CIS 350 – INFRASTRUCTURE TECHNOLOGIES

HOMEWORK # 2

Group work (maximum 2 students)

NAME(S):_____

Do not use built-in conversion functions on your calculator! Use back page for calculations if you need. Assume unsigned binary numbers.

Topics: Number systems and conversion between number bases

Work the following problems:

1. Convert to Binary:

   decimal: 95   binary: _____
   octal: 253   binary: _____
   hexa: B4C   binary: _____

2. Convert to Octal:

   decimal: 183   octal: _____
   binary: 11110101 octal: _____
   hexa: AF92   octal: _____

3. Convert to Decimal:

   binary: 11101101 decimal: _____
   octal: 624   decimal: _____
   hexa: B2A   decimal: _____

4. Convert to Hexadecimal:

   binary: 10101111001 hexa: _____
   octal: 716   hexa: _____
   decimal: 850   hexa: _____

5. Convert Binary to Decimal and Hexa:

   11101.111   decimal: _____
   11101.111   hexa: _____

6. Convert from Decimal to Hexadecimal. If the answer is irrational, stop at four hexadecimal digits:

   0.6640625   hexa: _____

7. Ex. 3.5, p. 92 (textbook).