Name	Box	Due date: Monday March 12
ECE130-02/03	Homework #3 (binary nun	nbers) Spring 2001

1 (Part of Problem 3 on page 19 of Dr. Eccles' book). Convert each of the following unsigned binary numbers to their decimal equivalent.

Unsigned Binary	Decimal
1100	
10000	

2 (Part of Problem 5 on page 19 of Dr. Eccles' book). Convert each of the following decimal numbers to their binary equivalent.

Decimal	Binary		
57			
159			
31			

3 (Part of Problem 8 on page 19 of Dr. Eccles' book). Convert each of the following unsigned binary numbers to their decimal equivalent.

Unsigned Binary	Decimal
101.1101	
1001.101	

4 (Part of Problem 22 on page 20 of Dr. Eccles' book). Perform the following arithmetic in binary.

Operation	Result
1110+110	
1011*1011	

5 Convert the following 4-bit numbers to their 2's complement counterparts.

0101	
10100	
0111	

6 Carry out the following additions and indicate if there is overflow for unsigned or 2's complement representations.

			Decimal Notation		Overflow (Yes/No)	
Addend	Augment	Binary result	Unsigned	2's compl	Unsigned	2's compl
0101	1011					
1100	1001					
0011	0110					

ECE130-02/03 Homework #3 Spring 2001, Page 1 of 1