

Name: _____ Number: _____



Questions

1. Write down the binary representations of following numbers:

$$(15)_{10} =$$

$$(54)_{10} =$$

$$(43)_{10} =$$

$$(86)_{10} =$$

Solution: $(15)_{10} = (1111)_2$, $(54)_{10} = (110110)_2$, $(43)_{10} = (101011)_2$, $(86)_{10} = (1010110)_2$,

2. Write down the hexadecimal representations of following numbers:

$$(15)_{10} =$$

$$(54)_{10} =$$

$$(43)_{10} =$$

$$(86)_{10} =$$

Solution: $(15)_{10} = (F)_{16}$, $(54)_{10} = (36)_{16}$, $(43)_{10} = (2B)_{16}$, $(86)_{10} = (56)_{16}$,

3. Calculate following questions in decimal base

$$25 \vee 13 =$$

$$41 \wedge 7 =$$

$$3 \oplus 17 =$$

Solution: $25 \vee 13 = 29$, $41 \wedge 7 = 1$, $3 \oplus 17 = 18$

4. Fill the following tables

\wedge	0	1	\vee	0	1	\oplus	0	1
0			0			0		
1			1			1		

Solution:

\wedge	0	1	\vee	0	1	\oplus	0	1
0	0	0	0	0	1	0	0	1
1	0	1	1	1	1	1	1	0

Good luck!

Points earned: _____