

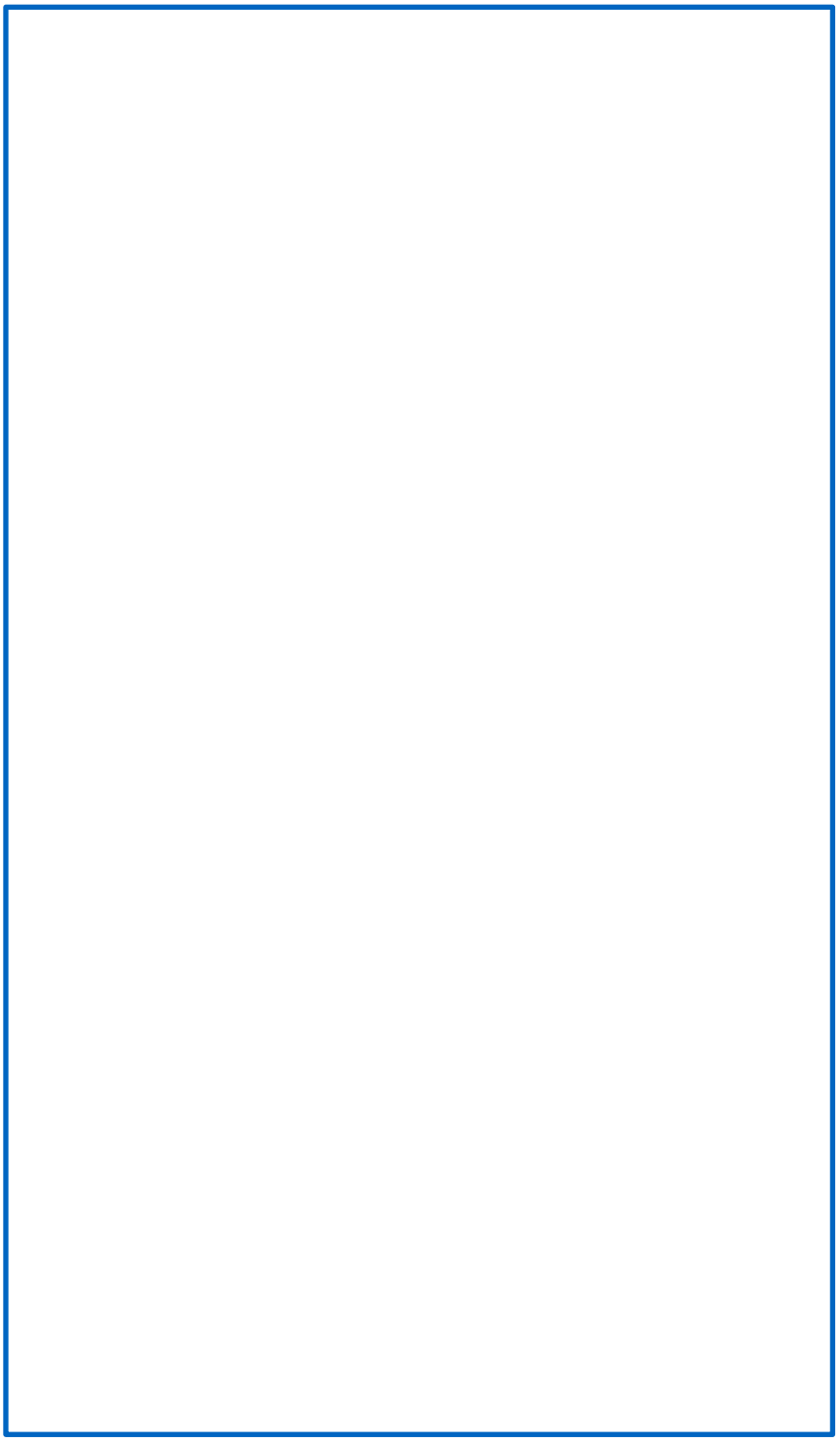


# unit 1









*Hexadecimal*  
*Digit*

*Binary*  
*Nibble*

0<sub>16</sub>



0000<sub>2</sub>

1<sub>16</sub>



0001<sub>2</sub>

2<sub>16</sub>



0010<sub>2</sub>

3<sub>16</sub>



0011<sub>2</sub>

4<sub>16</sub>



0100<sub>2</sub>

5<sub>16</sub>



0101<sub>2</sub>

6<sub>16</sub>



0110<sub>2</sub>

7<sub>16</sub>



0111<sub>2</sub>

8<sub>16</sub>



1000<sub>2</sub>

9<sub>16</sub>



1001<sub>2</sub>

A<sub>16</sub>



1010<sub>2</sub>

B<sub>16</sub>



1011<sub>2</sub>

C<sub>16</sub>



1100<sub>2</sub>

D<sub>16</sub>



