

1. Convertir 1110111 de base 2 a base 5

$(1110111)_2 \times_{10} \times_5$

1 1 1 0 1 1 1

$$1 \times 2^6 + 1 \times 2^5 + 1 \times 2^4 + 0 \times 2^3 + 1 \times 2^2 + 1 \times 2^1 + 1 \times 2^0 = 64 + 32 + 16 + 4 + 2 + 1 =$$

$(119)_{10}$

119_{10}	X_5
23	4
4	3
0	4

$(1110111)_2 \text{ ----- } 119_{10} \text{ ----- } 434_5$

2. Convertir 120 en base 3 a base 9

$(120)_3 \text{ ----- } X_{10} \text{ ----- } X_9$

$$1 \times 3^2 + 2 \times 3^1 + 0 \times 3^0 = 9 + 6 = (15)_{10}$$

15_{10}	X_9
1	6
0	1

$(120)_3 \text{ ----- } 15_{10} \text{ ----- } 16_9$

3. Convertir AABB de base 12 a base 2

$(AABB)_{12} \text{ ----- } X_{10} \text{ ----- } X_2$

$$10 \times 12^3 + 10 \times 12^2 + 11 \times 12^1 + 11 \times 12^0 = 17280 + 1440 + 132 + 11 = (18863)_{10}$$

18863_{10}	X_2
9431	1
4715	1
2357	1
1178	1
589	0
294	1
147	0
73	1
36	1
18	0
9	0
4	1
2	0
1	0
0	1

$(AABB)_3$ ----- $(18863)_{10}$ ----- $(100100110101111)_2$