

UNIVERSITY OF CALIFORNIA AT BERKELEY
EECS Department

EECS 40, Summer 2005
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Homework #7

Due Wed. 8/10 at 5P in HW Box (2nd floor lounge)
Total Points:

Representation of Numerical Data in Binary Form

Problem1: P7.5 in the textbook

Problem2: P7.6 in the textbook

Problem3: P7.8 in the textbook

Combinatorial Logical Circuits

Problem4: P7.24 in the textbook

Problem5: P7.27 in the textbook

Problem6: P7.29 in the textbook

Synthesis of Logic Circuits

Problem7: P7.42 in the textbook

Problem8: P7.43 in the textbook

Minimization of Logic Circuits

Problem9: P7.47 in the textbook

Problem10: P7.48 in the textbook

Propagation Delay

Problem11:

Assume each NAND gate in the logic circuit below has the propagation delay of **$t_p = 50$ ps**. Note that the logic input signals **A**, **B** and **C** each change from 0 to 1 at time $t = 50$ ps. Draw the timing diagram for the signals **D**, **E**, **F** and **G**, for times in the range $t=0$ to $t=250$ ps .

