

COMPUTER SCIENCE 20, SPRING 2012
DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

Class #33 (Public Key Crypto)

Homework, due in hard copy at 10:15am on 4/27/2012.

1. Compute $123456789 \pmod{987654321}$.
2. Compute $100000000 \pmod{3}$.
3. Let the capital letters A through Z be used to represent base-26 numbers. Convert NBA to base 10.
4. Let $xy \equiv 5 \pmod{8}$ for two distinct integers x and y such that $x, y > 1$. What is the smallest possible value of $x + y$?
5. Let $x \equiv 2x \pmod{6}$. What is $x \pmod{3}$?