

## Homework of Chapter2,3

2.13

(a) 11111010

(b) 00011001

(c) 11111000

(d) 00000001

14

(a) 1100

(b) 1010

(c) 1111

(d) 01011

(e) 10000

17

(a) 1100 (binary) 、 -4 (decimal)

(b) 01010100 (binary) 、 84 (decimal)

(c) 0011 (binary) 、 3 (decimal)

(d) 11 (binary) 、 -1 (decimal)

22

20000(decimal)+20000(decimal)

24

40000(decimal)+40000(decimal)

27

The problem is that two positive numbers' sum is a negative number.

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$[(n \text{ AND } m \text{ AND } (\text{NOT } s)) \text{ OR } ((\text{NOT } n) \text{ AND } (\text{NOT } m) \text{ AND } s)] \text{ AND}$

1000

56

$$- 1.101 \times 2^{(12-7)} = -52$$

3.3

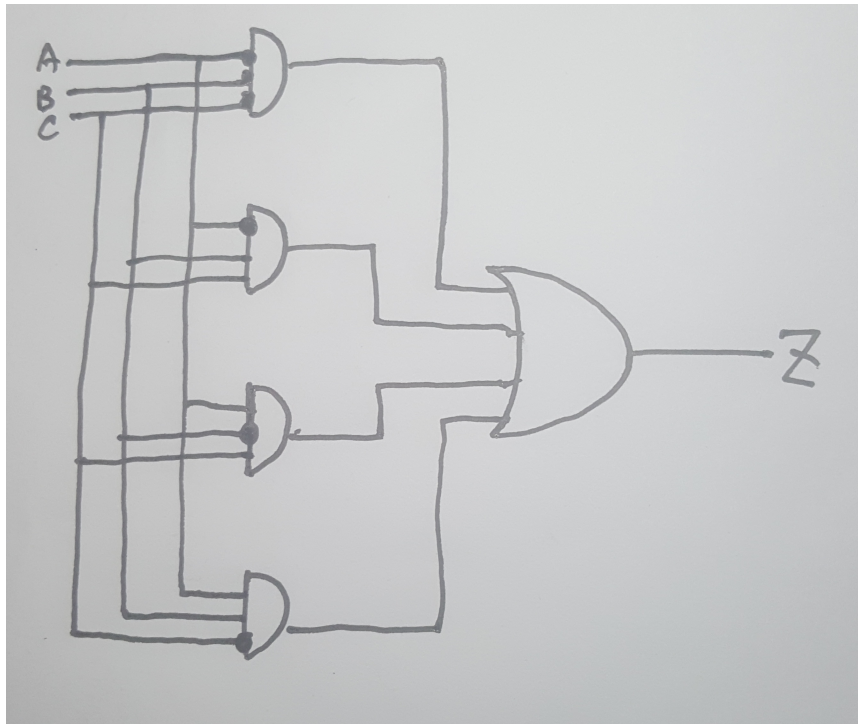
16 different two input logic functions.

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A	B	C	OUT
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	0
1	1	1	0

16



23

A	B	C	Z
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	0

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- (a) Z is always the same as A.
- (b) Z is still its previous value.
- (c) Yes, it is.

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No. The original value cannot be recovered. Because a new value had been written into it.