BINARIO

Operaciones aritméticas

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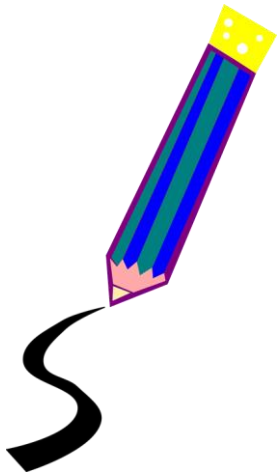
SUMA

$$\begin{array}{r} 0 \\ +\ 0 \\ \hline 0 \end{array} \qquad \begin{array}{r} 0 \\ +\ 1 \\ \hline 1 \end{array} \qquad \begin{array}{r} 1 \\ +\ 0 \\ \hline 1 \end{array} \qquad \begin{array}{r} 1 \\ +\ 1 \\ \hline 10 \end{array}$$



$$\begin{array}{r} 1111 \\ +\ 111 \\ \hline 1011 \end{array}$$

$$\begin{array}{r} 1010 \\ +\ 100 \\ \hline 1110 \end{array} \qquad \begin{array}{r} 1110 \\ +\ 111 \\ \hline 10101 \end{array} \qquad \begin{array}{r} 1111 \\ +\ 1 \\ \hline 10000 \end{array}$$

RESTA

$$11001 - 1101 = 1100$$

$$10000 - 0001 = 1111$$

$$10110_2 \rightarrow 22$$

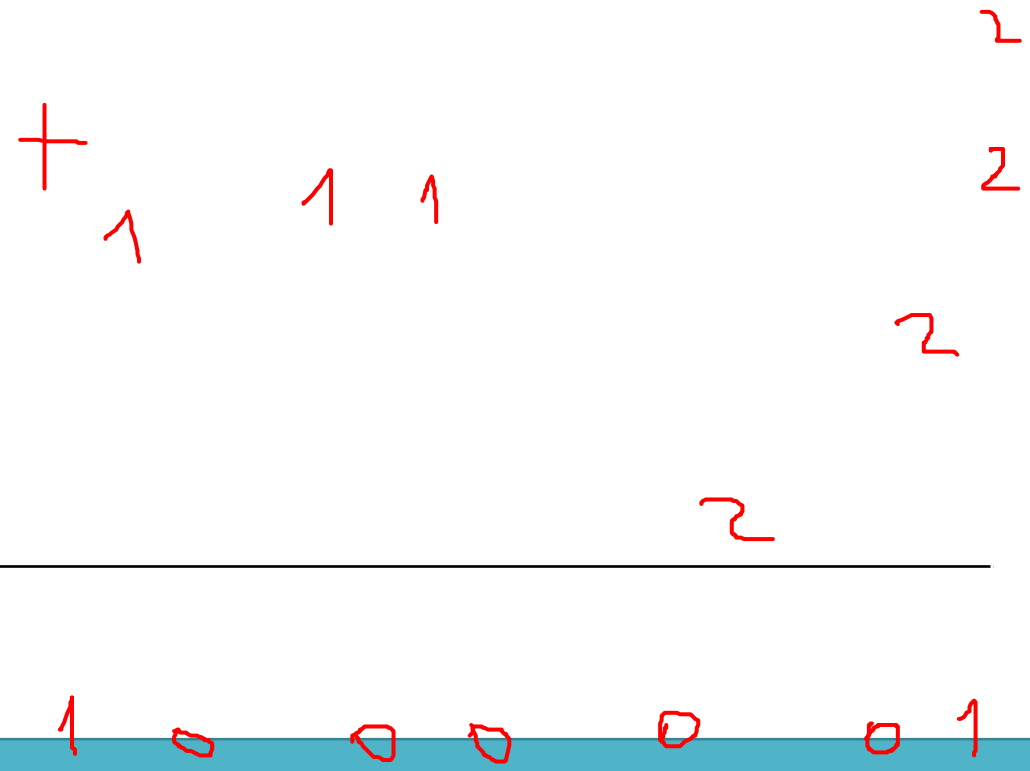
$$- \quad 1111_2 \rightarrow 15$$

$$0111 \rightarrow 7$$

MULTIPLICACION

$$
\begin{array}{r}
1\ 0\ 1 \\
\times\ 1\ 1\ 0\ 1 \\
\hline
\\
\\
\\
\hline
\\
\\
\hline
\end{array}
$$

$$
\begin{array}{r}
1\ ,0\ 1 \\
\times\ 1,\ 0 \\
\hline
0_2 \\
1\ 0\ 1_2 \\
\hline
1,0\ 1\ 0
\end{array}
$$



DIVISION

Ejemplo: 1101/100

```
 1101 | 100
-100    11
  101
 -100
    1
```

```
 1101      | 100
-100         11.01
  101
 -100
    100
   -100
      0
```

DIVISION

3,2 / 2 → 32 / 0 ; 1/16 ⇒ 1,6 { 3,2/2 x 10/10

Ejercicio 15.1

100 x 61,2 / 3,55 x 100

6120 / 355

111001 | 1001
-1001 | 110.0101
01010
-1001
1100
-1001
1100

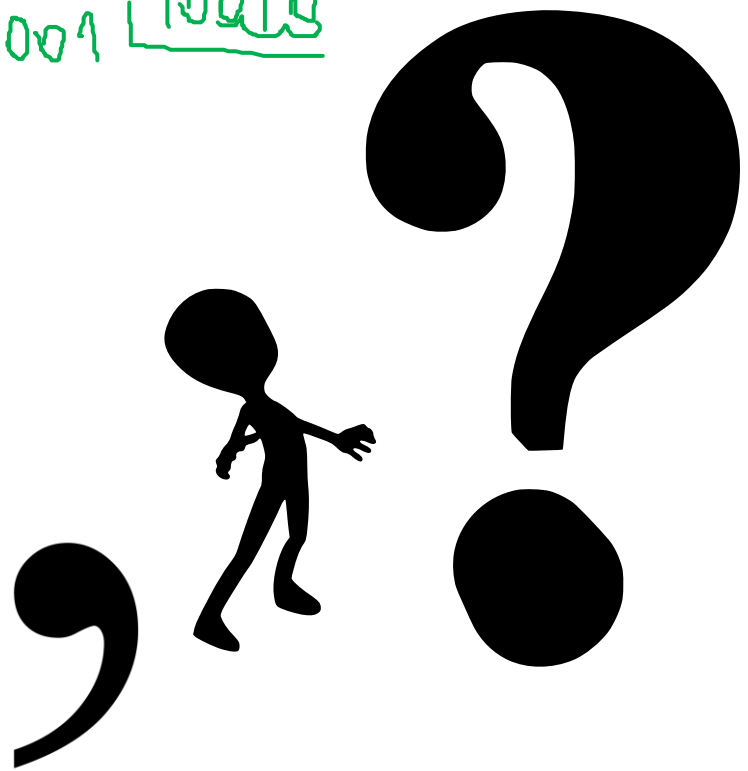
61,2 x1 x100 x100
3,55

15. Resuelva los siguientes cocientes binarios.

15.1.- 111001 / 1001
a) 11,101
b) 100,101
c) 110,01 periódico
d) 111,101

15.2.- 111,001 / 10,01
a) 110,01
b) 1,001
c) 0,000111
d) 11,001 periódico

111001 | 1001 0 1



FIN

¡Nos preparamos para saber como se almacena internamente la información!