Course: CS 1050 C (Fall'03) – Homework 2

Instructor : Prasad Tetali, office: Skiles 126, email: tetali@math.gatech.edu
Office Hours: **Wed. Fri. 4:30–5:30pm, Thurs. 2:00–3:00pm**

Due: next Wednesday

Section 3.7: 10, 13, 22

Remark for 22: Note that you are not asked to show that for every positive integer n, $n^2 + 2n - 3$ is prime. Obviously, such a statement is false, since for $n = 3$, we get 12, which is not a prime. You only have to show that (i) there exists a positive integer n such that $n^2 + 2n - 3$ is prime, and that there is a unique such integer n.

Section 3.8: 14, 24 (b,c), 28.
hint for 28. useful reminders: if m divides n then $m \leq n$. one way to show that $m = n$ is to show that $m \leq n$ and also that $n \leq m$.

Section 4.2: 2, 7, 13

Also solve. Find the gcd of 34709 and 100313; also express the gcd as an integer combination of the above two numbers. (That is, find integers x and y such that gcd(34709, 100313) = 100313 x + 34709 y.

Optional Problems.

Section 3.7: 15, 17

Section 3.8: 15, 23

Section 4.2: 8, 28

TAs emails:

Kim, Woo Young: wooyoung@cc.gatech.edu
office hrs: Mon, Wed. 11-noon in CS Commons area
Chakrabarthy, Deeparnab: deepc@cc.gatech.edu
office hrs: Tue, Thurs. 10-11am in CS Commons area