

Adding/Subtracting Quaternary Numbers (A)

Calculate each sum or difference.

$$\begin{array}{r} 2000_4 \\ + 1313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3333_4 \\ - 1211_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10203_4 \\ - 1110_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11100_4 \\ - 1122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 1332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3323_4 \\ - 1123_4 \\ \hline \end{array}$$

$$\begin{array}{r} 13000_4 \\ - 3021_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10022_4 \\ - 1023_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2332_4 \\ + 3312_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10202_4 \\ - 1312_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11331_4 \\ - 2200_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11020_4 \\ - 1102_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3122_4 \\ + 3110_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 1220_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12002_4 \\ - 3310_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11120_4 \\ - 1132_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3233_4 \\ - 1230_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12032_4 \\ - 2101_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2232_4 \\ + 1103_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2033_4 \\ + 1312_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (A) Answers

Calculate each sum or difference.

$$\begin{array}{r} 2000_4 \\ + 1313_4 \\ \hline 3313_4 \end{array}$$

$$\begin{array}{r} 3333_4 \\ - 1211_4 \\ \hline 2122_4 \end{array}$$

$$\begin{array}{r} 10203_4 \\ - 1110_4 \\ \hline 3033_4 \end{array}$$

$$\begin{array}{r} 11100_4 \\ - 1122_4 \\ \hline 3312_4 \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 1332_4 \\ \hline 3323_4 \end{array}$$

$$\begin{array}{r} 3323_4 \\ - 1123_4 \\ \hline 2200_4 \end{array}$$

$$\begin{array}{r} 13000_4 \\ - 3021_4 \\ \hline 3313_4 \end{array}$$

$$\begin{array}{r} 10022_4 \\ - 1023_4 \\ \hline 2333_4 \end{array}$$

$$\begin{array}{r} 2332_4 \\ + 3312_4 \\ \hline 12310_4 \end{array}$$

$$\begin{array}{r} 10202_4 \\ - 1312_4 \\ \hline 2230_4 \end{array}$$

$$\begin{array}{r} 11331_4 \\ - 2200_4 \\ \hline 3131_4 \end{array}$$

$$\begin{array}{r} 11020_4 \\ - 1102_4 \\ \hline 3312_4 \end{array}$$

$$\begin{array}{r} 3122_4 \\ + 3110_4 \\ \hline 12232_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 1220_4 \\ \hline 11003_4 \end{array}$$

$$\begin{array}{r} 12002_4 \\ - 3310_4 \\ \hline 2032_4 \end{array}$$

$$\begin{array}{r} 11120_4 \\ - 1132_4 \\ \hline 3322_4 \end{array}$$

$$\begin{array}{r} 3233_4 \\ - 1230_4 \\ \hline 2003_4 \end{array}$$

$$\begin{array}{r} 12032_4 \\ - 2101_4 \\ \hline 3331_4 \end{array}$$

$$\begin{array}{r} 2232_4 \\ + 1103_4 \\ \hline 10001_4 \end{array}$$

$$\begin{array}{r} 2033_4 \\ + 1312_4 \\ \hline 10011_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (B)

Calculate each sum or difference.

$$\begin{array}{r} 10121_4 \\ - 2001_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11010_4 \\ - 3030_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 2300_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1332_4 \\ + 2310_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11330_4 \\ - 3120_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2221_4 \\ + 1310_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2201_4 \\ + 2222_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1000_4 \\ + 3011_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3212_4 \\ + 1302_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1331_4 \\ + 3332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 3201_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2212_4 \\ + 3101_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10001_4 \\ - 3001_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2123_4 \\ - 1122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3103_4 \\ - 1130_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3002_4 \\ + 2111_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2130_4 \\ + 1330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10100_4 \\ - 1021_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3331_4 \\ - 2302_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3000_4 \\ + 1003_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (B) Answers

Calculate each sum or difference.

