

ECCS-1721 Digital Logic
Homework 2

1. Find the product of the following numbers represented in 5 bit two's complement.

- $10 * 11 = 0001101110$
- $-12 * 13 = 1101100100$
- $15 * -15 = 1100011111$
- $-14 * -15 = 0011010010$

2. Find the product of the following numbers represented in 5 bit two's complement. Make sure to pay attention to the fixed point.

- $5 * 0.75 = 011.11$
- $10 * (-0.75) = 1001.10$
- $-12 * (-0.25) = 011.00$

3. Convert the following unsigned numbers to CSD:

- $01|011111|011 = 11|0000|11|01 = 10100000101$
- $10|01111111|0100|0111 = 101000000101001001$
- $|111|001|01111111|011|0111|00 = 100T0|011|000000|0T1|0T1|00T00 = 1001010100000000100100100$