

Multiplying Quaternary Numbers (A)

Calculate each product.

$$\begin{array}{r} 2013_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 332_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2232_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3222_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3112_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2213_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2103_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 230_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1022_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2311_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3010_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1023_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 123_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3220_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3301_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2001_4 \\ \times 10_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (A) Answers

Calculate each product.

$$\begin{array}{r} 2013_4 \\ \times 30_4 \\ \hline 121110_4 \end{array}$$

$$\begin{array}{r} 332_4 \\ \times 13_4 \\ \hline 12302_4 \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 21_4 \\ \hline 13110_4 \end{array}$$

$$\begin{array}{r} 2232_4 \\ \times 33_4 \\ \hline 220302_4 \end{array}$$

$$\begin{array}{r} 3222_4 \\ \times 13_4 \\ \hline 121212_4 \end{array}$$

$$\begin{array}{r} 3112_4 \\ \times 30_4 \\ \hline 220020_4 \end{array}$$

$$\begin{array}{r} 2213_4 \\ \times 12_4 \\ \hline 33222_4 \end{array}$$

$$\begin{array}{r} 2103_4 \\ \times 30_4 \\ \hline 123210_4 \end{array}$$

$$\begin{array}{r} 230_4 \\ \times 3_4 \\ \hline 2010_4 \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 13_4 \\ \hline 13222_4 \end{array}$$

$$\begin{array}{r} 1022_4 \\ \times 23_4 \\ \hline 30232_4 \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 22_4 \\ \hline 120312_4 \end{array}$$

$$\begin{array}{r} 2311_4 \\ \times 2_4 \\ \hline 11222_4 \end{array}$$

$$\begin{array}{r} 3010_4 \\ \times 11_4 \\ \hline 33110_4 \end{array}$$

$$\begin{array}{r} 1023_4 \\ \times 32_4 \\ \hline 100122_4 \end{array}$$

$$\begin{array}{r} 123_4 \\ \times 22_4 \\ \hline 10032_4 \end{array}$$

$$\begin{array}{r} 3220_4 \\ \times 21_4 \\ \hline 200220_4 \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 13_4 \\ \hline 120200_4 \end{array}$$

$$\begin{array}{r} 3301_4 \\ \times 13_4 \\ \hline 122113_4 \end{array}$$

$$\begin{array}{r} 2001_4 \\ \times 10_4 \\ \hline 20010_4 \end{array}$$

Multiplying Quaternary Numbers (B)

Calculate each product.

$$\begin{array}{r} 3133_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1130_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3222_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 330_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1323_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 322_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3011_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 201_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2032_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1323_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2122_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2212_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1303_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1331_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1120_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1122_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1201_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1200_4 \\ \times 32_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (B) Answers

Calculate each product.

$$\begin{array}{r} 3133_4 \\ \times 11_4 \\ \hline 101123_4 \end{array}$$

$$\begin{array}{r} 1130_4 \\ \times 32_4 \\ \hline 110020_4 \end{array}$$

$$\begin{array}{r} 3222_4 \\ \times 20_4 \\ \hline 131100_4 \end{array}$$

$$\begin{array}{r} 330_4 \\ \times 30_4 \\ \hline 23100_4 \end{array}$$

$$\begin{array}{r} 1323_4 \\ \times 22_4 \\ \hline 103032_4 \end{array}$$

$$\begin{array}{r} 322_4 \\ \times 32_4 \\ \hline 30230_4 \end{array}$$

$$\begin{array}{r} 3011_4 \\ \times 13_4 \\ \hline 111203_4 \end{array}$$

$$\begin{array}{r} 201_4 \\ \times 30_4 \\ \hline 12030_4 \end{array}$$

$$\begin{array}{r} 2032_4 \\ \times 23_4 \\ \hline 120122_4 \end{array}$$

$$\begin{array}{r} 1323_4 \\ \times 12_4 \\ \hline 23202_4 \end{array}$$

$$\begin{array}{r} 2122_4 \\ \times 33_4 \\ \hline 210012_4 \end{array}$$

$$\begin{array}{r} 2212_4 \\ \times 2_4 \\ \hline 11030_4 \end{array}$$

$$\begin{array}{r} 1303_4 \\ \times 10_4 \\ \hline 13030_4 \end{array}$$

$$\begin{array}{r} 1331_4 \\ \times 11_4 \\ \hline 21301_4 \end{array}$$

$$\begin{array}{r} 1120_4 \\ \times 10_4 \\ \hline 11200_4 \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 23_4 \\ \hline 203122_4 \end{array}$$

