

# 1) Soma Binária

1111	1111	1111
1101	1001100	01011100
1011 +	1110111 +	00111011 +
11000	11000011	10010111

$$\begin{array}{r}
 111 \\
 111000011 + \\
 10010111 \\
 101011010
 \end{array}$$

$$\begin{array}{r}
 11 \\
 101011010 \\
 11000 + \\
 101110010 \\
 1110001010
 \end{array}$$

## 2) Subtração

$$\begin{array}{r}
 2 \\
 0110 \\
 0110 - \\
 0100
 \end{array}$$

## 3) 10011 para decimal

$$\begin{array}{l}
 1 \times 2^0 = 1 \\
 1 \times 2^1 = 2 \\
 0 \times 2^2 = 0 \\
 0 \times 2^3 = 0 \\
 1 \times 2^4 = 16 = 19
 \end{array}$$

4) Suma Binară

$$\begin{array}{r} 11 \\ 1110 \\ 0111+ \\ \hline 10101 \end{array}$$

5) Subtracție Binară

$$\begin{array}{r} 2 \\ 1001 \\ 0111- \\ \hline 0010 \end{array}$$
 decimal  $9 - 7 = 2$   
 $= 0010$

6) Conversie Decimal  $\rightarrow$  Binară

$$\begin{array}{r} 2512 \\ 1 \ 7212 \\ \hline 7 \ 0 \ 612 \\ \hline 0 \ 312 \\ \hline 1 \ 722 \\ \hline 1 \end{array}$$

11001

7)  $101 + 110 + 100$

$$\begin{array}{r} 1 \\ 101+ \\ 110 \\ 1011 \end{array} \qquad \begin{array}{r} 1011 \\ 100+ \\ 1111 \end{array}$$

$= 1111$

$$\begin{array}{r} 2112 \\ 8 \overline{) 17000} - \\ \underline{1011} \\ 07107 \end{array}$$

1 1

9) 101101 Conversion decimal

$$\begin{array}{l} 1 \times 2^0 = 1 \\ 0 \times 2^1 = 0 \\ 1 \times 2^2 = 4 \\ 1 \times 2^3 = 8 \\ 0 \times 2^4 = 0 \\ 1 \times 2^5 = 32 \end{array}$$

$$32 + 8 + 4 + 1 = 45$$

$$\begin{array}{r} 70 = \\ 11 \\ 111 \\ 1014 = \\ 1120 \end{array}$$

$$7 + 5 = 12$$