Homework 8

Note: HW is due at the end of class meeting.

1. Two computers are to be connected using their serial ports
   (a) For this to work, what operational parameters need to be specified?
   (b) In this application, what is meant by “data flow” synchronization?
   (c) What are two ways data flow synchronization can be achieved?

2. Why is the RS232 voltage specification for mark and space logic levels used for serial communications instead of TTL voltage levels?

3. A serial I/O port sends the following waveform:
   ![Waveform Diagram]
   (a) What is the ASCII character being sent? (check your textbook for ASCII code table)
   (b) What type of parity is being used?

4. Assuming your program uses polling to send and receive data via a HC12 SCI interface. What are the important flag(s) that software needs to handle to ensure correct operations? Write two code sequences to illustrate how the program sends and receives data. (assuming 8-bit data format)