$$\begin{array}{r} 1122_4 \\ \times 23_4 \\ \hline 33132_4 \end{array}$$

$$\begin{array}{r} 1201_4 \\ \times 12_4 \\ \hline 21012_4 \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 32_4 \\ \hline 231010_4 \end{array}$$

$$\begin{array}{r} 1200_4 \\ \times 32_4 \\ \hline 111000_4 \end{array}$$

Multiplying Quaternary Numbers (C)

Calculate each product.

$$\begin{array}{r} 3222_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1222_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3321_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2032_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1100_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3232_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2033_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2222_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1330_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1110_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 131_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1220_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3123_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3203_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2102_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2021_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3302_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2202_4 \\ \times 33_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (C) Answers

Calculate each product.

$$\begin{array}{r} 3222_4 \\ \times 23_4 \\ \hline 220032_4 \end{array}$$

$$\begin{array}{r} 1222_4 \\ \times 3_4 \\ \hline 10332_4 \end{array}$$

$$\begin{array}{r} 3321_4 \\ \times 30_4 \\ \hline 232230_4 \end{array}$$

$$\begin{array}{r} 2032_4 \\ \times 33_4 \\ \hline 201102_4 \end{array}$$

$$\begin{array}{r} 1100_4 \\ \times 20_4 \\ \hline 22000_4 \end{array}$$

$$\begin{array}{r} 3232_4 \\ \times 10_4 \\ \hline 32320_4 \end{array}$$

$$\begin{array}{r} 2033_4 \\ \times 22_4 \\ \hline 112112_4 \end{array}$$

$$\begin{array}{r} 2222_4 \\ \times 2_4 \\ \hline 11110_4 \end{array}$$

$$\begin{array}{r} 1330_4 \\ \times 20_4 \\ \hline 33200_4 \end{array}$$

$$\begin{array}{r} 1110_4 \\ \times 11_4 \\ \hline 12210_4 \end{array}$$

$$\begin{array}{r} 131_4 \\ \times 23_4 \\ \hline 10333_4 \end{array}$$

$$\begin{array}{r} 1220_4 \\ \times 33_4 \\ \hline 120120_4 \end{array}$$

$$\begin{array}{r} 3123_4 \\ \times 21_4 \\ \hline 132303_4 \end{array}$$

$$\begin{array}{r} 3203_4 \\ \times 3_4 \\ \hline 22221_4 \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 22_4 \\ \hline 22330_4 \end{array}$$

$$\begin{array}{r} 2102_4 \\ \times 30_4 \\ \hline 123120_4 \end{array}$$

$$\begin{array}{r} 2021_4 \\ \times 21_4 \\ \hline 103101_4 \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 21_4 \\ \hline 130332_4 \end{array}$$

$$\begin{array}{r} 3302_4 \\ \times 3_4 \\ \hline 23112_4 \end{array}$$

$$\begin{array}{r} 2202_4 \\ \times 33_4 \\ \hline 211332_4 \end{array}$$

Multiplying Quaternary Numbers (D)

Calculate each product.

$$\begin{array}{r} 2302_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3102_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3101_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3101_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2110_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2333_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3022_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 223_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1232_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3323_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2323_4 \\ \times 3_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (D) Answers

Calculate each product.

$$\begin{array}{r} 2302_4 \\ \times 31_4 \\ \hline 210022_4 \end{array}$$

$$\begin{array}{r} 3102_4 \\ \times 10_4 \\ \hline 31020_4 \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 11_4 \\ \hline 23320_4 \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 20_4 \\ \hline 13020_4 \end{array}$$

$$\begin{array}{r} 3101_4 \\ \times 12_4 \\ \hline 103212_4 \end{array}$$

$$\begin{array}{r} 3101_4 \\ \times 23_4 \\ \hline 203323_4 \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 12_4 \\ \hline 12210_4 \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 31_4 \\ \hline 22210_4 \end{array}$$

