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## Lab 4 - Radix Conversion Worksheet

Convert:

1.  $0x4F45$  into octal

0100 1111 0100 0101

000 100 111 101 000 101

0 4 7 5 0 5

**47505**

2.  $269_{10}$  into radix 7

$267/7 = 38 \text{ R } 3$

$38/7 = 5 \text{ R } 3$

$5/7 = 0 \text{ R } 5$

**533**

3.  $110011011110_2$  into decimal

1100 1101 1110

C D E = 0xcdc

$12(16^2) + 13(16) + 14(1) = \mathbf{3294}$

4.  $2BD_{19}$  into decimal

$(1)(13) + (19^1)(11) + (19^2)(2) = \mathbf{944}$

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

**0x535d**

b) Negate the number.

1010 1100 1010 0010 + 1 =

**1010 1100 1010 0011**