

Activity 3 (Revisiting 304 Background Material)

Your Name: Connor Yu

1. Unsigned Binary Representation:

Represent 4 (decimal) as Binary: 0100

Represent 7 (decimal) as Binary: 0111

Represent 9 (decimal) as Binary: 1001

2. Signed Binary Representation (two's complement):

What is the two's complement of: 0101

0101: 5

1011: -5

What is the two's complement of: 0110

0110: 6

1010: -6

Represent -6 as Binary: 1010

Represent -5 as Binary: 1011

3. Convert eca8 6420 (hex) to binary:

1110 1100 1010 1000 0110 0100 0010 0000

4. Signed vs Unsigned extension: extend: 1100 to 8-bit binary assuming:

a) unsigned: 0000 1100

b) signed extension: 1111 1100