

EE 2720, Fall 06

Homework #5

Due Monday November 6 at 9:30 am,
under my door (EE 245)

Enjoy your homework
It is a very short one

Friendly

Alex

EE 2720, Homework #5

Problem 1: Consider the logic function F where F is

$F = A \cdot B' + C' \cdot D + E'$. Realize F using only NAND gates. Use both the algebraic and graphical approach. You must show figures of course.

Problem 2: Consider the logic function F where F is

$F = (A + B') \cdot (C' + D) \cdot E'$. Realize F using only NOR gates. Use both the algebraic and graphical approach. You must show figures of course.

Problem 3: Prove equations (5),

(6), (7), (8) and (11) on page 8 of handout # 11; (they relate to the XOR operator). You are not allowed to use a truth table when proving eq. (11).