

Sample Questions & Answers

Binary to Decimal Conversions

$$0000\ 0000 = 0$$

$$0000\ 0011 = 3$$

$$0000\ 0101 = 5$$

$$0000\ 1101 = 13$$

$$0101\ 1111 = 95$$

$$0110\ 0110 = 102$$

$$1001\ 1001 = 153$$

$$1011\ 0101 = 181$$

$$1111\ 1111 = 255$$

Addition Problems

$$\begin{array}{r} 0001\ 1010 = 26 \\ + 0000\ 1101 = 13 \\ \hline 0010\ 0111 = 39 \end{array}$$

$$\begin{array}{r} 0000\ 0001 = 1 \\ + 0111\ 1111 = 127 \\ \hline 1000\ 0000 = 128 \end{array}$$

$$\begin{array}{r} 1000\ 1000 = 136 \\ + 0010\ 0100 = 36 \\ \hline 1010\ 1100 = 172 \end{array}$$

$$\begin{array}{r} 0101\ 0101 = 85 \\ + 1010\ 1010 = 150 \\ \hline 1111\ 1111 = 255 \end{array}$$

$$\begin{array}{r} 0111\ 1000 = 120 \\ + 0000\ 1111 = 15 \\ \hline 1000\ 0111 = 135 \end{array}$$

Subtraction Problems

$$\begin{array}{r} 1110\ 1000 = 232 \\ - 0000\ 1010 = 10 \\ \hline 1101\ 1110 = 222 \end{array}$$

$$\begin{array}{r} 1001\ 1010 = 154 \\ - 0011\ 0110 = 54 \\ \hline 0110\ 0100 = 100 \end{array}$$

$$\begin{array}{r} 1011\ 0001 = 177 \\ - 0010\ 1111 = 47 \\ \hline 1000\ 0010 = 130 \end{array}$$

$$\begin{array}{r} 1000\ 0001 = 129 \\ - 0010\ 1010 = 42 \\ \hline 0101\ 0111 = 87 \end{array}$$

$$\begin{array}{r} 1000\ 0101 = 133 \\ - 0001\ 0101 = 21 \\ \hline 0111\ 0000 = 112 \end{array}$$