

NASA Format

Convert 37.25 and 0.2 into NASA Format.

37.25

$$37_{10} = 100101_2 \quad .25_{10} = .01_2 \Rightarrow 100101.01_2$$

$$100101.01_2 = 1.0010101 \times 2^5$$

Mantissa

$$2^6 = 100000_2$$

Power Characters

00101010	00000000	00000000	00100000
Hex	Z A	0 0	0 0 Z 0
[ZA000020]			

0.2

$$0.2_{10} = .001\overline{001}_2 = 1.1001 \times 2^{-3}$$

0011	1110	0100	1100	1100	1100	1100	1101
3	E	4	C	C	C	C	D
[3E4CCCCD]							