

# Adding/Subtracting Binary Numbers (A)

Calculate each sum or difference.

$$\begin{array}{r} 1100011_2 \\ - 100100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 101011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100110_2 \\ - 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 110000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110100_2 \\ + 111011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100011_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100000_2 \\ + 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 111011_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (A) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1100011_2 \\ - 100100_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 110010_2 \\ \hline 1011111_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101011_2 \\ \hline 1011010_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110110_2 \\ \hline 1011110_2 \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 101011_2 \\ \hline 1011110_2 \end{array}$$

$$\begin{array}{r} 1100110_2 \\ - 110110_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 100001_2 \\ \hline 1001011_2 \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 111000_2 \\ \hline 1011100_2 \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 110000_2 \\ \hline 110001_2 \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 111000_2 \\ \hline 100000_2 \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 100111_2 \\ \hline 101000_2 \end{array}$$

$$\begin{array}{r} 110100_2 \\ + 111011_2 \\ \hline 1101111_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110010_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 1100011_2 \\ - 111101_2 \\ \hline 100110_2 \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111101_2 \\ \hline 111101_2 \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 110001_2 \\ \hline 100010_2 \end{array}$$

$$\begin{array}{r} 100000_2 \\ + 110110_2 \\ \hline 1010110_2 \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111000_2 \\ \hline 1110111_2 \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 101001_2 \\ \hline 101010_2 \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 111011_2 \\ \hline 1100101_2 \end{array}$$

## Adding/Subtracting Binary Numbers (B)

Calculate each sum or difference.

$$\begin{array}{r} 1000110_2 \\ - 100110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110110_2 \\ + 101010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010100_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110000_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110000_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001011_2 \\ - 101011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 110011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101100_2 \\ + 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010010_2 \\ - 100101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100111_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111001_2 \\ + 110000_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (B) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1000110_2 \\ - 100110_2 \\ \hline 100000_2 \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111101_2 \\ \hline 101010_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 110010_2 \\ \hline 1101111_2 \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 101111_2 \\ \hline 1010000_2 \end{array}$$

$$\begin{array}{r} 110110_2 \\ + 101010_2 \\ \hline 1100000_2 \end{array}$$

$$\begin{array}{r} 1010100_2 \\ - 101001_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 110101_2 \\ \hline 1010111_2 \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 111000_2 \\ \hline 1011100_2 \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 110101_2 \\ \hline 101000_2 \end{array}$$

$$\begin{array}{r} 1110000_2 \\ - 111101_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 1110000_2 \\ - 110111_2 \\ \hline 111001_2 \end{array}$$

$$\begin{array}{r} 1001011_2 \\ - 101011_2 \\ \hline 100000_2 \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 110111_2 \\ \hline 110101_2 \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 110011_2 \\ \hline 1110001_2 \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 100001_2 \\ \hline 1001011_2 \end{array}$$

$$\begin{array}{r} 101100_2 \\ + 101000_2 \\ \hline 1010100_2 \end{array}$$

$$\begin{array}{r} 1010010_2 \\ - 100101_2 \\ \hline 101101_2 \end{array}$$

$$\begin{array}{r} 100111_2 \\ + 101111_2 \\ \hline 1010110_2 \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 111100_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 111001_2 \\ + 110000_2 \\ \hline 1101001_2 \end{array}$$

## Adding/Subtracting Binary Numbers (C)

Calculate each sum or difference.

$$\begin{array}{r} 110000_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101011_2 \\ + 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101011_2 \\ + 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101010_2 \\ - 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010101_2 \\ - 110011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 100000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 111011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 110100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 110000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 101000_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (C) Answers

Calculate each sum or difference.

$$\begin{array}{r} 110000_2 \\ + 101111_2 \\ \hline 1011111_2 \end{array}$$

$$\begin{array}{r} 101011_2 \\ + 110001_2 \\ \hline 1011100_2 \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 100010_2 \\ \hline 1000111_2 \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 110110_2 \\ \hline 101001_2 \end{array}$$

$$\begin{array}{r} 101011_2 \\ + 100111_2 \\ \hline 1010010_2 \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 110101_2 \\ \hline 100001_2 \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 100010_2 \\ \hline 110101_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 111100_2 \\ \hline 1100100_2 \end{array}$$

$$\begin{array}{r} 1101010_2 \\ - 110101_2 \\ \hline 110101_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110010_2 \\ \hline 1011010_2 \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111101_2 \\ \hline 1111100_2 \end{array}$$

$$\begin{array}{r} 1010101_2 \\ - 110011_2 \\ \hline 100010_2 \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 111101_2 \\ \hline 100000_2 \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 100000_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 1011101_2 \\ - 111011_2 \\ \hline 100010_2 \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 110100_2 \\ \hline 101101_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 100111_2 \\ \hline 1001111_2 \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 111001_2 \\ \hline 111010_2 \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 110000_2 \\ \hline 1011101_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 101000_2 \\ \hline 1010000_2 \end{array}$$

