① 2.875 → hex

2/16 = R2

.875 · 16 = 14 = E

$2.E_{16} = 2.875_{10}$

$2.7_8 = 2.875_{10}$

$10.111_2 = 2.875_{10}$

2.875 → octal

2/8 = R2 → 2.7

.875 · 8 = 7

binary:

2/2 = 1 R0

1/2 = 0 R1

10.111

.875 · 2 = 1

.75 · 2 = 1

.5 · 2 = 1

② $.1796875_{10}$ → HEX

.1796875 · 16 = 2.875

.875 · 16 = 14.0

14 = E

$.2E_{16} = .1796875_{10}$

$.431_8 = .1796875_{10}$

$.110100_2 = .1796875_{10}$

Binary

.1796875 · 2 = 0

.359375 · 2 = 0

.71875 · 2 = 1

.4375 · 2 = 0

.875 · 2 = 1

.75 · 2 = 1

.5 · 2 = 1

Octal

.1796875 · 8 = 1

.4375 · 8 = 3

.5 · 8 = 4

.134

$.134_8 = .1796875_{10}$

.0010111

$.0010111_2 = .1796875_{10}$

2.875 → ~~10.111~~

$2.E_{16}$

10, 1110

$.101110 \cdot 2^2$

01011100|00000000|00000000|00000010

5 C 0 0 0 0 0 2

5C000002 ; negative = DC000002

.1796875 $\cdot \frac{1796875}{1} = \frac{1796875}{10,000,000} \div \frac{625}{625}$

$\frac{2875}{16000} \div \frac{23}{128} = 23 \cdot 128^{-1} = .23 \times 2^{-5}$

$-5_{10} =$ 00000101
$\sim =$ 11111010
$+1 =$ 11111011

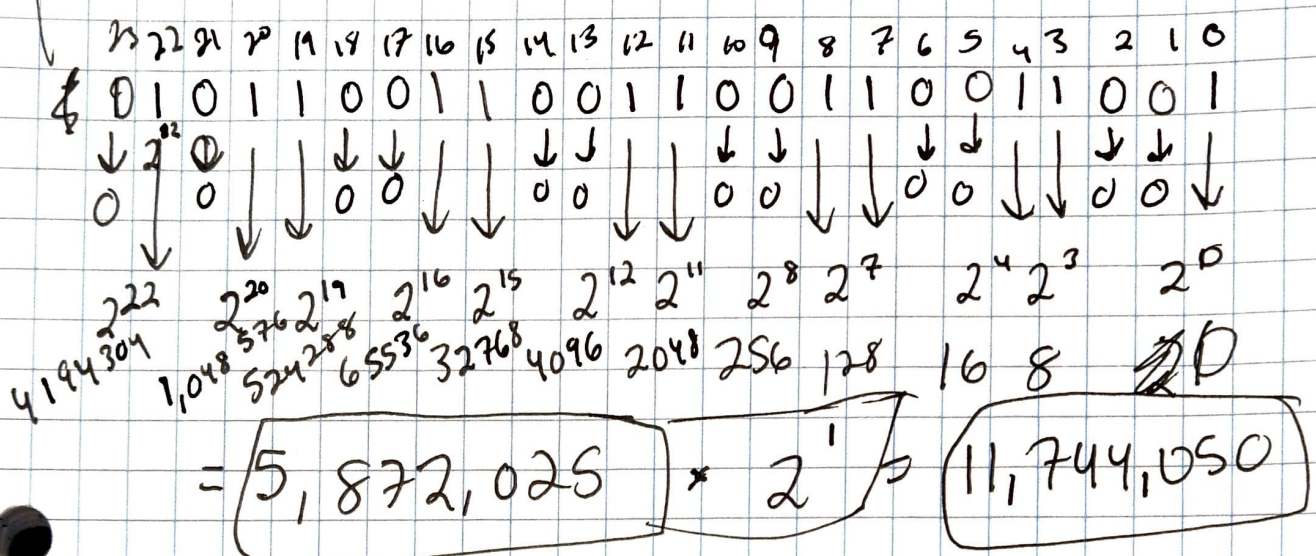
$.1796875 = .23 \times 2^{-5} =$ 01011100|00000000|
00000000|11111011

5C0000FB

If negative = DC0000FB

c) 59|99|99|01

01011001 | 10011001 | 10011001 | 00000001



$= 5,872,025 \times 2^{1} = 11,744,050$

59999902

same as above except power

$5,872,025 \cdot 2^{2}$

$\cdot 4 = 23,488,100$

A6 66 67 FE

1 0 1 0 0 1 1 0 | 0 1 1 0 0 1 1 0 | 0 1 1 0 0 1 1 1 | 1 1 1 1 1 1 1 0

23 22 21 20 19 18 17 16 | 15 14 13 12 11 10 9 8 | 7 6 5 4 3 2 1 0

1 0 1 0 0 1 1 0 | 0 1 1 0 0 1 1 0 | 0 1 1 0 0 1 1 1

2^{23} 2^{21} 2^{18} 2^{17} 2^{14} 2^{13} 2^{10} 2^{9} 2^{6} 2^{5} 2^{3} 2^{2} 2^{1} 2^{0}

8388608 + 2,097,152 + 16384 + 8192 + 1024 + 512 + 64 + 32 + 4 + 2

2^{18} 262144 131072

0 1 0 1 1 0 0 1 1 0 0 1 1 0 0 | 1 0 0 1 1 0 0 0

2^{22} 2^{19} 2^{16} 2^{15} 2^{12} 2^{11} 2^{8} 2^{7} 2^{4} 2^{3}

4194304 65536 40^{96} 2048 256 128 16 8

1048576 32768

524,288

-5,872,024

0 1 1 0 0 1 1 1

65 ... 210

64 32 16 8 4 2 1

103

$-5,872,024 \times 2^{103}$