ECE 3724 Quiz #8 Reese Solution

Answer each of the following questions (you can use a calculator)

a. Draw the asynchronous data waveform seen at the PIC TX pin for the value 0xB1 sent in 8-data bit, 1 stop bit format. Remember that data is sent LSb first.

b. For the value 0x31 sent in 7-bit, even parity format, what is the value of the parity bit?

0x31 = 0110001 - there are an odd number of ones, so to form even parity the parity bit must be “1” to make an even number of “1”s.

c. Write C code that enables the INT1 interrupt, with priorities disabled (does not matter if rising or falling triggered).

```c
IPEN = 0; // disable priorities
INT1IF = 0; // clear interrupt flag
INT1IE = 1; // enable INT1
GIE = 1; // global interrupt enable
```

d. What registers are automatically saved when an interrupt occurs on the PIC18?

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