## Adding/Subtracting Binary Numbers (D)

Calculate each sum or difference.

$$\begin{array}{r} 1011111_2 \\ - 101100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 101100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101110_2 \\ + 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100000_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100011_2 \\ - 110000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 110100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010100_2 \\ - 100100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111110_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011011_2 \\ - 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101100_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110111_2 \\ + 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 100110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 101101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110111_2 \\ + 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111110_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (D) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1011111_2 \\ - 101100_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 101100_2 \\ \hline 1010000_2 \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110101_2 \\ \hline 1100110_2 \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 110010_2 \\ \hline 1100010_2 \end{array}$$

$$\begin{array}{r} 101110_2 \\ + 101001_2 \\ \hline 1010111_2 \end{array}$$

$$\begin{array}{r} 100000_2 \\ + 100010_2 \\ \hline 1000010_2 \end{array}$$

$$\begin{array}{r} 1100011_2 \\ - 110000_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 110100_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 1010100_2 \\ - 100100_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 1111110_2 \\ - 111111_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 101001_2 \\ \hline 1100110_2 \end{array}$$

$$\begin{array}{r} 1011011_2 \\ - 110001_2 \\ \hline 101010_2 \end{array}$$

$$\begin{array}{r} 101100_2 \\ + 111000_2 \\ \hline 1100100_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 100011_2 \\ \hline 1001011_2 \end{array}$$

$$\begin{array}{r} 110111_2 \\ + 110001_2 \\ \hline 1101000_2 \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 100110_2 \\ \hline 101101_2 \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 101101_2 \\ \hline 1101100_2 \end{array}$$

$$\begin{array}{r} 110111_2 \\ + 100001_2 \\ \hline 1011000_2 \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111110_2 \\ \hline 111011_2 \end{array}$$

## Adding/Subtracting Binary Numbers (E)

Calculate each sum or difference.

$$\begin{array}{r} 100000_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001110_2 \\ - 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110011_2 \\ + 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101101_2 \\ - 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111010_2 \\ + 100101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 101101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101110_2 \\ - 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101001_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 101010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 101111_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (E) Answers

Calculate each sum or difference.

$$\begin{array}{r} 100000_2 \\ + 100010_2 \\ \hline 1000010_2 \end{array}$$

$$\begin{array}{r} 1001110_2 \\ - 100010_2 \\ \hline 101100_2 \end{array}$$

$$\begin{array}{r} 101000_2 \\ + 110110_2 \\ \hline 1011110_2 \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 111010_2 \\ \hline 1011111_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 111001_2 \\ \hline 1110110_2 \end{array}$$

$$\begin{array}{r} 110011_2 \\ + 110101_2 \\ \hline 1101000_2 \end{array}$$

$$\begin{array}{r} 1101101_2 \\ - 111010_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 111101_2 \\ \hline 1111010_2 \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 101001_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 111010_2 \\ + 100101_2 \\ \hline 1011111_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 100010_2 \\ \hline 1011111_2 \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111111_2 \\ \hline 100110_2 \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 101101_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 101000_2 \\ \hline 1100110_2 \end{array}$$

$$\begin{array}{r} 1101110_2 \\ - 110010_2 \\ \hline 111100_2 \end{array}$$

$$\begin{array}{r} 1101001_2 \\ - 111111_2 \\ \hline 101010_2 \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 101000_2 \\ \hline 1010101_2 \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 101010_2 \\ \hline 1001100_2 \end{array}$$

$$\begin{array}{r} 1010011_2 \\ - 101111_2 \\ \hline 100100_2 \end{array}$$

## Adding/Subtracting Binary Numbers (F)

Calculate each sum or difference.

$$\begin{array}{r} 1100111_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 101010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 101110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110101_2 \\ + 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011011_2 \\ - 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 101101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 110011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111000_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 100111_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (F) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1100111_2 \\ - 110111_2 \\ \hline 110000_2 \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111010_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 1110011_2 \\ - 111100_2 \\ \hline 110111_2 \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 100001_2 \\ \hline 1010011_2 \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111001_2 \\ \hline 101100_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 110001_2 \\ \hline 1101110_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110111_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 100001_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 101010_2 \\ \hline 111010_2 \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 101110_2 \\ \hline 1010000_2 \end{array}$$

$$\begin{array}{r} 110101_2 \\ + 100001_2 \\ \hline 1010110_2 \end{array}$$

$$\begin{array}{r} 1011011_2 \\ - 101000_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 100011_2 \\ \hline 1000100_2 \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 111010_2 \\ \hline 1101010_2 \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 101101_2 \\ \hline 1010001_2 \end{array}$$

$$\begin{array}{r} 100010_2 \\ + 110011_2 \\ \hline 1010101_2 \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 100010_2 \\ \hline 110111_2 \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 100111_2 \\ \hline 110001_2 \end{array}$$

$$\begin{array}{r} 1111000_2 \\ - 111111_2 \\ \hline 111001_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 100111_2 \\ \hline 111011_2 \end{array}$$

