

Math 305, Problem Set #4
(due **by email** