UVa Email ID (no aliases please): _mgs4ff_____

Name ____Maddie Stigler____ Lab section __104_____

Lab 4 - Radix Conversion Worksheet

Convert:

1. 0x4F45 into octal

4F45 = 0100 1111 0100 0101 Binary
0 100 111 101 000 101 = **4 7 5 0 5**

2. 269_{10} into radix 7

269/7 = 38r3
38/7 = 5r3
5/6 = 0r5
= **533**

3. 110011011110_2 into decimal

2^1 + 2^2 + 2^3 + 2^4 + 2^6 + 2^7 + 2^10 + 2^11 = 2 + 4 + 8 + 16 + 64 + 128 + 1024 + 2048 = **3294**

4. $2BD_{19}$ into decimal

2x19^2 + 11x19^1 + 13x19^0 = **944**

5. Given the following positive binary integer in two's complement: 0101001101011101

    a) Convert the number to hexadecimal:

0101 0011 0101 1101 = **5 3 5 D**

    b) Negate the number.

1010 1100 1010 0010 + 1 = **1010 1100 1010 0011**