

// Dion Niazi dn3gy 14 02 2017 radixWorksheet.pdf

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Lab 4 - Radix Conversion Worksheet

Convert:

1. $0x4F45$ into octal

0100 1111 0100 0101
 100 111 101 000 101
 4 7 5 0 5
 47505_8

2. 269_{10} into radix 7

$269/7 = 38 \text{ r } 3$
 $38/7 = 5 \text{ r } 3$
 $5/7 = 0 \text{ r } 5$
 533_7

3. 110011011110_2 into decimal

$2^{11} + 2^{10} + 2^7 + 2^6 + 2^4 + 2^3 + 2^2 + 2^1 = 2048 + 1024 + 128 + 64 + 16 + 8 + 4 + 2$
 $= 3294_{10}$

4. $2BD_{19}$ into decimal

$2 \cdot 19^2 + 11 \cdot 19^1 + 13 \cdot 19^0 = 7310 + 209 + 13 = 7532_{10}$

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

a) Convert the number to hexadecimal:
 $535D_{16}$

- b) Negate the number.
1010110010100011₂
ACA3₁₆