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Name _Wright Kim_____ Lab section _104____

Lab 4 - Radix Conversion Worksheet

Convert:

1. 0x4F45 into octal

0x4f45 (hex) → 0 100 111 101 000 101 (binary) → 047505 (octal)

2. 269_{10} into radix 7

269
7 | 38 – 3 533 (radix 7)
7 | 5 – 3
7 | 0 – 5

3. 110011011110_2 into decimal

2^11 + 2^10 + 2^7 + 2^6 + 2^4 + 2^3 + 2^2 + 2^1 = 3294

4. $2BD_{19}$ into decimal

2*19^2 + 11*19^1 + 13*19^0 = 944

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

   a) Convert the number to hexadecimal:

0101 0011 0101 1101 → 0x535D

   b) Negate the number.

Flip the bits 1010 1100 1010 0010, add 1→ 1010 1100 1010 0011