

# BASES DE NUMERACIÓN

## Conteo

2	8	10	16	20
0	0	0	0	0
1	1	1	1	1
10	2	2	2	2
11	3	3	3	3
100	4	4	4	4
101	5	5	5	5
110	6	6	6	6
111	7	7	7	7
1000	10	8	8	8
1001	11	9	9	9
1010	12	10	a	a
1011	13	11	b	b
1100	14	12	c	c
1101	15	13	d	d
1110	16	14	e	e
1111	17	15	f	f
10000	20	16	10	g
10001	21	17	11	h
10010	22	18	12	i
10011	23	19	13	j
10100	24	20	14	10

## Cambio de base 10 a otras

2	8	10	16	20
Parte entera $123\%2=1$ $123//2=61$  $61\%2=1$ $61//2=30$  $30\%2=0$ $30//2=15$  $15\%2=1$ $15//2=7$  $7\%2=1$ $7//2=3$  $3\%2=1$ $3//2=1 \uparrow$  <b>1111011</b>  Parte fraccionaria $0.45*2=0.9 \downarrow$ $0.9*2=1.8$ $0.8*2=1.6$ $0.6*2=1.2$ $0.2*2=0.4$ $0.4*2=0.8$ $0.8*2=1.6$ $0.6*2=1.2$ ...  <b>0.01110011...</b>  Resultado <b>-1111011.01110011...</b>	Parte entera $123\%8=3$ $123//8=15$  $15\%8=7$ $15//8=1 \uparrow$  <b>173</b>  Parte fraccionaria $0.45*8=3.6$ $\downarrow 0.6*8=4.8$ $0.8*8=6.4$ ...  <b>0.346...</b>  Resultado <b>-173.346...</b>	<b>-123.45</b>	Parte entera $123\%16=11$ ( <b>b</b> ) $123//16=7 \uparrow$  <b>7b</b>  Parte fraccionaria $0.45*16=7.2 \downarrow$ $0.2*16=3.2$ ...  <b>0.73...</b>  Resultado <b>-7b.73...</b>	Parte entera $123\%20=3$ $123//20=6 \uparrow$  <b>63</b>  Parte fraccionaria $0.45*20=9.0$  <b>0.9</b>  Resultado <b>-63.9</b>

## Cambio de otras bases a base 10

<b>2</b>	<b>8</b>	<b>10</b>	<b>16</b>	<b>20</b>
<b>1111011.01110011</b> $2^6 + 2^5 + 2^4 + 2^3 + 2^1 + 2^0 + 2^{-2} + 2^{-3} + 2^{-4} + 2^{-7} + 2^{-8} = 123,57421875$	<b>173.346</b> $1 * 8^2 + 7 * 8^1 + 3 * 8^0 + 3 * 8^{-1} + 4 * 8^{-2} + 6 * 8^{-3} = 123.44921875$	<b>123.45</b> = $1 * 10^2 + 2 * 10^1 + 3 * 10^0 + 4 * 10^{-1} + 5 * 10^{-2}$	<b>7b.73</b> $7 * 16^1 + 11 * 16^0 + 7 * 16^{-1} + 3 * 16^{-2} = 123,44921875$	<b>63.9</b> $6 * 20^1 + 3 * 20^0 + 9 * 20^{-1} = 123,45$