

# Comments regarding material for Hour Test II

07/22/08

1. Your homework is meant to cover important points.
2. Generally know all of the definitions and what means for the conditions of a definition not to be met.
3. Chapter 6: There are many elementary proofs concerning sets which you should be familiar with at this point. This chapter is very fertile ground for questions.
3. Chapter 7: This is a very important chapter. You should be able to write statements in terms of formal quantifiers into English, and vice versa. Certainly know how to negate statements with quantifiers.
4. Chapters 8, 9: Know all of the terminology concerning functions; what it means for a functions to be injective, not injective, surjective, not surjective, bijective, not bijective, for example. *Omit Section 9.4.*
5. Chapter 10: Know how to *use* the theorems and propositions, and what the basic counting principles are. I will *not* ask you to prove propositions or theorems in this sections; perhaps a corollary though. However, there may be short proofs which use the theorems.
6. Chapter 11: Understand, in particular, how to apply the pigeonhole principle.
7. Chapter 12: Know how to *use* the theorems and propositions, in particular know what the basic enumeration formulas are. I will *not* ask you to prove the formal statements of this section: lemmas, propositions, theorems, or corollaries.