Binary to Octal

Binary equivalent	Octal Digits
000	= 0
001	= 1
010	= 2
011	= 3
100	= 4
101	= 5
110	= 6
111	= 7

$(1011011.1101)_2 = (?)_8$

Create group(s) of 3 digits starting from the left of the floating point

Create group(s) of 3 digits starting from the right of the floating point

00 | 011 | 011 . 110 | 100

1 3 3 6 4

$= (133.64)_8$

Octal to Binary

represent each octal digit in 3 bit binary number.

$(123.56)_8 = (?)_2$

001 010 011 101 110

$= (001\ 010\ 011.\ 101\ 110)_2$

Binary to Hex

Binary equivalent	Hex Digits	Binary equivalent	Hex Digits
0000	= 0	1000	= 8
0001	= 1	1001	= 9
0010	= 2	1010	= A
0011	= 3	1011	= B
0100	= 4	1100	= C
0101	= 5	1101	= D
0110	= 6	1110	= E
0111	= 7	1111	= F

$(1011011.1101)_2 = (?)_{16}$

Create group(s) of 4 digits starting from the left of the floating point

Create group(s) of 4 digits starting from the right of the floating point

0101 | 1011 . 1101

5 B D

$= (5B.D)_{16}$

Hex to Binary

represent each octal digit in 4 bit binary number.

$(123.5A)_{16} = (?)_2$

0001 0010 0011 0101 1010

$= (0001\ 0010\ 0011.\ 0101\ 1010)_2$