$$\begin{array}{r} 2110_4 \\ \times 21_4 \\ \hline 110310_4 \end{array}$$

$$\begin{array}{r} 2333_4 \\ \times 22_4 \\ \hline 131312_4 \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 20_4 \\ \hline 103320_4 \end{array}$$

$$\begin{array}{r} 3022_4 \\ \times 3_4 \\ \hline 21132_4 \end{array}$$

$$\begin{array}{r} 223_4 \\ \times 20_4 \\ \hline 11120_4 \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 11_4 \\ \hline 11132_4 \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 30_4 \\ \hline 201000_4 \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 12_4 \\ \hline 32322_4 \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 21_4 \\ \hline 20001_4 \end{array}$$

$$\begin{array}{r} 1232_4 \\ \times 20_4 \\ \hline 31300_4 \end{array}$$

$$\begin{array}{r} 3323_4 \\ \times 32_4 \\ \hline 312322_4 \end{array}$$

$$\begin{array}{r} 2323_4 \\ \times 3_4 \\ \hline 20301_4 \end{array}$$

Multiplying Quaternary Numbers (E)

Calculate each product.

$$\begin{array}{r} 1212_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1330_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1313_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2111_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2302_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2012_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2011_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 210_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1322_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2312_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2110_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3020_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2203_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1033_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2233_4 \\ \times 12_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (E) Answers

Calculate each product.

$$\begin{array}{r} 1212_4 \\ \times 21_4 \\ \hline 32112_4 \end{array}$$

$$\begin{array}{r} 1330_4 \\ \times 10_4 \\ \hline 13300_4 \end{array}$$

$$\begin{array}{r} 1313_4 \\ \times 13_4 \\ \hline 31001_4 \end{array}$$

$$\begin{array}{r} 2111_4 \\ \times 3_4 \\ \hline 12333_4 \end{array}$$

$$\begin{array}{r} 3032_4 \\ \times 31_4 \\ \hline 221312_4 \end{array}$$

$$\begin{array}{r} 2302_4 \\ \times 20_4 \\ \hline 112100_4 \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 12_4 \\ \hline 21132_4 \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 31_4 \\ \hline 100222_4 \end{array}$$

$$\begin{array}{r} 2012_4 \\ \times 33_4 \\ \hline 133122_4 \end{array}$$

$$\begin{array}{r} 2011_4 \\ \times 3_4 \\ \hline 12033_4 \end{array}$$

$$\begin{array}{r} 210_4 \\ \times 31_4 \\ \hline 13110_4 \end{array}$$

$$\begin{array}{r} 1322_4 \\ \times 13_4 \\ \hline 31112_4 \end{array}$$

$$\begin{array}{r} 2312_4 \\ \times 22_4 \\ \hline 130130_4 \end{array}$$

$$\begin{array}{r} 2110_4 \\ \times 23_4 \\ \hline 121130_4 \end{array}$$

$$\begin{array}{r} 2133_4 \\ \times 11_4 \\ \hline 30123_4 \end{array}$$

$$\begin{array}{r} 1012_4 \\ \times 23_4 \\ \hline 30002_4 \end{array}$$

$$\begin{array}{r} 3020_4 \\ \times 13_4 \\ \hline 111320_4 \end{array}$$

$$\begin{array}{r} 2203_4 \\ \times 13_4 \\ \hline 101311_4 \end{array}$$

$$\begin{array}{r} 1033_4 \\ \times 3_4 \\ \hline 3231_4 \end{array}$$

$$\begin{array}{r} 2233_4 \\ \times 12_4 \\ \hline 100122_4 \end{array}$$

Multiplying Quaternary Numbers (F)

Calculate each product.

$$\begin{array}{r} 2103_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 132_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2103_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 221_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1122_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 103_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1022_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3331_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2320_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3233_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 201_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 103_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3223_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2223_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2000_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2200_4 \\ \times 10_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (F) Answers

Calculate each product.

