Alph Numeric

→ ASCII

→ 8 4 2 $\frac{1}{1}$ ← ω
→ 1 0 1 0 ← Code

8×1+0×1+1×2+0×1

8 + 2 = 10

→ 3 3 2 1 — ω
1 0 1 0 ← Code

3 + 0 + 2 + 0

5

→ 2 4 2 1 ← ω
1 0 0 1 ← Code

2 + 0 + 0 + 1 → 3 dre

Numeric Code → Binary Caled Decimal
Code

→ Weighted   → Non-Weighted
                        → Gray Code
→ 8421
→ 3321   → Excess - Code
→ 2421
                    → 1's
→ 2's Complement

4bit $-2^3 \; 2^2 \; 2^1 \; 2^0$
2's   →   1 0 1 1 → -5

→ -8 + 2 + 1
→ - 5

1's → Nonweight Code

→ Sequential & self - Complementry Code

$2^3 \; 2^2 \; 2^1 \; 2^0$
→ 0 → 0000 → +1
   1 → 0001
   2 → 0010 ←
   3 → 0011 ←
   4 → 0100 ←

Sequential Code

↳ eg

           2 4 2 $\frac{1}{0}$ ← 4
1's (0 1 0 0   ) 9's
           1 0 1 1   ← 5

9's
10's

        9
       -4
      ___
        5

→ 2 4 2 1
1's (→ 0 0 1 1 → 3   ) 9's
        → 1 1 0 0 → 6
              9
           — 3/36

→ 2421
0 → 0000
1 → 0001

2 → 1000
     0010

1 → 0001
2 → 0010
3 → 0011
4 → 0100
_____
5 → 1011
6 → 1100
7 → 1101
8 → 1110
9 → 1111

24' 0010

3 < $\begin{array}{l}1001\\0011\end{array}$

4 < $\begin{array}{l}0100\\1010\end{array}$

8 < $\begin{array}{l}1011\\0101\end{array}$

9

4's → $\dfrac{9}{4}$

5

2421

1101

(7)