

**CS 201: DISCRETE STRUCTURES**  
**SECTION G**  
**Assignment 09**  
DUE: Friday November 02, 2018.

**Submit a handwritten copy**

**USE Rosen's 7th edition**

**Reading:**      Section 4.1 and 4.3 for modular arithmetic and GCD and LCM  
                    Section 5.1 for mathematical induction

**Problem 1**

Page 329, Section 5.1 problems: 1, 3, 5, 7, 11, 13, 15

**Problem 2**

- a. Prove the associative property for  $+_m$  operator
- b. Prove the distributive property for  $+_m$  and  $\cdot_m$  operators
- c. Page 244, exercise 4.1, question 9 (part a,b,c), 13 part(a,b,c), 19, 41