

CS 5541 - Computer Systems
Spring 2019
In-Class Exercise 1
Integer Representations

1) What is the range of decimal values that a 4-bit two's complement integer can express?

_____ **-8** _____ to _____ **7** _____

2) What is the range of decimal values that a 6-bit unsigned integer can express?

_____ **0** _____ to _____ **63** _____

3) Fill in the following table with the missing values. Do NOT use a calculator or online tool. Please convert the values by hand (just some review practice).

Binary (Base 2)	Hexadecimal (Base 16)	Decimal (Base 10)
10110001	B1	177
00001111	0F	15
10001001	89	137
10011010	9A	154