## **MATH 2610**

## Discrete Mathematics for Computer Science Thursday March, 3 2005

I will collect the homework from this week Wednesday March 9, 2005.

(1) Find a solution to the following system of linear congruences.

$$x \equiv 2 \pmod{3}$$

$$x \equiv 2 \pmod{5}$$

$$x \equiv 2 \pmod{7}$$

(2) Find a solution to the following system of linear congruences.

$$x \equiv 2 \pmod{3}$$

$$x \equiv 3 \pmod{5}$$

$$x \equiv 6 \pmod{8}$$

$$x\equiv 1 ({\rm mod}\ 11)$$

(3) Find a solution to the following system of linear congruences.

$$2x \equiv 2 \pmod{3}$$

$$3x \equiv 2 \pmod{5}$$

$$4x \equiv 2 \pmod{7}$$