

Homework 2

due on

18/11

Chapter 3:

Problems: 2, 30, 35, 42, 43, 47

Chapter 4:

Problems: 2 and

4-3

Obtain the 1s and 2s complement of the following unsigned binary numbers:

1001 1100, 1001 1101, 1010 1000, 0000 0000, 1000 0000

4-6

Perform the arithmetic operations $+36 + (-24)$ and $-35 - (-24)$ in binary using signed 2's complement representation for negative numbers.

4-16

The adder-subtractor circuit in Figure 4-7 has the following values input select S and data inputs A and B. Determine in each case the values of the outputs S3, S2, S1, S0 and C4.

	S	A	B
a	0	0111	0111
b	1	0100	0111
c	1	1101	1010
d	0	0111	1010
e	1	0001	1000