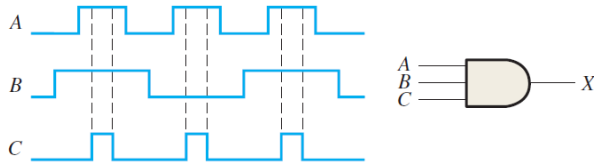


CPEG 207 Digital Systems HOMEWORK 2

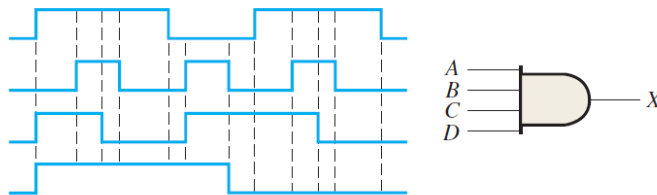
Name: _____

Show your work detail and clearly identify your answer.

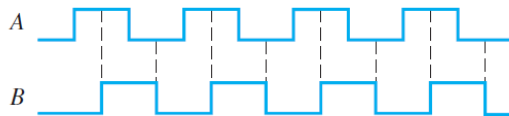
1. A) The input waveforms applied to a 3-input AND gate are as indicated below. Show the output waveform in proper relation to the inputs with a timing diagram.



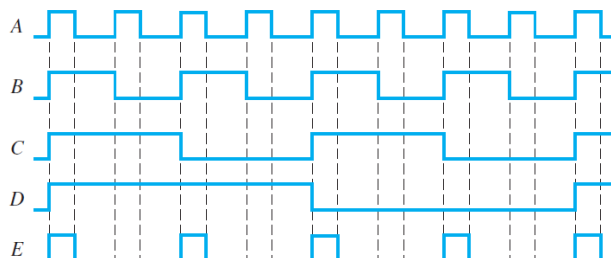
- B) The input waveforms applied to a 4-input AND gate are as indicated. Draw the net output waveform of this system.



2. A) Determine the output for a 2-input OR gate when the input waveforms are shown below and draw a timing diagram.

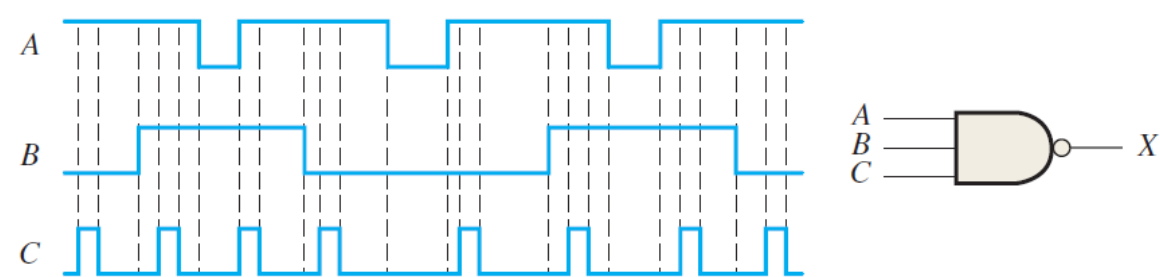


- B) For the five input waveforms shown below, determine the output if the five signals are ANDed. Determine the output if the five signals are ORed. Draw the timing diagram for each case.

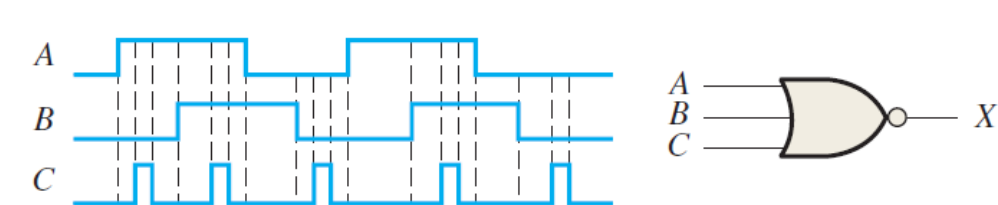


AND
OR

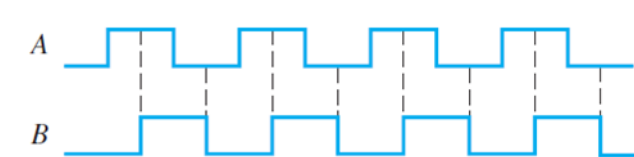
3. Determine the gate output for the waveforms below, and draw the timing diagram.



4. Determine the output waveform and draw the timing diagram.



5. A) Determine the output of an exclusive-OR gate for the waveforms and draw a timing diagram.



B) In the simple programmed AND array with programmable links in Figure 3–89, determine the Boolean output expressions.

