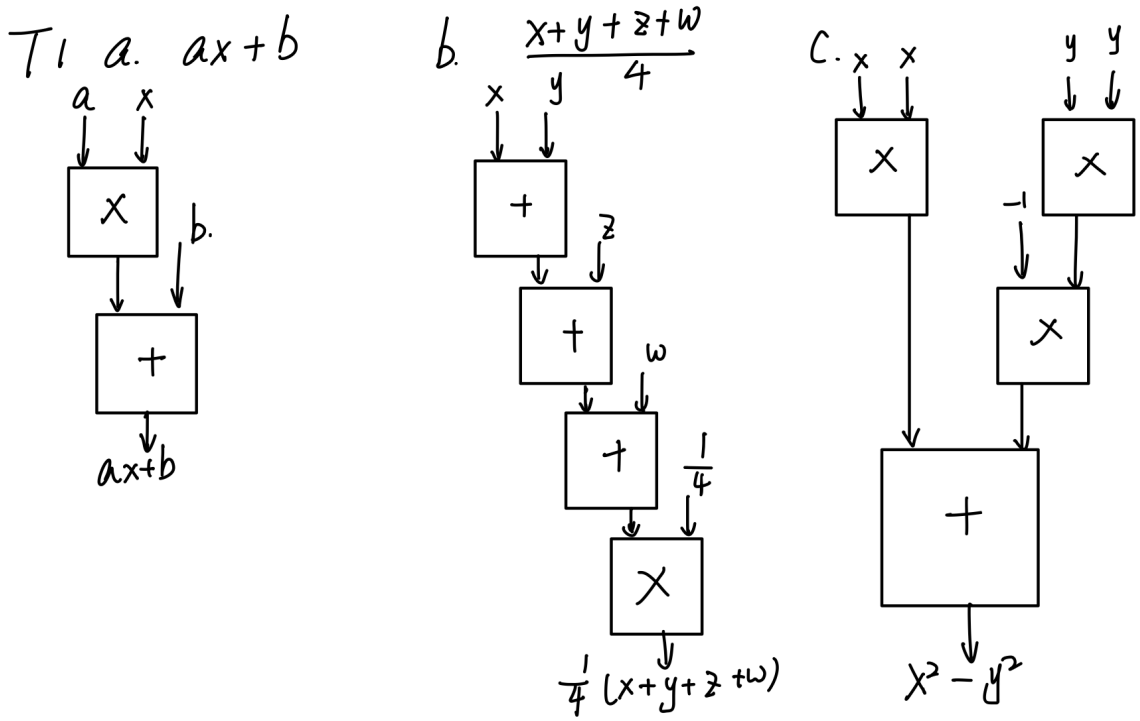
HW1

1. T1



2. (1)

a. 01100010

b. 10010111

(2)

c. 66

d. -17

3. a. 110100 DEC: -12

   b. 00100101 DEC: 37

   c. 0111 DEC: 7

   d. 1111 DEC: -1

4. a. 11101011

   b. 00011110

   c. 11110000

   d. 00000001

5. 0 10000001 00010011001100110011010

   若指数域全为1并且尾数域全为0，那么当符号位为1时表示负无穷，当符号位为0时，表示正无穷；若指数域全为1，但是尾数位不全为0，那么表示非数NaN。

6. 2022.5625

7. (1) a. 10000101

   b. 11111111

   c. 10101111

   (2) d. 1001101111111101

   e. 0101000000000111

8. T8

A	B	C	Q_1
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	1

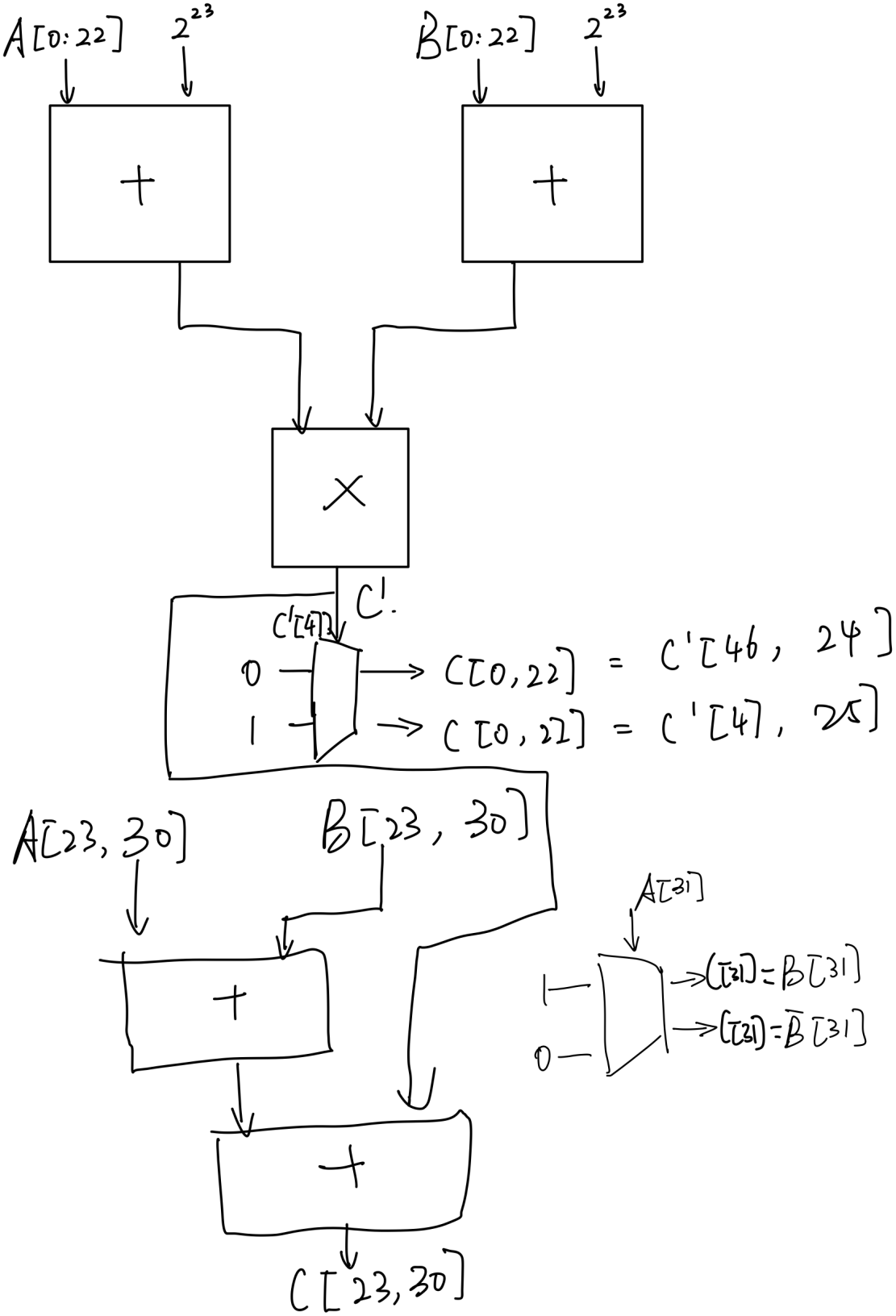
A	B	C	Q_2
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

$Q_2 = ABC$

9. Eiho

10. 1.7976931348623157E+308

11. T11


A[0:22]
2^23
B[0:22]
2^23
+
+
×
C'
C'[4]
0
1
C[0,22] = C'[46, 24]
C[0,22] = C'[4, 25]
A[23,30]
B[23,30]
A[31]
+
+
1
0
C[31] = B[31]
C[31] = B̄[31]
C[23,30]