$$\begin{array}{r} 10121_4 \\ - 2001_4 \\ \hline 2120_4 \end{array}$$

$$\begin{array}{r} 11010_4 \\ - 3030_4 \\ \hline 1320_4 \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 2300_4 \\ \hline 3021_4 \end{array}$$

$$\begin{array}{r} 1332_4 \\ + 2310_4 \\ \hline 10302_4 \end{array}$$

$$\begin{array}{r} 11330_4 \\ - 3120_4 \\ \hline 2210_4 \end{array}$$

$$\begin{array}{r} 2221_4 \\ + 1310_4 \\ \hline 10131_4 \end{array}$$

$$\begin{array}{r} 2201_4 \\ + 2222_4 \\ \hline 11023_4 \end{array}$$

$$\begin{array}{r} 1000_4 \\ + 3011_4 \\ \hline 10011_4 \end{array}$$

$$\begin{array}{r} 3212_4 \\ + 1302_4 \\ \hline 11120_4 \end{array}$$

$$\begin{array}{r} 1331_4 \\ + 3332_4 \\ \hline 11323_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 3201_4 \\ \hline 12330_4 \end{array}$$

$$\begin{array}{r} 2212_4 \\ + 3101_4 \\ \hline 11313_4 \end{array}$$

$$\begin{array}{r} 10001_4 \\ - 3001_4 \\ \hline 1000_4 \end{array}$$

$$\begin{array}{r} 2123_4 \\ - 1122_4 \\ \hline 1001_4 \end{array}$$

$$\begin{array}{r} 3103_4 \\ - 1130_4 \\ \hline 1313_4 \end{array}$$

$$\begin{array}{r} 3002_4 \\ + 2111_4 \\ \hline 11113_4 \end{array}$$

$$\begin{array}{r} 2130_4 \\ + 1330_4 \\ \hline 10120_4 \end{array}$$

$$\begin{array}{r} 10100_4 \\ - 1021_4 \\ \hline 3013_4 \end{array}$$

$$\begin{array}{r} 3331_4 \\ - 2302_4 \\ \hline 1023_4 \end{array}$$

$$\begin{array}{r} 3000_4 \\ + 1003_4 \\ \hline 10003_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (C)

Calculate each sum or difference.

$$\begin{array}{r} 11300_4 \\ - 3322_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3231_4 \\ + 2032_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10311_4 \\ - 1200_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ - 1010_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1011_4 \\ + 2133_4 \\ \hline \end{array}$$

$$\begin{array}{r} 13103_4 \\ - 3130_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11123_4 \\ - 3303_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11033_4 \\ - 2130_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2231_4 \\ - 1100_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1212_4 \\ + 2212_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3210_4 \\ + 1022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10330_4 \\ - 2213_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3223_4 \\ - 1210_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2203_4 \\ + 3201_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2102_4 \\ + 1002_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3001_4 \\ + 1201_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1030_4 \\ + 2022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3011_4 \\ + 3001_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12012_4 \\ - 2330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1203_4 \\ + 2202_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (C) Answers

Calculate each sum or difference.

$$\begin{array}{r} 11300_4 \\ - 3322_4 \\ \hline 1312_4 \end{array}$$

$$\begin{array}{r} 3231_4 \\ + 2032_4 \\ \hline 11323_4 \end{array}$$

$$\begin{array}{r} 10311_4 \\ - 1200_4 \\ \hline 3111_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ - 1010_4 \\ \hline 2113_4 \end{array}$$

$$\begin{array}{r} 1011_4 \\ + 2133_4 \\ \hline 3210_4 \end{array}$$

$$\begin{array}{r} 13103_4 \\ - 3130_4 \\ \hline 3313_4 \end{array}$$

$$\begin{array}{r} 11123_4 \\ - 3303_4 \\ \hline 1220_4 \end{array}$$

$$\begin{array}{r} 11033_4 \\ - 2130_4 \\ \hline 2303_4 \end{array}$$

$$\begin{array}{r} 2231_4 \\ - 1100_4 \\ \hline 1131_4 \end{array}$$

$$\begin{array}{r} 1212_4 \\ + 2212_4 \\ \hline 10030_4 \end{array}$$

$$\begin{array}{r} 3210_4 \\ + 1022_4 \\ \hline 10232_4 \end{array}$$

$$\begin{array}{r} 10330_4 \\ - 2213_4 \\ \hline 2111_4 \end{array}$$

$$\begin{array}{r} 3223_4 \\ - 1210_4 \\ \hline 2013_4 \end{array}$$

$$\begin{array}{r} 2203_4 \\ + 3201_4 \\ \hline 12010_4 \end{array}$$

$$\begin{array}{r} 2102_4 \\ + 1002_4 \\ \hline 3110_4 \end{array}$$

$$\begin{array}{r} 3001_4 \\ + 1201_4 \\ \hline 10202_4 \end{array}$$

$$\begin{array}{r} 1030_4 \\ + 2022_4 \\ \hline 3112_4 \end{array}$$

$$\begin{array}{r} 3011_4 \\ + 3001_4 \\ \hline 12012_4 \end{array}$$

$$\begin{array}{r} 12012_4 \\ - 2330_4 \\ \hline 3022_4 \end{array}$$

$$\begin{array}{r} 1203_4 \\ + 2202_4 \\ \hline 10011_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (D)

