

Midterm 3 Info

Time & place: Wednesday, November 30 at 6-7pm in MSEB 119.

Topics: Material covered in class from:

- Chapter 14 (Cauchy sequences and infinite series)
- Number Theory Handouts 1 and 2 (divisibility, primes, congruences)

Format: The midterm exam is closed book.

Be aware:

- To get full credit you must write **complete**, **clear**, and **concise** solutions.
- Clearly label the important steps and techniques you use.
- Everything must be proven, except for the true/false questions.
- The exam format is identical to the previous exams: you will be asked to define important terms, state precisely key results covered in class, and to prove mathematical statements. Additionally there will be one problems consisting of true/false questions.

Preview: One of the exam questions will come from the following list.

1. Prove that a convergent sequence is Cauchy.
2. Prove that a Cauchy sequence is convergent.
3. Prove the Comparison Test for infinite series.
4. Prove Euclid's theorem on the infinitud of primes.