Jie Zhou:2047477

Convert signed binary to decimal

1a.) 0111 0110

$=0*2^7+1*2^6+1*2^5+1*2^4+0*2^3+1*2^2+1*2^1+0*2^0$

$=118$

Decimal: 118

1b.) 1001 0001

$=0*2^7+1*2^6+1*2^5+0*2^4+1*2^3+1*2^2+1*2^1+1*2^0$

$=111$

Decimal: -111

Convert signed decimal to binary

2a.) 98

$=0110\ 0010$

2b.) -46

$=1101\ 0010$

Convert signed decimal to hexadecimal

3a.) 105

$=105/16=6,9,6/16=0=6$

$=0*69$

Hexadecimal: 69

3b.) -82

$=82/16=5=2,5/16=0=5$

=0*52

Hexadecimal: AE

Convert signed hexadecimal to decimal

4a.) 3456

=3*16^3+4*16^2+5*16^1+6*16^0

=13398

Decimal:13398

4b.) A82C= 57D3 ,57D3+1=57D4

=5*16^3+7*16^2+D*16^1+4*16^0

=-22484