COSC 2410
Spring 2013
HW 3 (100 points)

Name:
TA:

(Due date : 31st January,2013 - Midnight)
You have to submit your assignments through blackboard by the due date. No need to turn in the Hardcopies. You can either turn in your assignments by typing in the answers or by scanning your work.

Problem 2.6 c)
Factor the following expression to obtain a product of sums
A'BC + EF + DEF'

Problem 2.8 b)
Simplify the following expression to a minimum sum of products
[A + B(C'+ D)]'

Problem 2.12 b), c), d)
Simplify each of the following expressions by applying one of the theorems. State the theorem used.

(b) $[W + X'(Y + Z)][W' + X'(Y + Z)]$

(c) $(V'W + UX)'(UX + Y + Z + V'W)$

(d) $(UV' + W'X)(UV' + W'X + Y'Z)$

Problem 5.8 a)
Find the minimum sum of products and the minimum product of sums for the function. Use K-MAPS:
f (a, b, c, d)=∏ M(0, 1, 6, 8, 11, 12) • ∏ D(3, 7, 14, 15)

Problem 5.14 c)
Find the minimum sum-of-products expression for the function. Use K-MAPS:
f(r, s, t) =rs'+ r's'+ st'