

$$- 101'11_{10} = 101_{10} + 11_{10} = 1100101,0001_2 \text{ (sumando a 4 dígitos)}$$

$$101:2 = 50 \rightarrow \text{resto } 1$$

$$50:2 = 25 \rightarrow 0$$

$$25:2 = 12 \rightarrow 1$$

$$12:2 = 6 \rightarrow 0$$

$$6:2 = 3 \rightarrow 0$$

$$3:2 = 1 \rightarrow 1$$

*digitos no significativos*

$$0'11 \times 2 = 0'22 \rightarrow \text{resto entero } 0$$

$$0'22 \times 2 = 0'44 \rightarrow 0$$

$$0'44 \times 2 = 0'88 \rightarrow 0$$

$$0'88 \times 2 = 1'76 \rightarrow 1$$

$$0'76 \times 2 = 1'52 \rightarrow 1$$

$$0'52 \times 2 = 1'04 \rightarrow 1$$

$$0'04 \times 2 = 0'08 \rightarrow 0$$

*← dígitos no significativos*

$$- 666_{10} = 333 = 166 = 83 = 41 = 20 = 10 = 5 = 2 = 1 \rightarrow 1010011010_2$$

$$- 1011011100_2 = 1 \cdot 2^7 + 0 \cdot 2^6 + 1 \cdot 2^5 + 1 \cdot 2^4 + 0 \cdot 2^3 + 1 \cdot 2^2 + 1 \cdot 2^1 + 0 \cdot 2^0 = 512 + 128 + 64 + 16 + 8 + 4 = 732_{10}$$

$$- 10110,111_2 = 1 \cdot 2^4 + 0 \cdot 2^3 + 1 \cdot 2^2 + 1 \cdot 2^1 + 0 \cdot 2^0 + 1 \cdot 2^{-1} + 1 \cdot 2^{-2} + 1 \cdot 2^{-3} = 22'875_{10}$$

$$- 125784_{10} = 1E358_{16}$$

$$125784:16 = 7861 \rightarrow \text{resto } 8$$

$$7861:16 = 491 \rightarrow 5$$

$$491:16 = 30 \rightarrow 11 \equiv B$$

$$30:16 = 1 \rightarrow 14 \equiv E$$

*digitos no significativos*

$$A \equiv 10$$

$$B \equiv 11$$

$$C \equiv 12$$

$$D \equiv 13$$

$$E \equiv 14$$

$$F \equiv 15$$

$$- 10110111,1101_2 \rightarrow \text{agrupar por 4 dígitos y luego a octal}$$

$$(2^3 = 8)$$

$$\rightarrow \underbrace{0101}_{2} \underbrace{1011}_{6} \underbrace{11}_{7}, \underbrace{1101}_{6} \underbrace{00}_{4} = 267'164_8$$

$$- 345,61_8 \rightarrow \text{agrupar por 4 dígitos y luego a hexadecimal}$$

$$(2^4 = 16)$$

$$\rightarrow 345'61_8 = \underbrace{011}_{4} \underbrace{100}_{14 \equiv E} \underbrace{101}_{5}, \underbrace{1100}_{12 \equiv C} \underbrace{01}_{4} = E5,C4_{16}$$

$$- A8B34_{16} \rightarrow \text{agrupar por 4 dígitos y luego a octal}$$

$$\rightarrow \underbrace{1010}_{2} \underbrace{1000}_{8} \underbrace{1011}_{5} \underbrace{0011}_{3} \underbrace{0100}_{4} = 2505464_8$$

$$- CAFE_{16} \rightarrow \text{agrupar por 4 dígitos y luego a octal}$$

$$\rightarrow \underbrace{1100}_{1} \underbrace{1010}_{4} \underbrace{1111}_{3} \underbrace{1110}_{7} = 145376_8$$

$$- \text{DECADA}_{16} = 13 \cdot 16^5 + 14 \cdot 16^4 + 12 \cdot 16^3 + 10 \cdot 16^2 + 11 \cdot 16^1 + 10 \cdot 16^0 = 14600922_{10}$$