This is a closed book quiz. Be sure to show your work for any partial credit.

**1)** **(5 points)** Convert 3710 to binary.

 Repeatedly divide by 2

 37 /2= 18 R 1

 18 /2= 9 R 0

 9 /2= 4 R 1

 4 /2= 2 R 0

 2 /2= 1 R 0

 1 /2= 0 R 1 so have 1 0 0 1 0 1

**2) (5 points)** Convert 00110012 to decimal, i.e., base 10.

 The values is 16 + 8 + 1 = 2510

**3) (5 points)** Perform the binary addition below showing carries as appropriate.

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**4) (5 points)** Perform the binary subtraction below.

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