$$\begin{array}{r} 2103_4 \\ \times 12_4 \\ \hline 31302_4 \end{array}$$

$$\begin{array}{r} 132_4 \\ \times 20_4 \\ \hline 3300_4 \end{array}$$

$$\begin{array}{r} 2103_4 \\ \times 13_4 \\ \hline 100011_4 \end{array}$$

$$\begin{array}{r} 221_4 \\ \times 30_4 \\ \hline 13230_4 \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 31_4 \\ \hline 132320_4 \end{array}$$

$$\begin{array}{r} 1122_4 \\ \times 10_4 \\ \hline 11220_4 \end{array}$$

$$\begin{array}{r} 103_4 \\ \times 32_4 \\ \hline 10022_4 \end{array}$$

$$\begin{array}{r} 1022_4 \\ \times 21_4 \\ \hline 22122_4 \end{array}$$

$$\begin{array}{r} 3331_4 \\ \times 11_4 \\ \hline 103301_4 \end{array}$$

$$\begin{array}{r} 310_4 \\ \times 12_4 \\ \hline 10320_4 \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 13_4 \\ \hline 20332_4 \end{array}$$

$$\begin{array}{r} 2320_4 \\ \times 31_4 \\ \hline 211120_4 \end{array}$$

$$\begin{array}{r} 3233_4 \\ \times 21_4 \\ \hline 201213_4 \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 32_4 \\ \hline 212200_4 \end{array}$$

$$\begin{array}{r} 201_4 \\ \times 3_4 \\ \hline 1203_4 \end{array}$$

$$\begin{array}{r} 103_4 \\ \times 2_4 \\ \hline 212_4 \end{array}$$

$$\begin{array}{r} 3223_4 \\ \times 3_4 \\ \hline 23001_4 \end{array}$$

$$\begin{array}{r} 2223_4 \\ \times 11_4 \\ \hline 31113_4 \end{array}$$

$$\begin{array}{r} 2000_4 \\ \times 10_4 \\ \hline 20000_4 \end{array}$$

$$\begin{array}{r} 2200_4 \\ \times 10_4 \\ \hline 22000_4 \end{array}$$

Multiplying Quaternary Numbers (G)

Calculate each product.

$$\begin{array}{r} 3221_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3012_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2022_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1131_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2202_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2002_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 130_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3133_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3231_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3333_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1223_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 231_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3100_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3213_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2123_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1333_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3231_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2123_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2001_4 \\ \times 21_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (G) Answers

Calculate each product.

$$\begin{array}{r} 3221_4 \\ \times 30_4 \\ \hline 223230_4 \end{array}$$

$$\begin{array}{r} 3012_4 \\ \times 30_4 \\ \hline 211020_4 \end{array}$$

$$\begin{array}{r} 2022_4 \\ \times 12_4 \\ \hline 30330_4 \end{array}$$

$$\begin{array}{r} 1131_4 \\ \times 33_4 \\ \hline 111303_4 \end{array}$$

$$\begin{array}{r} 2202_4 \\ \times 22_4 \\ \hline 121110_4 \end{array}$$

$$\begin{array}{r} 1102_4 \\ \times 13_4 \\ \hline 20332_4 \end{array}$$

$$\begin{array}{r} 2002_4 \\ \times 21_4 \\ \hline 102102_4 \end{array}$$

$$\begin{array}{r} 130_4 \\ \times 12_4 \\ \hline 2220_4 \end{array}$$

$$\begin{array}{r} 3133_4 \\ \times 3_4 \\ \hline 22131_4 \end{array}$$

$$\begin{array}{r} 3231_4 \\ \times 11_4 \\ \hline 102201_4 \end{array}$$

$$\begin{array}{r} 3333_4 \\ \times 20_4 \\ \hline 133320_4 \end{array}$$

$$\begin{array}{r} 1223_4 \\ \times 31_4 \\ \hline 111233_4 \end{array}$$

$$\begin{array}{r} 231_4 \\ \times 21_4 \\ \hline 12111_4 \end{array}$$

$$\begin{array}{r} 3100_4 \\ \times 10_4 \\ \hline 31000_4 \end{array}$$

$$\begin{array}{r} 3213_4 \\ \times 23_4 \\ \hline 213231_4 \end{array}$$

$$\begin{array}{r} 2123_4 \\ \times 11_4 \\ \hline 30013_4 \end{array}$$

$$\begin{array}{r} 1333_4 \\ \times 10_4 \\ \hline 13330_4 \end{array}$$

$$\begin{array}{r} 3231_4 \\ \times 2_4 \\ \hline 13122_4 \end{array}$$

$$\begin{array}{r} 2123_4 \\ \times 22_4 \\ \hline 120032_4 \end{array}$$

$$\begin{array}{r} 2001_4 \\ \times 21_4 \\ \hline 102021_4 \end{array}$$

Multiplying Quaternary Numbers (H)

