

## Review Questions

- ❖ What is the *decimal value* of the numeral  $107_8$ ?
  - A. 71
  - B. 87
  - C. 107
  - D. 568
- ❖ What is the decimal number 108 in hex?
  - A. 0x6C
  - B. 0xA8
  - C. 0x108
  - D. 0x612
- ❖ Represent  $0b100110110101101$  in hex.
- ❖ Represent 0x3C9 in binary.

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## Base Comparison

- ❖ Why does all this matter?
  - Humans think about numbers in **base 10**, but *computers* “think” about numbers in **base 2**
  - **Binary encoding** is what allows computers to do all the amazing things that they do!
- ❖ You should have this table memorized by the end of the class
  - Might as well start now 😊

Base 10	Base 2	Base 16
0	0000	0
1	0001	1
2	0010	2
3	0011	3
4	0100	4
5	0101	5
6	0110	6
7	0111	7
8	1000	8
9	1001	9
10	1010	A
11	1011	B
12	1100	C
13	1101	D
14	1110	E
15	1111	F

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