

## Notations

$$010111001010_2 = 5CA_{16}$$

$$10110001011010_2 = 2C5A_{16}$$

$$1101111010101111_2 = DEAF_{16}$$

$$1110111010_2 = 3BA_{16}$$

$$11101101000001_2 = 3B41_{16}$$

$$AC9_{16} = 101011001001_2 = 5311_8$$

$$FADE_{16} = 1111101011011110_2 = 175336_8$$

$$1ED5_{16} = 17325_8$$

$$1752_8 = 1111101010_2 = 3EA_{16}$$

$$1132_8 = 25A_{16}$$

$$10111.11_2 = 27.6_8$$

$$10110101_2 = 1 + 4 + 16 + 32 + 128 = 181_{10}$$

$$10101010_2 = 2 + 8 + 32 + 128 = 170_{10}$$

$$110.011_2 = .125 + .25 + 2 + 4 = 6.375_{10}$$

$$11001.101_2 = 16 + 8 + 1 + .5 + .125 = 25.625_{10}$$

$$10101.111_2 = 21.875_{10}$$

$$555_8 = 101101101_2 = 365_{10}$$

$$175_8 = 125_{10}$$

$$5.5_8 = 5.625_{10}$$

$$555_{10} = 512 + 32 + 8 + 2 + 1 = 1000101011_2$$

$$219_{10} = 11011011_2$$

$$125_{10} = 1111101_2$$

$$150_{10} = 10010110_2$$

$$25.625_{10} = 11001.101_2$$

$$42.375_{10} = 101010.011_2$$

$$2^{19} = 2^{10} * 2^9 = 512,000_{10}$$

$$2^{26} = 2^{10} * 2^{10} * 2^6 = 64,000,000_{10}$$

$$2^{38} = 2^8 * 2^{30} = 256 \text{ billion} = 274,877,906,900$$