

DEPARTMENT OF  COLORADO SCHOOL OF MINES
COMPUTER SCIENCE

CSCI 341: Computer Organization
WS 1: Integer Representation

1	Can you tell if the following number is two's complement? If so, how, if not why? 1001001001001000
2	Convert the previous two's complement number to hex and decimal.
3	Convert integer binary 11010001 to hex
4	Convert 8-bit unsigned binary 11001100 to decimal
5	Convert 8-bit unsigned number 0xCD to decimal and binary

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6	Convert 65 to hexadecimal
7	Convert 34 to binary
8	Convert the 8-bit, 2's complement 10110101 to decimal
9	Convert decimal $(-1)_{10}$ to 9-bit 2's complement binary

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10	Convert 8-bit 2's complement binary 11001101 to decimal and hex
11	What is the largest possible 16-bit unsigned binary number?
12	What is the largest possible 16-bit signed binary number in 2's complement?