

# Opérations en binaire

$$\begin{array}{r} a) \quad 1111, 1011 \\ + 101, 1100 \\ \hline 10101, 0111 \end{array}$$

$$\begin{array}{r} b) \quad 110111, 011 \\ + 10101, 0101 \\ \hline 1001100, 1011 \end{array}$$

$$\begin{array}{r} c) \quad 101, 1101 \\ - 11, 1010 \\ \hline 10, 0011 \end{array}$$

$$\begin{array}{r} d) \quad 10110101 \\ - 101011010 \\ \hline \end{array}$$

$$\begin{array}{r} e) \quad 101101010 \\ - 10110101 \\ \hline - (10100101) \end{array}$$

$$\begin{array}{r} f) \quad 1111, 1100 \\ - 1001, 1101 \\ \hline - (101, 1011) \end{array}$$

$$\begin{array}{r} f) \quad 1011 \\ \times 1001 \\ \hline + 1011 \\ 1011000 \\ - (1100011) \end{array}$$

$$\begin{array}{r} g) \quad 11, 11 \\ \times 10, 01 \\ \hline + 1111 \\ 1111000 \\ \hline 1000, 0111 \end{array}$$

$$\begin{array}{r} h) \quad 10000 \\ \times 10011 \quad (4) \\ \hline 10000 \\ 100000 \\ 1000000 \\ 100110000 \\ \hline 10011, 0000 \end{array}$$

$$10011$$

$$\begin{array}{r} i) \quad 1011101 \overline{) 110} \\ \underline{110} \downarrow \\ 1011 \\ \underline{110} \downarrow \\ 1010 \\ \underline{110} \downarrow \\ 1001 \\ \underline{110} \downarrow \\ 110 \\ \underline{11} \end{array}$$

$$\begin{array}{r} j) \quad 111101, 11 \\ \times 111 \\ \hline 111101, 11 \\ 111101, 11 \\ 111101, 11 \\ \hline 011101, 11 \\ \times 111 \\ \hline 111101, 11 \\ 111101, 11 \\ 111101, 11 \\ \hline 110 \end{array}$$

$$\begin{array}{r} k) \quad 1111010, 001 \\ \times 1011 \\ \hline 1111010, 001 \\ 1111010, 001 \\ 1111010, 001 \\ 1111010, 001 \\ \hline 1111010, 001 \\ 1111010, 001 \\ 1111010, 001 \\ \hline 1111010, 001 \end{array}$$