1.1 $28_{(10)}$

1.1.1 (binário)

$$\begin{array}{r|l} 28 & 2 \\ -28 & 14 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 14 & 2 \\ -14 & 7 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 7 & 2 \\ -6 & 3 \\ \hline 1 & \end{array} \quad \begin{array}{r|l} 3 & 2 \\ -2 & 1 \\ \hline 1 & \end{array}$$

$11100_{(2)} = 28_{(10)}$

1.1.2 (octal)

$$\begin{array}{r|l} 28 & 8 \\ -24 & 3 \\ \hline 4 & \end{array}$$

$34_{(8)} = 28_{(10)}$

1.1.3 (hexadecimal)

$$\begin{array}{r|l} 28 & 16 \\ -16 & 1 \\ \hline 12 & \end{array}$$

$12 = C$

$1C_{(16)} = 28_{(10)}$

1.2 $(160)_{10}$

1.2.1 (binário)

$$\begin{array}{r|l} 160 & 2 \\ -160 & 80 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 80 & 2 \\ -80 & 40 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 40 & 2 \\ -40 & 20 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 20 & 2 \\ -20 & 10 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 10 & 2 \\ -10 & 5 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 5 & 2 \\ -4 & 2 \\ \hline 1 & \end{array} \quad \begin{array}{r|l} 2 & 2 \\ -2 & 1 \\ \hline 0 & \end{array}$$

$10100000_{(2)} = 160_{(10)}$

1.2.2 (octal)

160 | 8
-160 | 20 | 8
0 | -16 | 2
4

240 (8) = 160 (10)

1.2.3 (hexadecimal)

160 | 16
-160 | 10 | 16
0 | 0

10 = A A0 (16) = 160 (10)

1.3 - 131 (10)

1.3.1 (binário)

131 | 2
130 | 65 | 2
1 | -64 | 32 | 2
1 | -32 | 16 | 2
0 | -16 | 8 | 2
0 | -8 | 4 | 2
0 | -4 | 2 | 2
0 | -2 | 1
0

10000011 (2) = 131 (10)

1.3.2 (octal)

131 | 8
128 | 16 | 8
003 | -16 | 2
0

203 (8) = 131 (10)

1.3.3 (hexadecimal)

131 | 16
-128 | 8
003

83 (16) = 131 (10)

(11)

1.4 $(FA1)_{(16)}$

1.4.1 (decimal)

16^2	16^1	16^0
F	A	1

F = 15

A = 10

(1.1) + (16.10) + (256.15)

1 + 160 + 3840

$FA1_{(16)} = 4001_{(10)}$

1.4.2 (binário)

- F - 15 - 1111
- A 10 - 1010
- 1 - 0001

$1111\,1010\,0001_{(2)} = FA1_{(16)}$

1.4.3 (octal)

1111 1010 0001

7641 (8) = FA1 (16)

1 → 4

6 → 6

7 → 7

1.5. $(63)_{(8)}$

1.5.1 (decimal)

8^1	8^0
6	3

(1.3) + (8.6)

3 + 48

$51_{(10)} = 63_{(8)}$

1.5.2(2)

-6 = 110 $\quad$ $110011_{(2)} = 63_{(8)}$
-3 = 011

1.5.3(6)

xx110011

$33_{(16)} = 63_{(8)}$

-0011 = 3
-0011 = 3