

**Exercícios para entregar: Faça as conversões, mostrando o cálculo (sem usar a calculadora):**

1)  $11001100_2 = X_{10}$   
 $1\ 1\ 0\ 0\ 1\ 1\ 0\ 0$   
 $2^7 + 2^6 + 2^5 + 2^4 + 2^3 + 2^2 + 2^1 + 2^0$   
 $128 + 64 + 8 + 4$   
 $204_{10}$

2)  $11001100_2 = X_{16}$   
 1100 1100

1100	C
1100	C

$CC_{16}$

3)  $114_{10} = X_{16}$   
 0111 0010

0111	7
0010	2

$72_{16}$

4)  $114_{10} = X_2$

Operação	Quociente	Resto
114 / 2	57	0
57 / 2	28	1
28 / 2	14	0
14 / 2	7	0
7 / 2	3	1
3 / 2	1	1
1 / 2	0	1

$1110010_2$

5)  $FA7_{16} = X_{10}$   
 $1\ 1\ 1\ 1\ 1\ 0\ 1\ 0\ 0\ 1\ 1\ 1_2$   
 $2^{11} + 2^{10} + 2^9 + 2^8 + 2^7 + 2^6 + 2^5 + 2^4 + 2^3 + 2^2 + 2^1 + 2^0$   
 $2048 + 1024 + 512 + 256 + 128 + 32 + 4 + 2 + 1$   
 $4007_{10}$

6)  $FA7_{16} = X_2$

1111	F
1010	A
0111	7

$1111\ 1010\ 0111_2$

7)  $10101110_2 = X_{10}$   
 $1\ 0\ 1\ 0\ 1\ 1\ 1\ 0$   
 $2^7 + 2^6 + 2^5 + 2^4 + 2^3 + 2^2 + 2^1 + 2^0$   
 $128 + 32 + 8 + 4 + 2$   
 $174_{10}$

8)  $10101110_2 = X_{16}$

1010	1110
1010	A
1110	E

$AE_{16}$

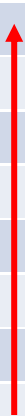
9)  $135_{10} = X_{16}$

1000	0111
1000	8
0111	7

$87_{16}$

10)  $135_{10} = X_2$

Operação	Quociente	Resto
135 / 2	67	1
67 / 2	33	1
33 / 2	16	1
16 / 2	8	0
8 / 2	4	0
4 / 2	2	0
2 / 2	1	0
1 / 2	0	1



$10000111_2$

11)  $CE9_{16} = X_{10}$

1	1	0	0	1	1	1	0	1	0	0	1
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$2^{11} + 2^{10} + 2^9 + 2^8 + 2^7 + 2^6 + 2^5 + 2^4 + 2^3 + 2^2 + 2^1 + 2^0$   
 $2048 + 1024 + 128 + 64 + 32 + 8 + 1$   
 $3305_{10}$

12)  $CE9_{16} = X_2$

1100	C
1110	E
1001	9

$1100\ 1110\ 1001_2$