Real Analysis - HW 2

September 14, 2015

This second homework for real analysis is due this coming Friday, September 18 by 3:00 PM. You should type it with LaTeX and turn in your printed PDF.

1. Use the definition of limit to prove that $\lim \dfrac{n+1}{2n-1} = \dfrac{1}{2}$.
2. Suppose that (x_n) and (y_n) are sequences with $x_n \to L$ and $|x_n - y_n| < 1/n$ for all n. Show that $y_n \to L$.