## Adding/Subtracting Binary Numbers (G)

Calculate each sum or difference.

$$\begin{array}{r} 1101010_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 111110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100000_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110110_2 \\ + 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110010_2 \\ - 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 100100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101000_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 100101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 101101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1000111_2 \\ - 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 100111_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (G) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1101010_2 \\ - 110111_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 111110_2 \\ \hline 1101110_2 \end{array}$$

$$\begin{array}{r} 1100000_2 \\ - 101001_2 \\ \hline 110111_2 \end{array}$$

$$\begin{array}{r} 110110_2 \\ + 111111_2 \\ \hline 1110101_2 \end{array}$$

$$\begin{array}{r} 1110010_2 \\ - 110111_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111011_2 \\ \hline 100111_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 111100_2 \\ \hline 1101011_2 \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 100100_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 1101000_2 \\ - 111101_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 111100_2 \\ \hline 100011_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 100111_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 110000_2 \\ + 100010_2 \\ \hline 1010010_2 \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 100101_2 \\ \hline 111100_2 \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 101101_2 \\ \hline 101001_2 \end{array}$$

$$\begin{array}{r} 1101100_2 \\ - 110101_2 \\ \hline 110111_2 \end{array}$$

$$\begin{array}{r} 100100_2 \\ + 110001_2 \\ \hline 1010101_2 \end{array}$$

$$\begin{array}{r} 100001_2 \\ + 101111_2 \\ \hline 1010000_2 \end{array}$$

$$\begin{array}{r} 1000111_2 \\ - 100011_2 \\ \hline 100100_2 \end{array}$$

$$\begin{array}{r} 1111001_2 \\ - 111110_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 1011000_2 \\ - 100111_2 \\ \hline 110001_2 \end{array}$$

## Adding/Subtracting Binary Numbers (H)

Calculate each sum or difference.

$$\begin{array}{r} 1110100_2 \\ - 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001101_2 \\ - 100110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101110_2 \\ + 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 101100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111011_2 \\ + 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1000011_2 \\ - 100000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 110001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111001_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001010_2 \\ - 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100110_2 \\ - 111011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010010_2 \\ - 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 100100_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (H) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1110100_2 \\ - 111100_2 \\ \hline 111000_2 \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111010_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 1001101_2 \\ - 100110_2 \\ \hline 100111_2 \end{array}$$

$$\begin{array}{r} 101110_2 \\ + 111101_2 \\ \hline 1101011_2 \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 101111_2 \\ \hline 101000_2 \end{array}$$

$$\begin{array}{r} 111101_2 \\ + 101100_2 \\ \hline 1101001_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 110000_2 \\ \hline 110010_2 \end{array}$$

$$\begin{array}{r} 111011_2 \\ + 111111_2 \\ \hline 1111010_2 \end{array}$$

$$\begin{array}{r} 1000011_2 \\ - 100000_2 \\ \hline 100011_2 \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 110001_2 \\ \hline 110011_2 \end{array}$$

$$\begin{array}{r} 101101_2 \\ + 100011_2 \\ \hline 1010000_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 110001_2 \\ \hline 1100000_2 \end{array}$$

$$\begin{array}{r} 111001_2 \\ + 101111_2 \\ \hline 1101000_2 \end{array}$$

$$\begin{array}{r} 1001010_2 \\ - 100011_2 \\ \hline 100111_2 \end{array}$$

$$\begin{array}{r} 1100110_2 \\ - 111011_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101110_2 \\ \hline 1011101_2 \end{array}$$

$$\begin{array}{r} 100101_2 \\ + 100111_2 \\ \hline 1001100_2 \end{array}$$

$$\begin{array}{r} 1010010_2 \\ - 110010_2 \\ \hline 100000_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101100_2 \\ \hline 1011011_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 100100_2 \\ \hline 1010011_2 \end{array}$$

## Adding/Subtracting Binary Numbers (I)

Calculate each sum or difference.

