

# HW #2

## ECT 213

### Spring 2008

Name: \_\_\_\_\_

Due Tuesday JAN 22, 2008 (start of lab).

1)

**3-8.** Sketch the output waveform at  $X$  for the two-input OR gates shown in Figure P3-8.

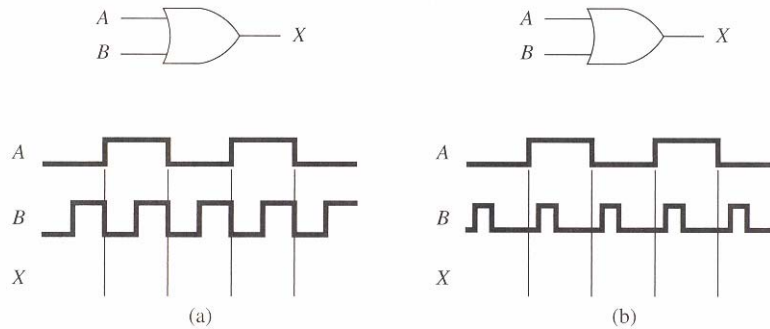


Figure P3-8

2)

**3-9.** Sketch the output waveform at  $X$  for the three-input AND gates shown in Figure P3-9.

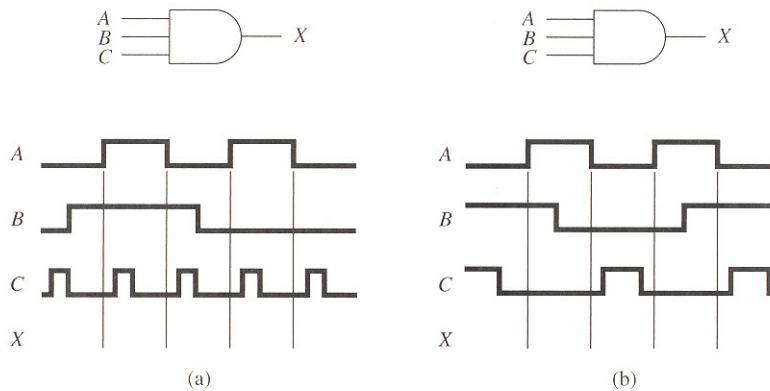


Figure P3-9

3)

**3-10.** The input waveform at *A* is given for the two-input AND gates shown in Figure P3-10. Sketch the input waveform at *B* that will produce the output at *X*.

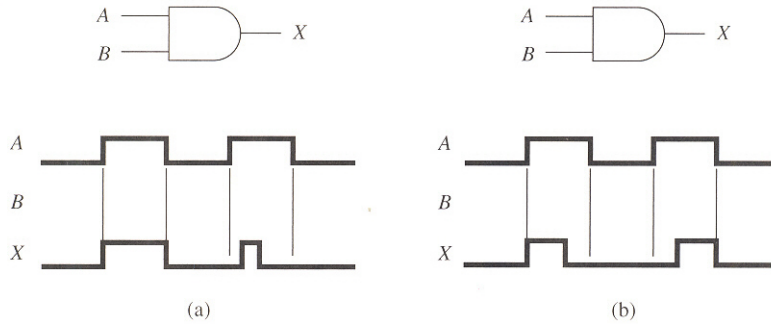


Figure P3-10

4)

**Section 3-3**

**3-7.** Sketch the output waveform at *X* for the two-input AND gates shown in Figure P3-7.

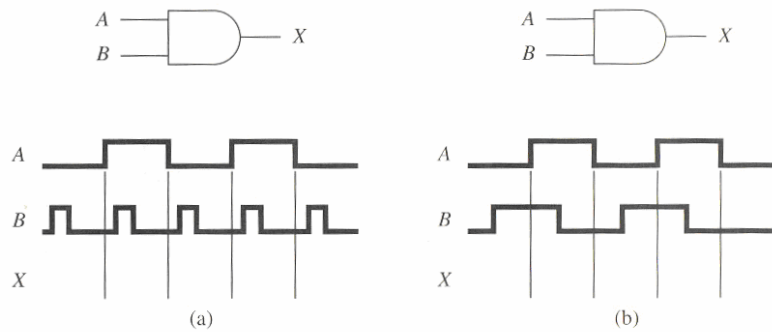
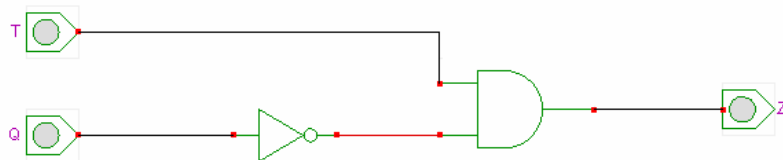
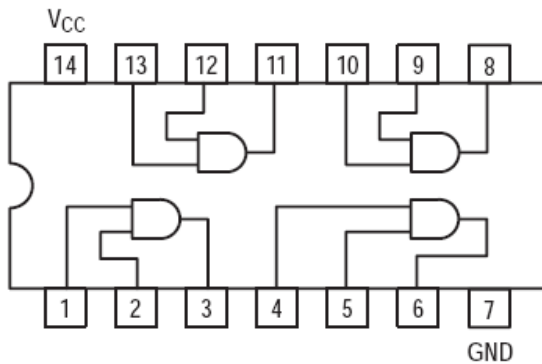
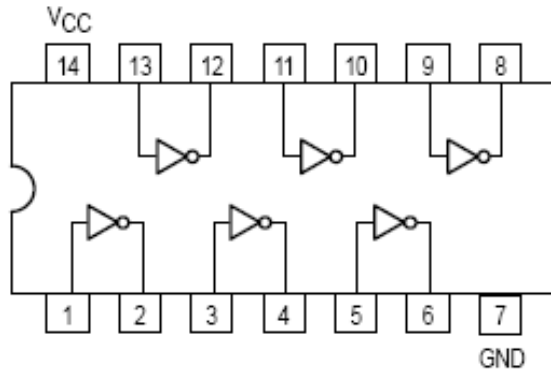


Figure P3-7

5) What is the Boolean equation for the following circuit?



6) Given the circuit in the previous question and using a 74LS04 (inverter) and 7408 (AND) IC, connect the circuit as shown in class.



7) Using the internet, find a datasheet for a 74LS04, 74LS08 and 74LS32 in a PDF file. List the links below (and save the datasheets, you will use them in upcoming labs)

a) 74LS04

b) 74LS08

c) 74LS32