Calculate each product.

$$\begin{array}{r} 3031_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 311_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3102_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1310_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1303_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3211_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1030_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1021_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 322_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 111_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2302_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3133_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1010_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2121_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2232_4 \\ \times 20_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (H) Answers

Calculate each product.

$$\begin{array}{r} 3031_4 \\ \times 10_4 \\ \hline 30310_4 \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 21_4 \\ \hline 20001_4 \end{array}$$

$$\begin{array}{r} 311_4 \\ \times 10_4 \\ \hline 3110_4 \end{array}$$

$$\begin{array}{r} 3102_4 \\ \times 23_4 \\ \hline 210012_4 \end{array}$$

$$\begin{array}{r} 1310_4 \\ \times 22_4 \\ \hline 102020_4 \end{array}$$

$$\begin{array}{r} 1303_4 \\ \times 10_4 \\ \hline 13030_4 \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 13_4 \\ \hline 23003_4 \end{array}$$

$$\begin{array}{r} 3211_4 \\ \times 30_4 \\ \hline 222330_4 \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 2_4 \\ \hline 13000_4 \end{array}$$

$$\begin{array}{r} 1030_4 \\ \times 2_4 \\ \hline 2120_4 \end{array}$$

$$\begin{array}{r} 1021_4 \\ \times 33_4 \\ \hline 101013_4 \end{array}$$

$$\begin{array}{r} 322_4 \\ \times 20_4 \\ \hline 13100_4 \end{array}$$

$$\begin{array}{r} 111_4 \\ \times 30_4 \\ \hline 3330_4 \end{array}$$

$$\begin{array}{r} 2120_4 \\ \times 20_4 \\ \hline 103000_4 \end{array}$$

$$\begin{array}{r} 2302_4 \\ \times 12_4 \\ \hline 100230_4 \end{array}$$

$$\begin{array}{r} 3133_4 \\ \times 3_4 \\ \hline 22131_4 \end{array}$$

$$\begin{array}{r} 1010_4 \\ \times 23_4 \\ \hline 23230_4 \end{array}$$

$$\begin{array}{r} 2121_4 \\ \times 13_4 \\ \hline 100233_4 \end{array}$$

$$\begin{array}{r} 1211_4 \\ \times 32_4 \\ \hline 112012_4 \end{array}$$

$$\begin{array}{r} 2232_4 \\ \times 20_4 \\ \hline 111300_4 \end{array}$$

Multiplying Quaternary Numbers (I)

Calculate each product.

$$\begin{array}{r} 2331_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 231_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2021_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 323_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 300_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1210_4 \\ \times 3_4 \\ \hline \end{array}$$

$$\begin{array}{r} 300_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2303_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2102_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3202_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3112_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2231_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1322_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1010_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 302_4 \\ \times 2_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3031_4 \\ \times 12_4 \\ \hline \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 23_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1101_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2011_4 \\ \times 13_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (I) Answers

Calculate each product.