Calculate each sum or difference.

$$\begin{array}{r} 1313_4 \\ + 2301_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1311_4 \\ + 3131_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3001_4 \\ + 3102_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2222_4 \\ + 1132_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11002_4 \\ - 1122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1010_4 \\ + 2213_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11001_4 \\ - 3313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11123_4 \\ - 3321_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1312_4 \\ + 3012_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1201_4 \\ + 2223_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10111_4 \\ - 1113_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3100_4 \\ - 1333_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3230_4 \\ - 1310_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3312_4 \\ + 3000_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2201_4 \\ + 3100_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10003_4 \\ - 2123_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1221_4 \\ + 2333_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10123_4 \\ - 2200_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1310_4 \\ + 3212_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1102_4 \\ + 1230_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (D) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1313_4 \\ + 2301_4 \\ \hline 10220_4 \end{array}$$

$$\begin{array}{r} 1311_4 \\ + 3131_4 \\ \hline 11102_4 \end{array}$$

$$\begin{array}{r} 3001_4 \\ + 3102_4 \\ \hline 12103_4 \end{array}$$

$$\begin{array}{r} 2222_4 \\ + 1132_4 \\ \hline 10020_4 \end{array}$$

$$\begin{array}{r} 11002_4 \\ - 1122_4 \\ \hline 3220_4 \end{array}$$

$$\begin{array}{r} 1010_4 \\ + 2213_4 \\ \hline 3223_4 \end{array}$$

$$\begin{array}{r} 11001_4 \\ - 3313_4 \\ \hline 1022_4 \end{array}$$

$$\begin{array}{r} 11123_4 \\ - 3321_4 \\ \hline 1202_4 \end{array}$$

$$\begin{array}{r} 1312_4 \\ + 3012_4 \\ \hline 10330_4 \end{array}$$

$$\begin{array}{r} 1201_4 \\ + 2223_4 \\ \hline 10030_4 \end{array}$$

$$\begin{array}{r} 10111_4 \\ - 1113_4 \\ \hline 2332_4 \end{array}$$

$$\begin{array}{r} 3100_4 \\ - 1333_4 \\ \hline 1101_4 \end{array}$$

$$\begin{array}{r} 3230_4 \\ - 1310_4 \\ \hline 1320_4 \end{array}$$

$$\begin{array}{r} 3312_4 \\ + 3000_4 \\ \hline 12312_4 \end{array}$$

$$\begin{array}{r} 2201_4 \\ + 3100_4 \\ \hline 11301_4 \end{array}$$

$$\begin{array}{r} 10003_4 \\ - 2123_4 \\ \hline 1220_4 \end{array}$$

$$\begin{array}{r} 1221_4 \\ + 2333_4 \\ \hline 10220_4 \end{array}$$

$$\begin{array}{r} 10123_4 \\ - 2200_4 \\ \hline 1323_4 \end{array}$$

$$\begin{array}{r} 1310_4 \\ + 3212_4 \\ \hline 11122_4 \end{array}$$

$$\begin{array}{r} 1102_4 \\ + 1230_4 \\ \hline 2332_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (E)

Calculate each sum or difference.

$$\begin{array}{r} 1203_4 \\ + 1122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3323_4 \\ + 1322_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1031_4 \\ + 1313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1023_4 \\ + 1212_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11220_4 \\ - 3133_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3303_4 \\ + 1223_4 \\ \hline \end{array}$$

$$\begin{array}{r} 13122_4 \\ - 3210_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3001_4 \\ - 1111_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10313_4 \\ - 2103_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11022_4 \\ - 2212_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 3023_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1322_4 \\ + 2111_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10022_4 \\ - 3010_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1220_4 \\ + 1300_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2212_4 \\ + 2203_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3212_4 \\ - 1303_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2231_4 \\ + 1203_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1123_4 \\ + 2122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 1012_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2321_4 \\ + 2110_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (E) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1203_4 \\ + 1122_4 \\ \hline 2331_4 \end{array}$$