1101<sub>2</sub>

E<sub>16</sub>



1110<sub>2</sub>

F<sub>16</sub>



1111<sub>2</sub>

1

1

1

1

1

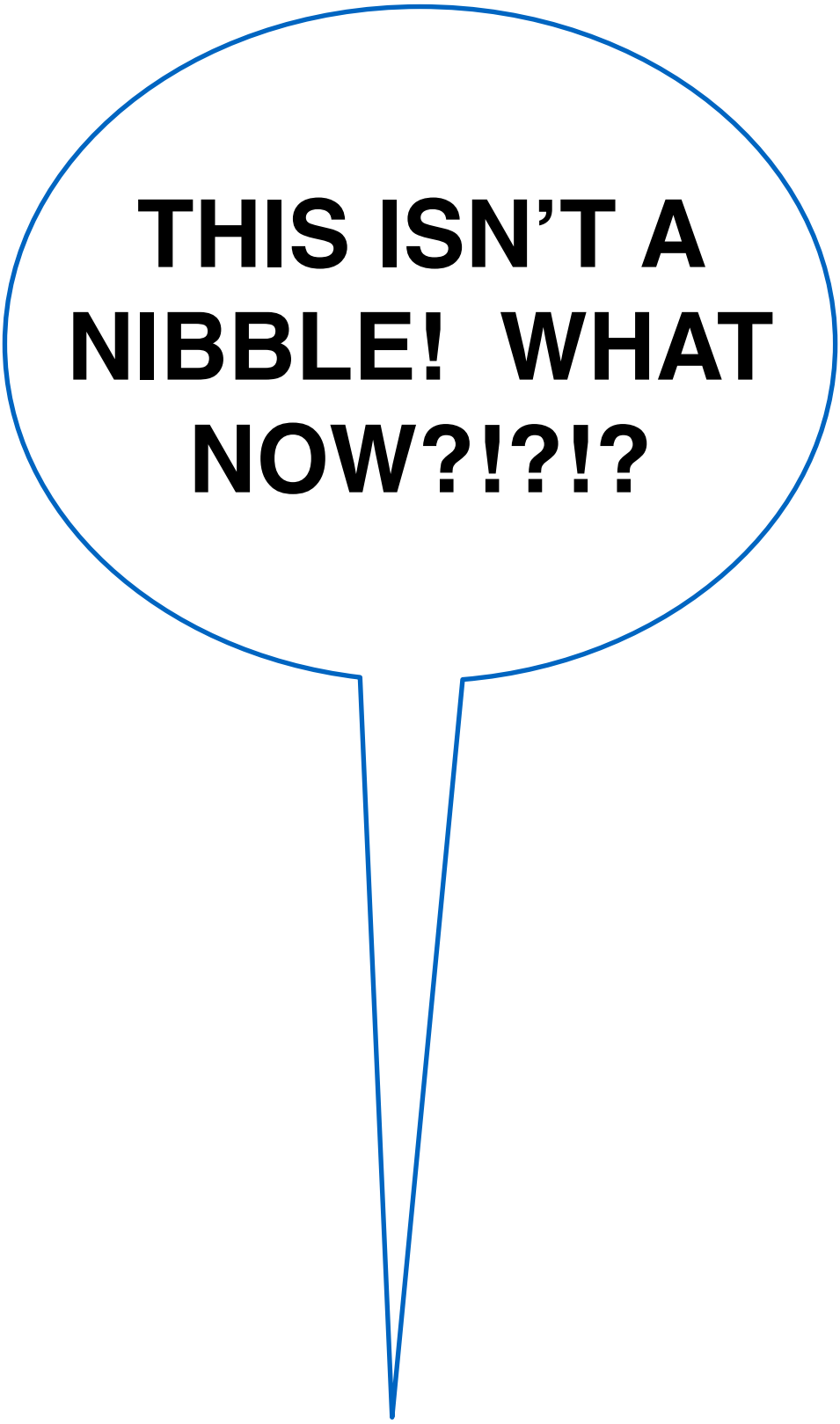
1



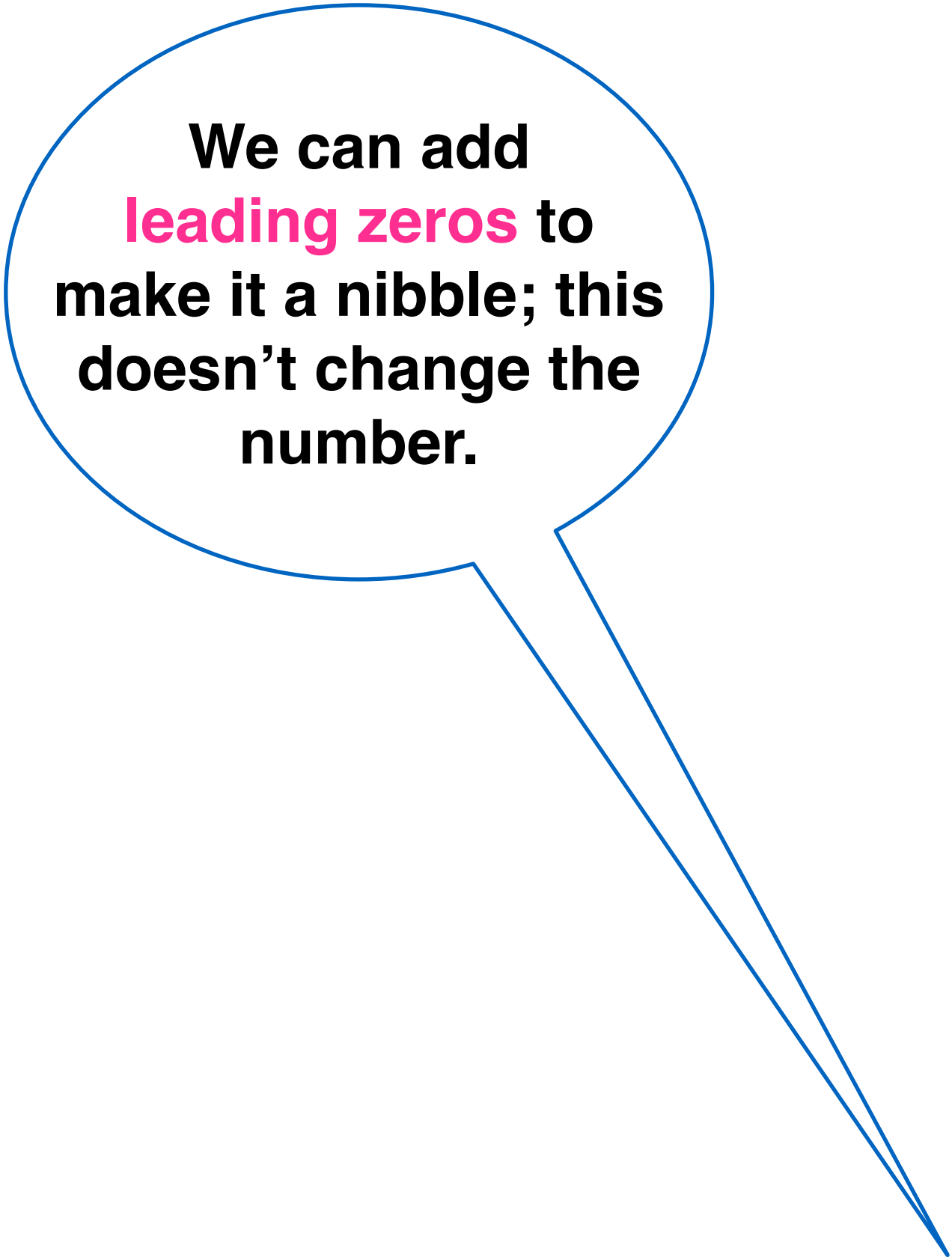


0101

5



**THIS ISN'T A  
NIBBLE! WHAT  
NOW?!?!?**



**We can add  
leading zeros to  
make it a nibble; this  
doesn't change the  
number.**



# unit 1

We can add **leading zeros** to make it a nibble; this doesn't change the number.

THIS ISN'T A NIBBLE! WHAT NOW?!?!?

Map  $110101_2$  to hex.

$110101_2$

$5_{16}$

$00110101_2$

$35_{16}$

Hexadecimal

Digit

Binary

Nibble

$0_{16} \leftrightarrow$

$0000_2$

$1_{16} \leftrightarrow$

$0001_2$

$2_{16} \leftrightarrow$

$0010_2$

$3_{16} \leftrightarrow$

$0011_2$

$4_{16} \leftrightarrow$

$0100_2$

$5_{16} \leftrightarrow$

$0101_2$

$6_{16} \leftrightarrow$

$0110_2$

$7_{16} \leftrightarrow$

$0111_2$

$8_{16} \leftrightarrow$

$1000_2$

$9_{16} \leftrightarrow$

$1001_2$

$A_{16} \leftrightarrow$

$1010_2$

$B_{16} \leftrightarrow$

$1011_2$

$C_{16} \leftrightarrow$

$1100_2$

$D_{16} \leftrightarrow$

$1101_2$

$E_{16} \leftrightarrow$

$1110_2$

$F_{16} \leftrightarrow$

$1111_2$

# unit 1

## Hexadecimal Numbers and you