Quiz

Answer the following items on sheet(s) of yellow paper. Do not write anything on the back of each sheet. Write your name and section on top of each sheet. **Show all solutions and box all final answers**. Deadline: **18 August 2015, 5pm.**

1. Perform the specified operations. Assume an 8-bit word size and operands in 2C notation. Express the answers in decimal.

    (a) 0100 0010 + 1001 0001

    (b) 1010 1010 + 0001 1000

    (c) 0101 0100 + 0010 0111

    (d) 1011 1011 + 1111 1110

    (e) 0111 1011 - 0110 0101

    (f) 0100 1001 - 1110 1011

    (g) 1110 1111 - 1100 1011

2. Determine if the following operations would result to an overflow. Assume an 8-bit word size.

    (a) 1100 0010 + 1101 0001

    (b) 1010 1010 + 0101 1100

    (c) 1101 0100 + 0010 0001

    (d) 1011 1011 + 1111 1110

    (e) 0111 1011 - 0111 0101

    (f) 0101 1001 - 1101 1011

    (g) 1111 1111 - 1001 1011

    (h) $1100\ 0010_{2c} + 1101\ 0001_{2c}$

    (i) $1010\ 1010_{2c} + 0101\ 1100_{2c}$

    (j) $1101\ 0100_{2c} + 0010\ 0001_{2c}$

    (k) $1011\ 1011_{2c} + 1111\ 1110_{2c}$

    (l) $0111\ 1011_{2c} - 0111\ 0101_{2c}$

    (m) $0101\ 1001_{2c} - 1101\ 1011_{2c}$