

First Name: _____ Last Name: _____

1. Convert the following numbers
 - a. $(110110011.01101)_2 \rightarrow$ Hexadecimal and Octal
 - b. $(2EA03.4C)_{16} \rightarrow$ Binary and Octal
 - c. $(5034.25)_{10} \rightarrow$ Binary, Hexadecimal and Octal

2. Perform the following arithmetic operations in the indicated base:
 - a. $(32.4)_5 + (13.2)_5$
 - b. $(32.4)_5 - (13.2)_5$
 - c. $(32.4)_5 * (13.2)_5$
 - d. $(13.2)_5 - (32.4)_5$
 - e. $(128C4.2)_{16} + (58D.C4)_{16}$
 - f. $(128C4.2)_{16} - (58D.C4)_{16}$
 - g. $(101101.011)_2 - (100011.101)_2$
 - h. $(101101.011)_2 + (100011.101)_2$
 - i. Repeat g. and h. by first converting the numbers to hexadecimal and then performing the operation, before converting back to binary.