

EE 2720, Fall 06

HW #3

Due Wednesday October 11, 06 at  
9:30 am in my office (EE, room  
245) under my door.

EE 2720, Homework # 3 (1)

Note: Please staple your homework

• Alex

Problem 1: Prove theorems  $(T1')$ ,  $(T2')$ ,  $(T3)$ ,  $(T3')$ ,  $(T4)$ ,  $(T5')$  found in handout #5

Problem 2: Prove theorem  $(T7)$  of handout #5 by using a truth table

Problem 3: Prove theorem  $(T10')$  of handout #5. You are not allowed to use a truth table.

Problem 4: Prove theorem  $(T13')$  of handout #5 using the finite induction technique.

Problem 5: Prove the theorem that states  $(X+Y) \cdot (X'+Z) = X \cdot Z + X' \cdot Y$ . You are not allowed to use a truth table.