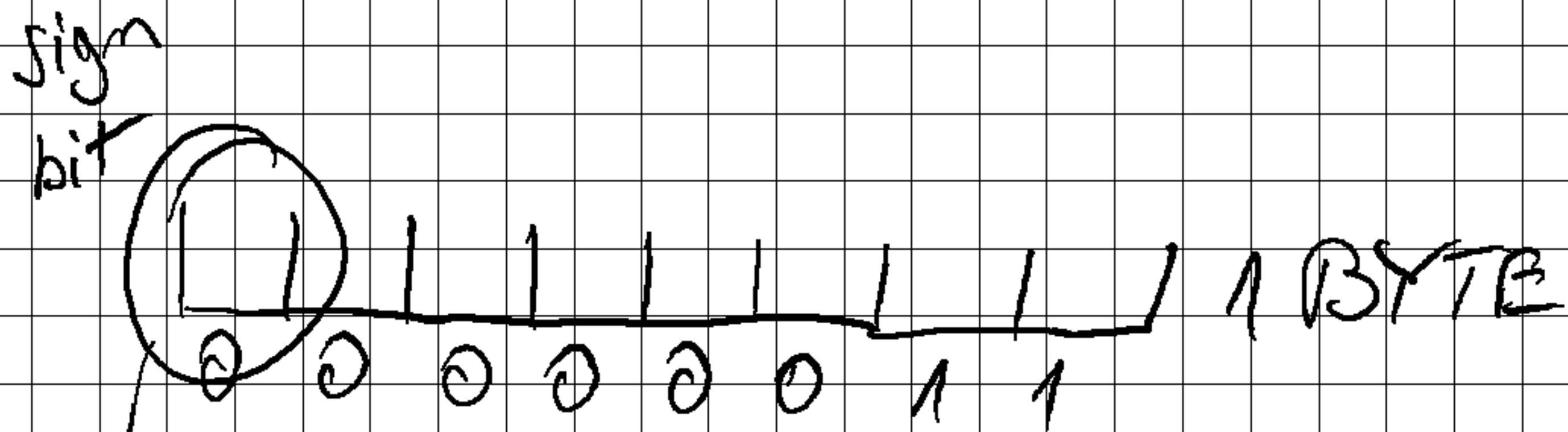


Complementary Code



0 - positive number
1 - negative number

$$[0, 255] \Rightarrow [-128, 127]$$

$$3 = 00000011$$

$$-3 = 10000011$$

$$7_{(10)} = 111_{(2)}$$

$$-7 = \begin{array}{r} 00000111 \downarrow \\ 10000111 \downarrow \sim \text{(negate)} \\ 11111000 \downarrow +1 \\ 11111001 \end{array}$$

$$-9 = \begin{array}{r} 00001001 \downarrow \\ 10001001 \downarrow \sim \\ 11110110 \downarrow +1 \\ 11110111 \end{array}$$

1110110011101101

$$\sum b_{(10)} \Rightarrow 1 \cdot 2^{11} + 1 \cdot 2^{10} + \dots = n$$

$$n_{(10)} \Rightarrow b_{(16)}$$

II 1110110011101101
E C E D

Homework : C \Rightarrow no. 8
A. \Rightarrow no. 9