

$$\begin{array}{r} 33 \\ + 15 \\ \hline \end{array} \quad \text{11}$$

$$\begin{array}{r} -128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 0 \quad 0 \quad 1 \quad 0 \quad 0 \quad 0 \quad 0 \quad 1 \end{array} = 32$$

$$\begin{array}{r} -128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 0 \quad 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 1 \quad 1 \end{array} = 15$$

$$\begin{array}{r} 1111 \\ 00100001 \\ + 00001111 \\ \hline 00110000 \end{array}$$

$$\begin{array}{r} -46 \\ +25 \end{array}$$

$$-46 =$$

$$\begin{array}{r} -128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 1 \quad 1 \quad 0 \quad 1 \quad 0 \quad 0 \quad 1 \quad 0 \\ 0 \quad 0 \quad 1 \quad 0 \quad 1 \quad 1 \quad 0 \quad 1 \end{array} \quad \begin{array}{r} \\ \\ +1 \end{array}$$

$$\begin{array}{r} 1 \\ 00101101 \\ +1 \\ \hline 00101110 \end{array}$$

$$\begin{array}{r}
 25 = \\
 -128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\
 \hline
 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 0 \quad 1
 \end{array}$$

$$00101110 = 46$$

$$\begin{array}{r}
 11 \\
 00101110 \\
 + 00011001 \\
 \hline
 01000111
 \end{array}$$

$$\begin{array}{r}
 00110011 \\
 - 00010000 \\
 \hline
 010011
 \end{array}$$

$$\begin{array}{r}
 00010000 \\
 11101111 \\
 + 1
 \end{array}$$

$$11110000$$

$$\begin{array}{r}
 11 \\
 00110011 \\
 + 11110000 \\
 \hline
 00100011 = 35 \checkmark
 \end{array}$$

$$\begin{array}{ccccccc} 0 & \backslash & \backslash & 0 & 0 & \backslash & 0 & \backslash \\ \backslash & \backslash & \backslash & 0 & \backslash & 0 & 0 & 0 \end{array}$$

$$\begin{array}{ccccccc} \backslash & \backslash & \backslash & 0 & \backslash & 0 & 0 & 0 \\ 0 & 0 & 0 & \backslash & 0 & \backslash & \backslash & \backslash \end{array}$$

$$\begin{array}{ccccccc} & & & \backslash & \backslash & \backslash & \backslash \\ 0 & 0 & 0 & \backslash & 0 & \backslash & \backslash & \backslash \\ & & & & & & & + \backslash \end{array}$$

$$000011000$$

$$\begin{array}{r} 01100101 \\ + 00011000 \\ \hline 01111101 \end{array}$$

$$\frac{27}{8} = 3.375$$

$$\frac{3}{8} = 0.375$$

$$\frac{70}{8} = 8.75$$

$$\frac{8}{8} = 1$$

$$3.375(8) = 33(8)$$

$$27(8)$$

$$7 \cdot 8^{(0)} = 7$$

$$2 \cdot 8^{(1)} = 16$$

$$16 + 7 = 23(8)$$

$$64(10)$$

$$4 \cdot 8^0 = 4$$

$$6 \cdot 8^1 = 48$$

$$48 + 4 = 52$$

$$57(8)$$

$$\begin{array}{r} 256 \quad 128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 0 \quad 1 \quad 1 \quad 0 \quad 1 \quad 0 \quad 0 \quad 0 \quad 1 \\ (10 \quad 1000) \end{array}$$

$$7 \cdot 8^0 = 7$$

$$5 \cdot 8^1 = 40$$

$$47 = 101117$$

$$\begin{array}{r} 128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 0 \quad 0 \quad 1 \quad 0 \quad 1 \quad 1 \quad 1 \quad 1 \end{array}$$

$$321(8)$$

$$\begin{array}{r} 192 \\ 16 \\ + 1 \\ \hline 209(17) \end{array}$$

$$\begin{array}{l} 1 \cdot 8^0 = 1 \\ 2 \cdot 8^1 = 16 \\ 3 \cdot 8^2 = 192 \end{array}$$

$2048 \quad 1024 \quad 512 \quad 256 \quad 128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1$
 $\begin{matrix} 1 & 0 & 1 & 1 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 1 \\ 1 & 0 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \end{matrix}$

$$2048 + 512 + 256 + 16 + 8 + 1 = 2841_{(10)}$$

$$1024 + 256 + 128 + 2 + 1 = 1411_{(10)}$$

10110011001
 $\quad \quad \quad 5 \quad 4 \quad \quad 3 \quad \quad 1$

1011000011
 $\quad \quad \quad 2 \quad 6 \quad \quad 0 \quad \quad 3$