

① $2.875 \rightarrow \text{hex}$

~~2.875~~

$2/16 = R2$

$.875 \cdot 16 = 14 = E$

$2.875 \rightarrow \text{octal}$

$2/8 = R2 \rightarrow 2.7$

$.875 \cdot 8 = 7$

binary:

$2/2 = 0 R0$

$0/2 = 0 R1$

10.111

$.875 \cdot 2 = 1$
 $.75 \cdot 2 = 1.5 \uparrow$
 $.5 \cdot 2 = 1 \uparrow$

② $.1796875_{10} \rightarrow \text{Hex}$

$.1796875 \cdot 16 = 2.875 \downarrow$
 $2.875 \cdot 16 = 46.0$
 $14 = E$

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

Octal

$.1796875 \cdot 8 = 1$
 $.4375 \cdot 8 = 3 \downarrow$
 $.5 \cdot 8 = 4 \downarrow$

$.134$

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

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

~~$.4375 = .1796875_{10}$~~

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

Binary

$.1796875 \cdot 2 = 0$

$.359375 \cdot 2 = 0$

$.71875 \cdot 2 = 1$

$.4375 \cdot 2 = 0$

$.875 \cdot 2 = 1$

$.75 \cdot 2 = 1$

$.5 \cdot 2 = 1$

~~$.110100$~~

$.0010111$

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

2.875 \rightarrow Konversion

2.E₁₆

10, 1110

.101110 $\cdot 2^2$

01011100 | 00000000 | 00000000 | 00000010

5 C 0 0 0 0 0 2

5C000002

negative = DC000002

.1796875

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

$\frac{2875}{10000} = \frac{23}{128} = 23 \cdot 128^{-1} = .23 \times 2^{-5}$

-5₁₀ = 00000101

~ = 11111010

+1 = 11111011

.1796875 = .23 $\times 2^{-5}$ =
.10111

01011100 | 00000000 |
00000000 | 11111011

5C0000FB

If negative = DC0000FB

c) 5999901

$$\begin{array}{c}
 \underbrace{01011001}_{\text{222}} \underbrace{10011001}_{\text{220}} \underbrace{10011001}_{\text{217}} \underbrace{00000001}_{\text{216}} \\
 \begin{array}{cccccccccccccccccccccccc}
 \text{22} & \text{21} & \text{20} & \text{19} & \text{18} & \text{17} & \text{16} & \text{15} & \text{14} & \text{13} & \text{12} & \text{11} & \text{10} & \text{9} & \text{8} & \text{7} & \text{6} & \text{5} & \text{4} & \text{3} & \text{2} & \text{1} & \text{0} \\
 0 & 1 & 0 & 1 & 1 & 0 & 0 & 1 & 1 & 0 & 0 & 1 & 1 & 0 & 0 & 1 & 1 & 0 & 0 & 1 & 1 & 0 & 0 & 1 \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 0 & 2^{22} & 0 & 2^{21} & 2^{20} & 2^{19} & 2^{18} & 2^{17} & 2^{16} & 2^{15} & 2^{14} & 2^{13} & 2^{12} & 2^{11} & 2^{10} & 2^9 & 2^8 & 2^7 & 2^6 & 2^5 & 2^4 & 2^3 & 2^2 & 2^1 & 2^0 \\
 4194304 & & 1048576 & 524288 & 262144 & 131072 & 65536 & 32768 & 16384 & 8192 & 4096 & 2048 & 1024 & 512 & 256 & 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 & 0
 \end{array} \\
 = \boxed{5,872,025} \times 2^1 = \boxed{11,744,050}
 \end{array}$$

5999902

same as above ~~for~~ 82 except power

$$\begin{array}{l}
 5,872,025 \cdot 2^2 \\
 \cdot 4 = \boxed{23,488,100}
 \end{array}$$

● A6/66/67FE

10100110 | 01100110 | 01100111 |

11111110

2²² 2²¹ 2²⁰ 2¹⁹ 2¹⁸ 2¹⁷ 2¹⁶ 2¹⁵ 2¹⁴ 2¹³ 2¹² 2¹¹ 2¹⁰ 2⁹ 2⁸ 2⁷ 2⁶ 2⁵ 2⁴ 2³ 2² 2¹ 2⁰

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

X X X X X X X X X X X X X X X X

2²² 2²¹ 2¹⁸ 2¹⁷ 2¹⁴ 2¹³ 2¹⁰ 2⁹ 2⁷ 2⁵ 2² 2⁰
~~8388608~~ 2,047,152 16384 + 8192 + 1024 + 512 + 64 + 32 + 4 + 2
 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

2²² 2²⁰ 2¹⁹ 2¹⁶ 2¹⁵ 2¹² 2⁹ 2⁸ 2⁷ 2⁶ 2⁵ 2⁴ 2³

4194304 65536 4096 2048 256 128 16 8

1048576 32768 524,288

-5,872,024

01100111

65... 210

64 32 421

103

-5,872,024 × 2¹⁰³