Base 16 to Base 10

ACE(16) - ?(10)	A	C	E
Successive Power	16^2 = 256	16^1 = 16	16^0 = 1
Multiplication	256 * 10 = 2560	16 * 12 = 192	1 *15 = 15
Addition	2560+192+15 = 2767		
Final Answer	2767		

Base 10 to base 16

1555(16) = ?(10)	Dividend	Divisor	Quotient	Multiplication	Remainder
	1555	16	97.1875	0.1875 * 16	3
	97	16	6.0625	0.0625 *16	1
	6	16	0.375	0.375 * 16	6
	613				

Base 16 to Base 2

5B2	5				B				2			
	2^3	2^2	2^1	2^0	2^3	2^2	2^1	2^0	2^3	2^2	2^1	2^0
	8	4	2	1	8	4	2	1	8	4	2	1
	0	1	0	1	1	0	1	1	0	0	1	0
Answer	10110110010											

Base 2 to Base 16

11110011	1	1	1	1	0	0	1	1
	2^3	2^2	2^1	2^0	2^3	2^2	2^1	2^0
	8	4	2	1	8	4	2	1
	8*1	4*1	2*1	1*1	8*0	4*0	2*1	1*1
	8+4+2+1=15=F				0+0+2+1=3			
Answer	F3							

Base 10 to Base 2

114(10) to ?(2)	Dividend	Divisor	Quotient	Multiplication	Remainder
	114	2	57	0 * 2	0
	57	2	28.5	0.5 * 2	1
	28	2	14	0 * 2	0
	14	2	7	0 * 2	0
	7	2	3.5	0.5 * 2	1
	3	2	1.5	0.5 * 2	1
	1	2	0.5	0.5*2	1

Base 2 to 10

1110(2) = ?(10)	1	1	1	0
	2^3	2^2	2^1	2^0
	8	4	2	1
	8 * 1	4*1	2*1	1*0
	8	4	2	0
Add	8 + 4 + 2 + 0 = 14			
Answer	14			

Base 8 to Base 2

70(8) = ?(2)	7			0		
	2^2	2^1	2^0	2^2	2^1	2^0
	4	2	1	4	2	1
	1	1	1	0	0	0
Answer	111000					

Base 2 to Base 8

70(8) = ?(2)	1	1	1	0	0	0
	2^2	2^1	2^0	2^2	2^1	2^0
	4	2	1	4	2	1
	4*1=4	2*1=2	1*1=1	4*0=0	2*0=0	1*0=0
	4+2+1=7			0+0+0=0		
Answer	70					

Base 8 to Base 10

37(8) = ?(10)	3	7	2	7	0
	8^4 = 4096	8^3=512	8^2 = 64	8^1=8	8^0 = 1
	4096 * 3	512 * 7	64*2	8*7	0*1
	12288	3584	128	56	0
Add	12288+3584+128+56+0 = 16056				
Answer	16056				

Base 10 to Base 8

394(10) to ?(8)	Dividend	Divisor	Quotient	Multiplication	Remainder
	394	8	49.25	0.25 * 8	2
	49	8	6.125	0.125 * 8	1
	6	8	0.75	0.75 * 8	6
Answer	612				

Base 10 to Base 4

395(10) = ?(4)	Dividend	Divisor	Quotient	Multiplication	Remainder
	395	4	98.75	0.75*4	3
	98	4	24.5	0.5*4	2
	24	4	6	0 * 4	0
	6	4	1.5	0.5 * 4	2
	1	4	0.25	0.25 * 4	1
Answer	12023				

Base 4 to Base 10

13201(4) = ?(10)	1	3	2	0	1
	4^4	4^3	4^2	4^1	4^0
	256	64	16	4	1
	1 * 256	3*64	2*16	0*4	1*1
	256	192	32	0	1
Add	256 + 192 + 32 + 0 +1				
Answers	481				

Base 2 to Base 4

111010010(2)= ?(10)	0	1	1	1	0	1	0	0	1	0
	2^1	2^0	2^1	2^0	2^1	2^0	2^1	2^0	2^1	2^0
	2	1	2	1	2	1	2	1	2	1
	0*2	1*1	1*2	1*1	0*2	1*1	0*2	0*1	1*2	0*1
	0	1	2	1	0	1	0	0	2	0
Add	1		3		1		0		2	

Base 4 to base 2

13201(4)=?(2)	1		3		2		0		1	
	2^1	2^0	2^1	2^0	2^1	2^0	2^1	2^0	2^1	2^0
	2	1	2	1	2	1	2	1	2	1
	0	1	1	1	1	0	0	0	0	1