$$\begin{array}{r} 3323_4 \\ + 1322_4 \\ \hline 11311_4 \end{array}$$

$$\begin{array}{r} 1031_4 \\ + 1313_4 \\ \hline 3010_4 \end{array}$$

$$\begin{array}{r} 1023_4 \\ + 1212_4 \\ \hline 2301_4 \end{array}$$

$$\begin{array}{r} 11220_4 \\ - 3133_4 \\ \hline 2021_4 \end{array}$$

$$\begin{array}{r} 3303_4 \\ + 1223_4 \\ \hline 11132_4 \end{array}$$

$$\begin{array}{r} 13122_4 \\ - 3210_4 \\ \hline 3312_4 \end{array}$$

$$\begin{array}{r} 3001_4 \\ - 1111_4 \\ \hline 1230_4 \end{array}$$

$$\begin{array}{r} 10313_4 \\ - 2103_4 \\ \hline 2210_4 \end{array}$$

$$\begin{array}{r} 11022_4 \\ - 2212_4 \\ \hline 2210_4 \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 3023_4 \\ \hline 10213_4 \end{array}$$

$$\begin{array}{r} 1322_4 \\ + 2111_4 \\ \hline 10033_4 \end{array}$$

$$\begin{array}{r} 10022_4 \\ - 3010_4 \\ \hline 1012_4 \end{array}$$

$$\begin{array}{r} 1220_4 \\ + 1300_4 \\ \hline 3120_4 \end{array}$$

$$\begin{array}{r} 2212_4 \\ + 2203_4 \\ \hline 11021_4 \end{array}$$

$$\begin{array}{r} 3212_4 \\ - 1303_4 \\ \hline 1303_4 \end{array}$$

$$\begin{array}{r} 2231_4 \\ + 1203_4 \\ \hline 10100_4 \end{array}$$

$$\begin{array}{r} 1123_4 \\ + 2122_4 \\ \hline 3311_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 1012_4 \\ \hline 10201_4 \end{array}$$

$$\begin{array}{r} 2321_4 \\ + 2110_4 \\ \hline 11031_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (F)

Calculate each sum or difference.

$$\begin{array}{r} 3012_4 \\ + 1330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 2121_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3320_4 \\ + 2003_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2033_4 \\ + 1312_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11220_4 \\ - 1233_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 3120_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11003_4 \\ - 3132_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10032_4 \\ - 2011_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11012_4 \\ - 1022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3323_4 \\ - 2022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11013_4 \\ - 2122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1200_4 \\ + 2201_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3112_4 \\ + 2232_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1133_4 \\ + 3020_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1001_4 \\ + 3200_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2333_4 \\ - 1020_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 3012_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11312_4 \\ - 3301_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 2022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2032_4 \\ + 3021_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (F) Answers

Calculate each sum or difference.

$$\begin{array}{r} 3012_4 \\ + 1330_4 \\ \hline 11002_4 \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 2121_4 \\ \hline 3311_4 \end{array}$$

$$\begin{array}{r} 3320_4 \\ + 2003_4 \\ \hline 11323_4 \end{array}$$

$$\begin{array}{r} 2033_4 \\ + 1312_4 \\ \hline 10011_4 \end{array}$$

$$\begin{array}{r} 11220_4 \\ - 1233_4 \\ \hline 3321_4 \end{array}$$

$$\begin{array}{r} 1130_4 \\ + 3120_4 \\ \hline 10310_4 \end{array}$$

$$\begin{array}{r} 11003_4 \\ - 3132_4 \\ \hline 1211_4 \end{array}$$

$$\begin{array}{r} 10032_4 \\ - 2011_4 \\ \hline 2021_4 \end{array}$$

$$\begin{array}{r} 11012_4 \\ - 1022_4 \\ \hline 3330_4 \end{array}$$

$$\begin{array}{r} 3323_4 \\ - 2022_4 \\ \hline 1301_4 \end{array}$$

$$\begin{array}{r} 11013_4 \\ - 2122_4 \\ \hline 2231_4 \end{array}$$

$$\begin{array}{r} 1200_4 \\ + 2201_4 \\ \hline 10001_4 \end{array}$$

$$\begin{array}{r} 3112_4 \\ + 2232_4 \\ \hline 12010_4 \end{array}$$

$$\begin{array}{r} 1133_4 \\ + 3020_4 \\ \hline 10213_4 \end{array}$$

$$\begin{array}{r} 1001_4 \\ + 3200_4 \\ \hline 10201_4 \end{array}$$

$$\begin{array}{r} 2333_4 \\ - 1020_4 \\ \hline 1313_4 \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 3012_4 \\ \hline 1230_4 \end{array}$$

$$\begin{array}{r} 11312_4 \\ - 3301_4 \\ \hline 2011_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ + 2022_4 \\ \hline 11211_4 \end{array}$$

$$\begin{array}{r} 2032_4 \\ + 3021_4 \\ \hline 11113_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (G)

