Math 250: Daily Preparation

Overview

The main goal of today's daily preparation assignment is to have you review some key recent work and continue to develop your understanding of proofs that involve sets. The primary emphasis is on reading (or re-reading) some important sections of the text and responding to the questions posed below.

Basic learning objectives

These are the tasks you should be able to perform with reasonable fluency **when you arrive at our next class meeting**. Important new vocabulary words are indicated *in italics*.

- Know and understand the definition of *subset* and how this definition involves a conditional statement.
- Understand how to prove that a given set A is a subset of another given set B.
- Understand the basic idea of the "*choose-an-element*" method.

Advanced learning objectives

In addition to mastering the basic objectives, here are the tasks you should be able to perform in the near future **with practice and further study**:

- Be able to recognize and prove key relationships among sets, including when one set is a subset of another and when two sets are equal to one another.

Resources

Reading: Read pages 236-238 and page 251.

Watching: Here are some additional resources that have been developed to support your learning:

- Screencast 5.2.3: http://gvsu.edu/s/u8
- Screencast 5.3.1: http://gvsu.edu/s/u9

Questions

Respond to the following questions on separate paper, as explained in the document that describes guidelines and expectations for daily preparatory assignments. You should be prepared to show me your responses at the start of class; I will review your work briefly sometime before the end of class.

1. Complete Progress Check 5.15 on page 238.

2. Complete Exercise 5.2 #1 on pages 238-239.

3. Complete Exercise 5.2 #3 on page 239.

4. Write at least one question that you have about the ideas in Sections 5.1 - 5.3 that we have studied so far.