

Improper Integrals

Math 8 Section 1



On the Board

- Write 1 Improper Integral of Type I on the left board
- Write 1 Improper Integral of Type II on the center board



Today

- Written Homework #1 Due!
- Improper Integrals
 - Type I, II
- Comparison Theorem



Announcements

- Visitor on Today
- Office Hours Tomorrow
 - 2A?
- In Class Worksheets
- In two weeks.....



For Friday

- WeBWork
- Section 7.8 Practice Problems:
 - 8, 12, 13, 28, 34
- Pre-Lecture Notes (possibly 2)
- Sections 11.1 & 11.2 – Sequences and Series

Mathematician of the Week!



Mathematician of the Week!



Henri Lebesgue

- Married a sister of his fellow student
- Has a unit of measure named after him
- Lebesgue Integral vs. Riemann Integral – Math 35 or 63

<http://www.gap-system.org/~history/Posters/628.html>



Course Learning Outcomes

1. Students will be able to apply new integration techniques to computational problems.
2. Students will have a better understanding of limits through their study of sequences, series and power series.
3. Students will be able to apply convergence tests to determine whether a series converges.
4. Students will be able to use power series to approximate functions
5. Students will be able to analyze two-dimensional and three-dimensional problems through the use of vector techniques
6. Students will be able to find maxima and minima of functions of several variables.