Real Analysis

Math 310 MWF 10:30-11:25am
Fall 1996 127 Fowler

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(09/18/96)

SUMMARY Learning to write and read proofs

READING §8

Warm-Up
(5-10 minutes)
We will review your formal proofs of $\lim \dfrac{n+1}{2n+3} = 1/2$

THINKING ABOUT PROOFS
Today we are going to be doing more examples of formal proofs of the convergence of sequences. We shall be using this as a background for developing the skill of *reading* and *writing* formal mathematics.

Example 2 (p. 29)
Prove that $\lim \dfrac{3n+1}{7n-4} = 3/7$

Example 3 (p. 29)

Prove that $\lim \dfrac{4n^3 + 3n}{n^3 - 6} = 4$

Example 4 (p. 29)

Show that $a_n = (-1)^n$ does **not** converge.

Weekly Homework Assignment (Due Friday 9/20/96))

§8, page 32: **8.1(a),(c), 8.2(a),(e)** and **8.7(b)**