



Name:

Date:

Section:

Grade:

5.0 Character Representation and Bitwise Logic Operations

5.1 Instruction: Arrange the following in descending order [12 pts]:

<p>Orange !Orange orange 0range "o"range ORANGE</p>	
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Note: Remember that each letter or character is actually represented as ASCII and has a numerical equivalent. Use the numerical equivalent to determine the order of the words, one character at a time.

5.2 Instruction: Identify the output of the following code snippets. [12 pts]:

```
char a = 'A';
```

```
char b = 'B';
```

printf("%c", (a+8));	
printf("%c", (a-8));	
printf("%c", b);	
printf("%c", (b-20));	
printf("%c", (b-a));	

5.3 Instruction: Complete the table below by identifying the result of the following bitwise operations. Write your answers in hexadecimal format. Do not forget to write the letter suffix on your answers [24 pts]:

NOT 1AEFh	=	
NOT FACEh	=	
55h AND AAh	=	
C8h AND 34h	=	
55h OR AAh	=	
C8h OR 34h	=	
3Dh XOR D3h	=	
FFh XOR A5h	=	

Note: Bitwise means to perform the Logic Function on one-bit-at-a-time. Try to convert the values first to binary, then perform the Logic Function one-bit-at-a-time.