$$\begin{array}{r} 2331_4 \\ \times 20_4 \\ \hline 113220_4 \end{array}$$

$$\begin{array}{r} 231_4 \\ \times 2_4 \\ \hline 1122_4 \end{array}$$

$$\begin{array}{r} 2021_4 \\ \times 20_4 \\ \hline 101020_4 \end{array}$$

$$\begin{array}{r} 323_4 \\ \times 12_4 \\ \hline 11202_4 \end{array}$$

$$\begin{array}{r} 300_4 \\ \times 31_4 \\ \hline 21300_4 \end{array}$$

$$\begin{array}{r} 1210_4 \\ \times 3_4 \\ \hline 10230_4 \end{array}$$

$$\begin{array}{r} 300_4 \\ \times 22_4 \\ \hline 13200_4 \end{array}$$

$$\begin{array}{r} 2303_4 \\ \times 11_4 \\ \hline 31333_4 \end{array}$$

$$\begin{array}{r} 2102_4 \\ \times 10_4 \\ \hline 21020_4 \end{array}$$

$$\begin{array}{r} 3202_4 \\ \times 20_4 \\ \hline 130100_4 \end{array}$$

$$\begin{array}{r} 3112_4 \\ \times 30_4 \\ \hline 220020_4 \end{array}$$

$$\begin{array}{r} 2231_4 \\ \times 11_4 \\ \hline 31201_4 \end{array}$$

$$\begin{array}{r} 1322_4 \\ \times 20_4 \\ \hline 33100_4 \end{array}$$

$$\begin{array}{r} 1010_4 \\ \times 21_4 \\ \hline 21210_4 \end{array}$$

$$\begin{array}{r} 302_4 \\ \times 2_4 \\ \hline 1210_4 \end{array}$$

$$\begin{array}{r} 3031_4 \\ \times 12_4 \\ \hline 103032_4 \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 23_4 \\ \hline 21303_4 \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 21_4 \\ \hline 133200_4 \end{array}$$

$$\begin{array}{r} 1101_4 \\ \times 22_4 \\ \hline 30222_4 \end{array}$$

$$\begin{array}{r} 2011_4 \\ \times 13_4 \\ \hline 32203_4 \end{array}$$

Multiplying Quaternary Numbers (J)

Calculate each product.

$$\begin{array}{r} 3101_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2203_4 \\ \times 11_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3003_4 \\ \times 20_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2020_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 121_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3121_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3021_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1332_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 113_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 121_4 \\ \times 32_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1132_4 \\ \times 10_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3211_4 \\ \times 13_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1020_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 22_4 \\ \hline \end{array}$$

$$\begin{array}{r} 123_4 \\ \times 30_4 \\ \hline \end{array}$$

$$\begin{array}{r} 1230_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2212_4 \\ \times 21_4 \\ \hline \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 33_4 \\ \hline \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 31_4 \\ \hline \end{array}$$

$$\begin{array}{r} 232_4 \\ \times 2_4 \\ \hline \end{array}$$

Multiplying Quaternary Numbers (J) Answers

Calculate each product.

$$\begin{array}{r} 3101_4 \\ \times 10_4 \\ \hline 31010_4 \end{array}$$

$$\begin{array}{r} 2203_4 \\ \times 11_4 \\ \hline 30233_4 \end{array}$$

$$\begin{array}{r} 3003_4 \\ \times 20_4 \\ \hline 120120_4 \end{array}$$

$$\begin{array}{r} 2020_4 \\ \times 31_4 \\ \hline 123220_4 \end{array}$$

$$\begin{array}{r} 121_4 \\ \times 31_4 \\ \hline 11011_4 \end{array}$$

$$\begin{array}{r} 3121_4 \\ \times 31_4 \\ \hline 230011_4 \end{array}$$

$$\begin{array}{r} 3021_4 \\ \times 13_4 \\ \hline 111333_4 \end{array}$$

$$\begin{array}{r} 1332_4 \\ \times 33_4 \\ \hline 131202_4 \end{array}$$

$$\begin{array}{r} 113_4 \\ \times 22_4 \\ \hline 3212_4 \end{array}$$

$$\begin{array}{r} 121_4 \\ \times 32_4 \\ \hline 11132_4 \end{array}$$

$$\begin{array}{r} 1132_4 \\ \times 10_4 \\ \hline 11320_4 \end{array}$$

$$\begin{array}{r} 3211_4 \\ \times 13_4 \\ \hline 121003_4 \end{array}$$

$$\begin{array}{r} 1020_4 \\ \times 30_4 \\ \hline 31200_4 \end{array}$$

$$\begin{array}{r} 3200_4 \\ \times 22_4 \\ \hline 203000_4 \end{array}$$

$$\begin{array}{r} 123_4 \\ \times 30_4 \\ \hline 11010_4 \end{array}$$

$$\begin{array}{r} 1230_4 \\ \times 33_4 \\ \hline 121110_4 \end{array}$$

$$\begin{array}{r} 2212_4 \\ \times 21_4 \\ \hline 113112_4 \end{array}$$

$$\begin{array}{r} 321_4 \\ \times 33_4 \\ \hline 31113_4 \end{array}$$

$$\begin{array}{r} 2300_4 \\ \times 31_4 \\ \hline 203300_4 \end{array}$$

$$\begin{array}{r} 232_4 \\ \times 2_4 \\ \hline 1130_4 \end{array}$$