1a. 2^6+2^5+2^4+0+4+2+0 Bob Loth ID: 1684749

64+32+16+4+2 = 118 Jeremy Satram ID: 1564092

1b. -1 \*( 2^4 + 1 )

-1 \* (16 + 1) = 17

17

2a. 98

64(greatest bit below 98) + 32 = 96

96 + 2 = 98

00110010

2b. 46. Greatest bit below 46 is 32. 46 – 32 = 14

14 – 8 = 6.

Same for 4, and 2

Bits flipped: 32, 8, 4, 2.

00101110 = 46

Negative conversion: start with 11010001

Add one: 11010010

3a. 105 / 16 Q:6 R:9

6 /16 Q: 0 R:6

R2 R1 = 69

3b. 82 /16 Q:5 R:2

5/ 16 Q:0 R:5

0052

FFAE

4a. 3456

(3 \* 16^3) + (4 \* 16^2) +(5 \* 16^1) +(6 \* 16^0)

12288 + 1024 + 80 + 6 = 13398

4b. A82C

(10 \* 16^3) + (8 \* 16^2) + (2 \* 16^1) + (12)

40960 + 2048 + 32 + 12 = 43052