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Exercise

① 4 & 7

$2^3\ 2^2\ 2^1\ 2^0$

0100

0100

0111

0100 → 4

0111

16 8 4 2 1

10000

② 16 | 7

10000

00111

10111 → 23

16 4 2 1

③ 2 & (~13)

8 2^2 2^1 2^0

~ 1101

0010

0010

0010

0010 → 2

④ 5 ^ 8 (XOR)

32 16 8 4 2 1

0101

0101

1000

1101 → 13

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⑤ 7 >> 2

3 2 1 0

0 0 0 0 | 0 1 1 1

0 0 0 0 | 0 0 0 1 | 1 1 → 7

⑥ 84 >> 4

0 1 0 1 | 0 1 0 0

= 0 0 0 0 | 0 1 0 1 → 5

⑦ 15 << 5

0 0 0 0 | 1 1 1 1

0 0 0 0 | 1 1 1 1 | 0 0 0 0 | 0 0 → 480

2^8 2^7 2^6 2^5 2^4 2^3 2^2 2^1 2^0

⑧ 4 & (2<<3)

0 0 0 0 | 0 0 1 0

0 0 0 1 | 0 0 0 0 → 16

0 0 0 0 | 0 1 0 0

0 0 0 0 | 0 0 0 0 → 0

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⑨ 21 (19 >> 1)*

0001 0011

0000 1001

8 8 11

0000 1001

0000 0010

0000 1011 → 11

⑩ 0xFF & (0x13 << 0x2)*

0001 0011

0100 1100

1111 1111

0100 1100 → 0x4C

4 12

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Binario → Hexa 0-9 A-F C

① 1011 1100
11 12 0x BC

② 1000 0001 1100
8 1 12 0x 81C

③ 1000 0011 0011 1111 1010
8 3 3 15 10

0x 833FA

④ 1111 1010 0001
15 10 1 0x FA1

⑤ 1111 1111 1111 1111 1101 1110
15 15 15 15 13 14

0x FFFF DE

64

A	10
B	11
C	12
D	13
E	14
F	15

Hexa → Binario

1. 84
0101 0100

2. 0x FC 15
1111 1100 0001 0101

3. 0x 5487DA
0101 0100 1000 0111 1101 1010

4. 298
0001 0010 1010

5. 0x A15CB4
1010 0001 0101 1100 1011 0100

SAZZ