Calculate each sum or difference.

$$\begin{array}{r} 1100_4 \\ + 3222_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12030_4 \\ - 3232_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2022_4 \\ + 1123_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2013_4 \\ + 2121_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3310_4 \\ - 2220_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12112_4 \\ - 3211_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3002_4 \\ + 1203_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2321_4 \\ + 3330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3031_4 \\ + 3021_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11210_4 \\ - 3311_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1020_4 \\ + 3112_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3103_4 \\ - 2032_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10310_4 \\ - 3302_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1312_4 \\ + 2000_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2012_4 \\ + 3220_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3233_4 \\ - 1233_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3301_4 \\ - 1102_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10203_4 \\ - 1313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10013_4 \\ - 2332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11113_4 \\ - 3020_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (G) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1100_4 \\ + 3222_4 \\ \hline 10322_4 \end{array}$$

$$\begin{array}{r} 12030_4 \\ - 3232_4 \\ \hline 2132_4 \end{array}$$

$$\begin{array}{r} 2022_4 \\ + 1123_4 \\ \hline 3211_4 \end{array}$$

$$\begin{array}{r} 2013_4 \\ + 2121_4 \\ \hline 10200_4 \end{array}$$

$$\begin{array}{r} 3310_4 \\ - 2220_4 \\ \hline 1030_4 \end{array}$$

$$\begin{array}{r} 12112_4 \\ - 3211_4 \\ \hline 2301_4 \end{array}$$

$$\begin{array}{r} 3002_4 \\ + 1203_4 \\ \hline 10211_4 \end{array}$$

$$\begin{array}{r} 2321_4 \\ + 3330_4 \\ \hline 12311_4 \end{array}$$

$$\begin{array}{r} 3031_4 \\ + 3021_4 \\ \hline 12112_4 \end{array}$$

$$\begin{array}{r} 11210_4 \\ - 3311_4 \\ \hline 1233_4 \end{array}$$

$$\begin{array}{r} 1020_4 \\ + 3112_4 \\ \hline 10132_4 \end{array}$$

$$\begin{array}{r} 3103_4 \\ - 2032_4 \\ \hline 1011_4 \end{array}$$

$$\begin{array}{r} 10310_4 \\ - 3302_4 \\ \hline 1002_4 \end{array}$$

$$\begin{array}{r} 1312_4 \\ + 2000_4 \\ \hline 3312_4 \end{array}$$

$$\begin{array}{r} 2012_4 \\ + 3220_4 \\ \hline 11232_4 \end{array}$$

$$\begin{array}{r} 3233_4 \\ - 1233_4 \\ \hline 2000_4 \end{array}$$

$$\begin{array}{r} 3301_4 \\ - 1102_4 \\ \hline 2133_4 \end{array}$$

$$\begin{array}{r} 10203_4 \\ - 1313_4 \\ \hline 2230_4 \end{array}$$

$$\begin{array}{r} 10013_4 \\ - 2332_4 \\ \hline 1021_4 \end{array}$$

$$\begin{array}{r} 11113_4 \\ - 3020_4 \\ \hline 2033_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (H)

Calculate each sum or difference.

$$\begin{array}{r} 10313_4 \\ - 3211_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10213_4 \\ - 1003_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2232_4 \\ + 3132_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3211_4 \\ - 1211_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2013_4 \\ + 3021_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11030_4 \\ - 1312_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12130_4 \\ - 2313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1102_4 \\ + 2320_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1132_4 \\ + 3313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2131_4 \\ + 3303_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11223_4 \\ - 2133_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3213_4 \\ - 2211_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12232_4 \\ - 3330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11223_4 \\ - 2221_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2221_4 \\ + 1330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11310_4 \\ - 2001_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3313_4 \\ + 1313_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1313_4 \\ + 1332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3321_4 \\ + 3321_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11130_4 \\ - 2012_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (H) Answers

Calculate each sum or difference.

