

Course:	CIS-17A
Section:	Sec: 48593
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### 37.25 Base 10 to NASA FORMAT:

37.25 Base 10 is Equal to 25.4 Base 16

25.4 Base 16 is Equal to 00100101.0100

00100101.0100 is Equal to  $0.1001010100 \times 2^6$

As 6 is Positive, we can convert directly, so, 6 Base 10 is Equal to 0000 0110 Base 2

<b>0.100</b>	<b>1010</b>	<b>1000</b>	<b>0000</b>	<b>0000</b>	<b>0000</b>	<b>0000</b>	<b>0110</b>	
4	A	8	0	0	0	0	6	NASA FORMAT

### 0.2 Base 10 to NASA FORMAT:

0.2 Base 10 is Equal to 0.3333..... Base 16

0.3333..... Base 16 is Equal to 0.0011001100110011

0.0011001100110011 is Equal to  $0.1100110011001100 \times 2^{-2}$

as -2 is Negative, we apply 2's Complement method:

0000 0010                      2

1111 1101 1's Complement

0000 0001 +1 to Generate 2's Complement

**1111 1110**

<b>0.110</b>	<b>0110</b>	<b>0110</b>	<b>0110</b>	<b>0110</b>	<b>0110</b>	<b>1111</b>	<b>1110</b>	
6	6	6	6	6	6	F	E	NASA FORMAT