

MATH 141, Spring 2015
EXAM 1 TOPICS

Exam 1 will take place on Monday, March 2.

The exam will be one class period long. Graphing calculators (TI- \leq 86) are allowed and are somewhat useful. Be aware that I will come around and delete their memory before the exam.

Bring your QC ID to class for this first exam.

The exam covers all material covered in class from Chapter 1 of Stewart's *Essential Calculus*.

In addition to computational questions, there will be questions that ask you to understand concepts from the course, possibly including, and not limited to: (Pages apply to both 1st and 2nd Editions)

- The definition of a function (p. 2)
- The intuitive definition of a limit (p. 25)
- The Squeeze Theorem (p. 41)
- The definition of continuity (p. 46)
- Proving a function is continuous to prove the existence of a limit
- The Intermediate Value Theorem (p. 52)
- Conceptual understanding of infinite limits and limits at infinity (pp. 56–59)

You should understand how to use your graphing calculator to:

- Graph multiple functions.
- Choose suitable window to enhance the graph.
- Determine numerical approximations to limits using TABLE.

To study for the exam:

- I **especially recommend** the Chapter Review given for Chapter 1 (pp. 70–72) *Take these questions seriously.*
- Verify that you understand all precise definitions from Chapter 1, just as we discussed at the beginning of class.
- Review WebAssign homeworks.
- There will be a Question and Answer session during class on Wednesday, February 25. Prepare questions to ask during this Question and Answer session.