$$\begin{array}{r} 10313_4 \\ - 3211_4 \\ \hline 1102_4 \end{array}$$

$$\begin{array}{r} 10213_4 \\ - 1003_4 \\ \hline 3210_4 \end{array}$$

$$\begin{array}{r} 2232_4 \\ + 3132_4 \\ \hline 12030_4 \end{array}$$

$$\begin{array}{r} 3211_4 \\ - 1211_4 \\ \hline 2000_4 \end{array}$$

$$\begin{array}{r} 2013_4 \\ + 3021_4 \\ \hline 11100_4 \end{array}$$

$$\begin{array}{r} 11030_4 \\ - 1312_4 \\ \hline 3112_4 \end{array}$$

$$\begin{array}{r} 12130_4 \\ - 2313_4 \\ \hline 3211_4 \end{array}$$

$$\begin{array}{r} 1102_4 \\ + 2320_4 \\ \hline 10022_4 \end{array}$$

$$\begin{array}{r} 1132_4 \\ + 3313_4 \\ \hline 11111_4 \end{array}$$

$$\begin{array}{r} 2131_4 \\ + 3303_4 \\ \hline 12100_4 \end{array}$$

$$\begin{array}{r} 11223_4 \\ - 2133_4 \\ \hline 3030_4 \end{array}$$

$$\begin{array}{r} 3213_4 \\ - 2211_4 \\ \hline 1002_4 \end{array}$$

$$\begin{array}{r} 12232_4 \\ - 3330_4 \\ \hline 2302_4 \end{array}$$

$$\begin{array}{r} 11223_4 \\ - 2221_4 \\ \hline 3002_4 \end{array}$$

$$\begin{array}{r} 2221_4 \\ + 1330_4 \\ \hline 10211_4 \end{array}$$

$$\begin{array}{r} 11310_4 \\ - 2001_4 \\ \hline 3303_4 \end{array}$$

$$\begin{array}{r} 3313_4 \\ + 1313_4 \\ \hline 11232_4 \end{array}$$

$$\begin{array}{r} 1313_4 \\ + 1332_4 \\ \hline 3311_4 \end{array}$$

$$\begin{array}{r} 3321_4 \\ + 3321_4 \\ \hline 13302_4 \end{array}$$

$$\begin{array}{r} 11130_4 \\ - 2012_4 \\ \hline 3112_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (I)

Calculate each sum or difference.

$$\begin{array}{r} 3303_4 \\ + 1012_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10102_4 \\ - 2322_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12313_4 \\ - 3102_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2011_4 \\ + 3223_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12231_4 \\ - 3122_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3321_4 \\ + 2123_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1233_4 \\ + 1332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11203_4 \\ - 2002_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2203_4 \\ + 3312_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10122_4 \\ - 3101_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10113_4 \\ - 1320_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1333_4 \\ + 2022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 1113_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1233_4 \\ + 1022_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1300_4 \\ + 3320_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12001_4 \\ - 2021_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3022_4 \\ + 2013_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2101_4 \\ + 3130_4 \\ \hline \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 3201_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3033_4 \\ + 1322_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (I) Answers

Calculate each sum or difference.

$$\begin{array}{r} 3303_4 \\ + 1012_4 \\ \hline 10321_4 \end{array}$$

$$\begin{array}{r} 10102_4 \\ - 2322_4 \\ \hline 1120_4 \end{array}$$

$$\begin{array}{r} 12313_4 \\ - 3102_4 \\ \hline 3211_4 \end{array}$$

$$\begin{array}{r} 2011_4 \\ + 3223_4 \\ \hline 11300_4 \end{array}$$

$$\begin{array}{r} 12231_4 \\ - 3122_4 \\ \hline 3103_4 \end{array}$$

$$\begin{array}{r} 3321_4 \\ + 2123_4 \\ \hline 12110_4 \end{array}$$

$$\begin{array}{r} 1233_4 \\ + 1332_4 \\ \hline 3231_4 \end{array}$$

$$\begin{array}{r} 11203_4 \\ - 2002_4 \\ \hline 3201_4 \end{array}$$

$$\begin{array}{r} 2203_4 \\ + 3312_4 \\ \hline 12121_4 \end{array}$$

$$\begin{array}{r} 10122_4 \\ - 3101_4 \\ \hline 1021_4 \end{array}$$

$$\begin{array}{r} 10113_4 \\ - 1320_4 \\ \hline 2133_4 \end{array}$$

$$\begin{array}{r} 1333_4 \\ + 2022_4 \\ \hline 10021_4 \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 1113_4 \\ \hline 3123_4 \end{array}$$

