

Homework will be due usually on Friday. *The importance of doing all the homework cannot be overemphasized.* Mathematics cannot be learned passively. Even professional mathematicians frequently find that something can look straightforward, even easy, when someone else is demonstrating it, but turn out to be confusing and difficult when first attempted, and require a fair amount of practice to master.

Reading assignment: read carefully the handout and your lecture notes, then glance at Chapter 1 in the book — we will discuss this material on Friday.

Written assignment: Solve the following problem. The purpose of this problem is to gauge the level of the class, and give you some fast feedback on the quality of work expected. I will grade and return by Monday.

Problem

- (a) How many diagonals does an n -gon have?
- (b) Can a kingdom in which seventy seven roads lead out of each city have exactly 10000 roads?