ECE 3724 HW #2 – Reese NAME: _____

1. Do problem #2 of Chapter 2.

2. Assume the NSC computer of Chapter #2 has a new instruction called 'INC' (opcode = '11') that increments the contents of the OUT register; the INC instruction data field is a don't care. Also assume that the LOC input is tied to the complement of DOUT[3] bit (LOC = ~DOUT3). For the program below, how many clock cycles does it take to reach location #3?

Location	Instruction
0	OUT 0
1	INC
2	JC 1
3	JMP 3

3. Problems 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 from Chapter 3.