$$\begin{array}{r} 1233_4 \\ + 1022_4 \\ \hline 2321_4 \end{array}$$

$$\begin{array}{r} 1300_4 \\ + 3320_4 \\ \hline 11220_4 \end{array}$$

$$\begin{array}{r} 12001_4 \\ - 2021_4 \\ \hline 3320_4 \end{array}$$

$$\begin{array}{r} 3022_4 \\ + 2013_4 \\ \hline 11101_4 \end{array}$$

$$\begin{array}{r} 2101_4 \\ + 3130_4 \\ \hline 11231_4 \end{array}$$

$$\begin{array}{r} 11321_4 \\ - 3201_4 \\ \hline 2120_4 \end{array}$$

$$\begin{array}{r} 3033_4 \\ + 1322_4 \\ \hline 11021_4 \end{array}$$

Adding/Subtracting Quaternary Numbers (J)

Calculate each sum or difference.

$$\begin{array}{r} 1311_4 \\ + 3322_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3322_4 \\ + 2202_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12010_4 \\ - 3131_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2020_4 \\ + 2003_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10333_4 \\ - 3013_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3223_4 \\ + 3100_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2021_4 \\ + 2003_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3000_4 \\ + 1332_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12112_4 \\ - 2202_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3013_4 \\ - 1013_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2213_4 \\ + 1330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3233_4 \\ + 3011_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 3130_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1300_4 \\ + 1110_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1111_4 \\ + 3033_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3300_4 \\ + 2330_4 \\ \hline \end{array}$$

$$\begin{array}{r} 10332_4 \\ - 3002_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3313_4 \\ + 1210_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3230_4 \\ + 2013_4 \\ \hline \end{array}$$

$$\begin{array}{r} 12003_4 \\ - 2300_4 \\ \hline \end{array}$$

Adding/Subtracting Quaternary Numbers (J) Answers

Calculate each sum or difference.

$$\begin{array}{r} 1311_4 \\ + 3322_4 \\ \hline 11233_4 \end{array}$$

$$\begin{array}{r} 3322_4 \\ + 2202_4 \\ \hline 12130_4 \end{array}$$

$$\begin{array}{r} 12010_4 \\ - 3131_4 \\ \hline 2213_4 \end{array}$$

$$\begin{array}{r} 2020_4 \\ + 2003_4 \\ \hline 10023_4 \end{array}$$

$$\begin{array}{r} 10333_4 \\ - 3013_4 \\ \hline 1320_4 \end{array}$$

$$\begin{array}{r} 3223_4 \\ + 3100_4 \\ \hline 12323_4 \end{array}$$

$$\begin{array}{r} 2021_4 \\ + 2003_4 \\ \hline 10030_4 \end{array}$$

$$\begin{array}{r} 3000_4 \\ + 1332_4 \\ \hline 10332_4 \end{array}$$

$$\begin{array}{r} 12112_4 \\ - 2202_4 \\ \hline 3310_4 \end{array}$$

$$\begin{array}{r} 3013_4 \\ - 1013_4 \\ \hline 2000_4 \end{array}$$

$$\begin{array}{r} 2213_4 \\ + 1330_4 \\ \hline 10203_4 \end{array}$$

$$\begin{array}{r} 3233_4 \\ + 3011_4 \\ \hline 12310_4 \end{array}$$

$$\begin{array}{r} 10302_4 \\ - 3130_4 \\ \hline 1112_4 \end{array}$$

$$\begin{array}{r} 1300_4 \\ + 1110_4 \\ \hline 3010_4 \end{array}$$

$$\begin{array}{r} 1111_4 \\ + 3033_4 \\ \hline 10210_4 \end{array}$$

$$\begin{array}{r} 3300_4 \\ + 2330_4 \\ \hline 12230_4 \end{array}$$

$$\begin{array}{r} 10332_4 \\ - 3002_4 \\ \hline 1330_4 \end{array}$$

$$\begin{array}{r} 3313_4 \\ + 1210_4 \\ \hline 11123_4 \end{array}$$

$$\begin{array}{r} 3230_4 \\ + 2013_4 \\ \hline 11303_4 \end{array}$$

$$\begin{array}{r} 12003_4 \\ - 2300_4 \\ \hline 3103_4 \end{array}$$