

## NASA format

$37.25_{10}$

$$37_{10} \rightarrow \text{---} 2$$

$$(37/2) \cdot 2 = 1$$

$$0.25_{10} \rightarrow \underline{\quad}_2 \quad \begin{array}{l} 0.25 \cdot 2 = 0.5 \\ 0.5 \cdot 2 = 1.0 \end{array}$$

$$(18/2) \cdot 1.2 = 0$$

$$37_{10} \rightarrow 100101_2$$

$$(9/2)^{1/2} \cdot 2 = 1$$

$$0.25_{10} \rightarrow 0.01$$

$$(4/2)^{1/2} \cdot 2 = 0$$

$$(2/2) \cdot 2 = 0$$

$$37.25_{10} \rightarrow 100101.01_2$$

$$(1/2) \cdot 2 = 1$$

$$100101.01_2 = 100101.01 \cdot 2^0 = 0.10010101 \cdot 2^6$$

0.1001010 | 10000000 | 00000000 | 00000110  
y A 8 0 0 0

4A80000616

$0.2_{10}$

$$0.2_{10} \rightarrow -2$$

$$0.2 \cdot 2 = 0.4$$

$$0.4 \cdot 2 = 0.8$$

$$0.2_{10} \rightarrow \underline{0.0011}_2$$

$$0.8 \cdot 2 = 1.6$$

$$0.6 \cdot 2 = 1.2$$

$$0.\underline{0011}_2 = 0.\underline{0011} \cdot 2^0$$

$\frac{00011001}{1} \mid \frac{10011001}{9} \mid \frac{10011001}{9} \mid \frac{10011001}{9} \mid \frac{00000000}{0} \mid \frac{00000000}{0}$

19999900<sub>16</sub>