

CS 201: DISCRETE STRUCTURES
SECTION G
Assignment 10
DUE: Wednesday November 14

Submit a handwritten copy

USE Rosen's 7th edition

Reading: Section 4.4, 4.5, 4.6 for modular arithmetic
 Section 8.1 for application of recurrence relations

Problem 1

Section 4.3, page 272, problems: 33, 35
Section 4.4, page 284, problems: 1, 5, 9, 33, 35, 65

Problem 2

(calculator required)

When doing RSA encryption, suppose $p=7$, $q = 11$, $e = 23$. What are the public keys here? What is d , the private key?

Encrypt the numbers 67, 31, 41 and then decrypt them. You should get the same numbers

Problem 2

Section 8.1, page 510, problems: 3, 7, 9, 11, 19