

Computer Science 160

Quiz 01

January 9, 2024

Name: _____

Instructions: Perform the calculations and show all your work. No calculators! For full credit, show complete work without converting to decimal at any point.

Problems 1–5 are in binary.

Problem 1. (2 pts) $11 + 10$

Problem 2. (2 pts) $101 + 11$

Problem 3. (2 pts) $101 + 110$

Problem 4. (2 pts) $1010 + 1011$

Problem 5. (2 pts) $1010101 + 1100111 + 1000101$

Problems 6–10 are in hexadecimal. For full credit, show complete work without converting to decimal at any point. You are allowed to convert to binary, but I don't necessarily recommend it.

Hex	Binary	Hex	Binary
0x0	0000	0x8	1000
0x1	0001	0x9	1001
0x2	0010	0xA	1010
0x3	0011	0xB	1011
0x4	0100	0xC	1100
0x5	0101	0xD	1101
0x6	0110	0xE	1110
0x7	0111	0xF	1111

Problem 6. (2 pts) $0x4 + 0xC$

Problem 7. (2 pts) $0x18 + 0x14$

Problem 8. (2 pts) $0x1A + 0x2E$

Problem 9. (2 pts) $0xAA + 0x55$

Problem 10. (2 pts) $0xA4 + 0xBC$