

# MATH 110 Study Guide for Midterm Test 1

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Below is a list of sections from the textbook and problems from which I will select problems for Midterm Test 1. THIS NEEDS EDITING.

In general, you do not need to study or memorize proofs (although if you are planning to major in mathematics it would be a good idea). You should concentrate on getting the correct result in calculations; you should know how to use theorems rather than what they are called or what number they are given in the textbook. I will know what theorem you are using in a calculation if you use it correctly.

- **Chapter 1.** I will not be specifically testing the material of chapter 1, but you need to know it in order to do anything in the course. You should be able to do the following review exercises from the end of chapter 1 (page 53). If you have trouble with the exercises, in particular the C-level exercises, please be sure to review the relevant sections of chapter 1.
  - C-level: 1–3, 5–16, 19–20
  - B-level: 17–18, 22
  - A-level: 21
- **Section 2.1.** Skip example 2.
  - C-level: 3–7
  - B-level: 8
  - A-level: 9
- **Section 2.2.**
  - C-level: 4–10, 12–32
  - B-level: 1–3, 33–35, 40, 42
  - A-level: 37–38
- **Section 2.3.**
  - C-level: 1–32, 46, 48
  - B-level: 33–45, 47, 49–51
  - A-level: 52–61
- **Section 2.5.**
  - C-level: 1–40, 43, 47–50

- B-level: 41–42, 44–46, 51–54
- A-level: 55–65
- **Section 3.1.** Skip example 7.
  - C-level: 1, 3–30, 37–39, 43
  - B-level: 31–36, 44–46; 48–50
  - A-level: 51–52
- **Section 3.2.**
  - C-level: 1–30, 33–36
  - B-level: 37–44, 47–50, 54–55
  - A-level: 51–53
- **Section 3.3.**
  - C-level: 1–43, 49–80
  - B-level: 81–93
  - A-level: 94–102

Altogether that is a lot of material, but if you have been keeping up with the problem sets there should be nothing new to you in that list.