

solution

name

8 pts possible. Calculators are not allowed on this quiz.

1. (2 pts.) Add the binary numbers:  $101010101 + 11100011$ . Show your work.

$$\begin{array}{r} 101010101 \\ + 11100011 \\ \hline 1000111000 \end{array}$$

2. (6 pts.) a. Convert the following binary number to hexadecimal:  $1011110110$ . Show your work.

2 F 6

- b. Convert the following decimal number to binary: 75. Show your work.

$$75 - 64 = 11 \quad 11 - 8 = 3 \quad 3 - 2 = 1$$

1001011

- c. Convert the following hexadecimal number to octal:  $FA6_{\text{hex}}$ . Show your work.

1111 1010 0110  
7 6 4 6