

Example - 01

a: 1111 1110

b: 0011 1011

b: 0011 1011 (Binary code)

1100 0100 (Inverse code - one's complement)

1100 0100

+ 1

1100 0101 (Complement code - two's complement)

a - b: a + (-b)

1111 1110

+ 1100 0101

1 1100 0011

Exclude carry from sum 1 1100 0011,

1111 1110 - 0011 1011 = 1100 0011.

Example - 02

a: 1111 1110

b: 101 0110

b: 0101 0110 (Binary code)

1010 1001 (Inverse code - one's complement)

1010 1001

+ 1

1010 1010 (Complement code - two's complement)

$a - b: a + (-b)$

$$\begin{array}{r} 1111\ 1110 \\ +\ 1010\ 1010 \\ \hline 1\ 1010\ 1000 \end{array}$$

Exclude carry from sum 1 1010 1000,
 $1111\ 1110 - 101\ 0110 = 1010\ 1000.$