Last name _____

First name _____

LARSON—MATH 350–HOMEWORK WORKSHEET 11
Integers and Primes!

You should write out any definitions as needed, explain your notation, and be extremely clear. The goal of is to convince **other** readers of your ideas and arguments. Write as if you are writing to your colleagues. Remember that no one reads minds—they only can know what you tell them. Maximum clarity is a virtue—and worth practicing.

Half of being a scientist is **communication** (explaining to others This is a skill—and one that needs to be practiced. You will practice this skill in our class: **Answers are never enough. The explanation is as important as the answer**. You can't get full credit on an assignment that requires explanation unless you put in explanations.

Read Section 6.1, 6.2, 6.3 and 6.9 from our book. Then **do the following 4 problems** from our text:

- 6.5.1

- 6.9.3

- 6.9.4

- 6.10.3

General Recommendations and Advice

- On any question or problem involving general variables (that is, for *arbitrary* non-negative integers k, or n, etc) you should work out small concrete examples (so, for instance with $k = 2$ and $n = 3$). Figuring out concrete examples is a first key step for eventual understanding of general claims).

- If you are asked to prove a claim about general sets A and B, you should define *small* sets A and B (maybe let $A = \{x, y, z\}$ and let $B = \{u, v, w, x\}$) and see what the claim says about these *concrete) sets.

- Write lots of small examples. Not only does this make a problem *concrete* but helps you identify exactly where you don't understand something, and helps your friends, collaborators and teachers identify what you do or do not understand.