Convert the following signed decimal to its 8-bit signed binary representation using two’s-complement (To binary, reverse bits, then add 1)

-1 = 11111111

-16 = 11110000

-32 = 11100000

-64 = 11000000

-100 = 10011100

-128 = 10000000

Convert the following signed 8-bit binary integers to their decimal representation (Reverse the bits, add 1, then get the two’s complement)

10101010 = -86

10011111 = -97

11111110 = -2

10110000 = -80

10000011 = -125

11001100 = -52

Which of the following 16-bit hexadecimal numbers is negative (If the most significant digit is ≥ 8 the it is negative)

0CAB = positive

1234 = positive

DCBA = negative

5CD4 = positive

FFFF = negative

3FEB = positive

Convert the following signed hexadecimal numbers to their decimal representation (To two’s complement, then to decimal preceded by minus sign)

FA = -6

8F = -113

91 = -111

FF = -1