UVa Email ID (no aliases please): _____gtg3vv_____

Name __Gabriel Groover_____ Lab section _101 ___

Lab 4 - Radix Conversion Worksheet

Convert:

1. 0x4F45 into octal

In binary: 0100 1111 0100 0101
To octal: 0 100 111 101 000 101
4 7 5 0 5

2. 269_{10} into radix 7

269/7 = 38 r 3
38/7 = 5 r 3
5/7 = 0 r 5
533

3. 110011011110_2 into decimal

2^11 + 2^10 + 2^7 + 2^6 + 2^4 + 2^3 + 2^2 + 2 = 3294

4. $2BD_{19}$ into decimal

2*19^2 + B*19^1 + D*19^0
2*19^2 + 11*19 + 13 = 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 13
   0x535D

   b) Negate the number.
   1010110010100010 + 1
   1010110010100011