T1. Review HW03 and solve any problems that students point out they had difficulty with.

T2. Answer any general questions about HW04 and Lab 03 that students ask.

T3. Solve the following problems in order until time runs out.

- 1. Solve HW03 problem P4, P5, and P6. They are about designing a one-bit full adder from first principles.
- 2. Go over the solution of HW03 problem P9.
- 3. A combinational network has two binary control inputs C and D, and two binary data inputs X and Y, and a single output Z. Assume that only one of the control inputs can be equal to 1 at a time. When C=1, Z=X, and when D=1, Z=Y. Otherwise, Z=0. (a) Write the truth table in short form (showing only cases for variable C and D. (b) Design this network using only NOR gates. (b) Design this network using only NAND gates. For part (b) and (c), please use as few gates as possible.
- 4. For the given NOR-NOR gate network, convert the network to a NAND-NAND gate network. Use as few gates as possible.

