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CSCI-21 Quiz #3 Name Ismael Cortez

Please use pencil and erase mistakes. Closed book and notes, no electronic devices of any kind. Show your work, and if you need more room, use the back. Draw a box around numeric answers. 10 points

Convert the following decimal numbers to 8-bit two's complement signed binary numbers (2 each):

-74

128	64	32	16	8	4	2	1
0	1	0	0	1	0	1	0

2's: 1 0 1 1 0 1 1 0 ✓

38

128	64	32	16	8	4	2	1
0	0	1	0	0	1	1	0

6 ✓

-1

128	64	32	16	8	4	2	1
0	0	0	0	0	0	0	1

2's: 1 1 1 1 1 1 1 1 ✓

Convert the following unsigned numbers from the indicated bases to decimal (2 each):

56_{9}

$_{10}$ dec $= (5 \times 9^1) + (6 \times 9^0) = 45 + 6 = 51$

51 ✓

4 AB_{14}

$_{10}$ dec $= (10 \times 14^1) + (11 \times 14^0) = 140 + 11 = 151$

151 ✓