ECE 130 HW#3

1. Perform the following addition and subtraction operations in the following bases: 16, 10, 8, 5, and 2. You must show all work in conversions. ***Do not use a calculator!***

$7_{10} + 4_{10}$

Original	Base 16	Base 10	Base 8	Base 5	Base 2
7_{10}	7	7	7	12	111
4_{10}	4	4	4	4	100
$7_{10} + 4_{10}$	B	11	13	21	1011

$101101001_2 - 101011111_2$

Original	Base 16	Base 10	Base 8	Base 5	Base 2
101101001_2	169	361	551	2421	101101001
101011111_2	15F	351	537	2401	101011111
$101101001_2 - 101011111_2$	00A	10	012	20	000001010

$21021012_3 - 12021000_3$

Original	Base 16	Base 10	Base 8	Base 5	Base 2
21021012_3	14B1	5297	12261	82142	0001010010110001
12021000_3	EFA	3834	7372	60314	0000111011111010
$21021012_3 - 12021000_3$	5B7	1463	2667	21323	0000010110110111