

Invert each bit  
+ 1

$$11.001 \times 2$$

$$\begin{array}{r} 0101 + 5 \\ 1010 \\ + \quad 1 \\ \hline 1011 = 5 \end{array}$$

$$1 \dots 1111110$$

$$\frac{\$ 100 \times 10 =}{}$$

$$\frac{\$ 100.1 \times 10 =}{}$$

2's complement signed binary

$$\begin{array}{r} 8^4 \quad 1 \\ 11111101 \\ \hline -3 \end{array}$$

$$\begin{array}{r} 8^4 \quad 1 \\ 1101 \\ \hline -3 \\ 0101 + 5 \\ \hline 1011 - 5 \end{array}$$

$$\begin{array}{r} 5 \\ \textcircled{1001} \\ \hline -8 + 1 = -7 \end{array}$$

$$\begin{array}{r} \downarrow \\ \textcircled{01001} \\ \hline + 5 \end{array}$$

$$\begin{array}{r} 1000 \\ 0001 \\ \hline -8 \end{array}$$

$$\begin{array}{r} 10000 \\ 00001 \\ \hline -16 \end{array}$$

$$\begin{array}{r} 100001 \\ \hline -31 \end{array}$$

$$\begin{array}{r} 1000001 \\ \hline -32 \end{array}$$

①