$$\begin{array}{r} 1011101_2 \\ - 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101001_2 \\ + 100110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1101000_2 \\ - 101001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 101101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 111000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 111001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 110000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 100111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1110111_2 \\ - 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 111000_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (I) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1011101_2 \\ - 111001_2 \\ \hline 100100_2 \end{array}$$

$$\begin{array}{r} 1001111_2 \\ - 101001_2 \\ \hline 100110_2 \end{array}$$

$$\begin{array}{r} 101001_2 \\ + 100110_2 \\ \hline 1001111_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 101010_2 \\ \hline 1011001_2 \end{array}$$

$$\begin{array}{r} 1101000_2 \\ - 101001_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 111000_2 \\ \hline 100001_2 \end{array}$$

$$\begin{array}{r} 1100100_2 \\ - 101101_2 \\ \hline 110111_2 \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111001_2 \\ \hline 101110_2 \end{array}$$

$$\begin{array}{r} 111111_2 \\ + 111000_2 \\ \hline 1110111_2 \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 111000_2 \\ \hline 1101010_2 \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 101000_2 \\ \hline 110100_2 \end{array}$$

$$\begin{array}{r} 1011100_2 \\ - 111001_2 \\ \hline 100011_2 \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110111_2 \\ \hline 1101000_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111011_2 \\ \hline 100111_2 \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 110000_2 \\ \hline 100111_2 \end{array}$$

$$\begin{array}{r} 1111010_2 \\ - 111111_2 \\ \hline 111011_2 \end{array}$$

$$\begin{array}{r} 1010110_2 \\ - 100111_2 \\ \hline 101111_2 \end{array}$$

$$\begin{array}{r} 1110111_2 \\ - 111010_2 \\ \hline 111101_2 \end{array}$$

$$\begin{array}{r} 1100010_2 \\ - 111100_2 \\ \hline 100110_2 \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 111000_2 \\ \hline 1110110_2 \end{array}$$

## Adding/Subtracting Binary Numbers (J)

Calculate each sum or difference.

$$\begin{array}{r} 1010111_2 \\ - 1100112 \\ \hline \end{array}$$

$$\begin{array}{r} 111000_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010000_2 \\ - 101110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110011_2 \\ + 101000_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 100011_2 \\ \hline \end{array}$$

$$\begin{array}{r} 100111_2 \\ + 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011110_2 \\ - 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010101_2 \\ - 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 111101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 111110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 100010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111010_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 110101_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1100000_2 \\ - 100001_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 110110_2 \\ \hline \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 101111_2 \\ \hline \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 110100_2 \\ \hline \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 110010_2 \\ \hline \end{array}$$

## Adding/Subtracting Binary Numbers (J) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1010111_2 \\ - 110011_2 \\ \hline 100100_2 \end{array}$$

$$\begin{array}{r} 111000_2 \\ + 100010_2 \\ \hline 1011010_2 \end{array}$$

$$\begin{array}{r} 1010000_2 \\ - 101110_2 \\ \hline 100010_2 \end{array}$$

$$\begin{array}{r} 110001_2 \\ + 110010_2 \\ \hline 1100011_2 \end{array}$$

$$\begin{array}{r} 110011_2 \\ + 101000_2 \\ \hline 1011011_2 \end{array}$$

$$\begin{array}{r} 1100111_2 \\ - 111110_2 \\ \hline 101001_2 \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 100011_2 \\ \hline 110100_2 \end{array}$$

$$\begin{array}{r} 100111_2 \\ + 101111_2 \\ \hline 1010110_2 \end{array}$$

$$\begin{array}{r} 1011110_2 \\ - 111101_2 \\ \hline 100001_2 \end{array}$$

$$\begin{array}{r} 1010101_2 \\ - 101111_2 \\ \hline 100110_2 \end{array}$$

$$\begin{array}{r} 101111_2 \\ + 111101_2 \\ \hline 1101100_2 \end{array}$$

$$\begin{array}{r} 1100001_2 \\ - 111110_2 \\ \hline 100011_2 \end{array}$$

$$\begin{array}{r} 110010_2 \\ + 100010_2 \\ \hline 1010100_2 \end{array}$$

$$\begin{array}{r} 1100101_2 \\ - 111010_2 \\ \hline 101011_2 \end{array}$$

$$\begin{array}{r} 1011111_2 \\ - 110101_2 \\ \hline 101010_2 \end{array}$$

$$\begin{array}{r} 1100000_2 \\ - 100001_2 \\ \hline 111111_2 \end{array}$$

$$\begin{array}{r} 1011001_2 \\ - 110110_2 \\ \hline 100011_2 \end{array}$$

$$\begin{array}{r} 1010111_2 \\ - 101111_2 \\ \hline 101000_2 \end{array}$$

$$\begin{array}{r} 111110_2 \\ + 110100_2 \\ \hline 1110010_2 \end{array}$$

$$\begin{array}{r} 101010_2 \\ + 110010_2 \\ \hline 1011100_2 \end{array}$$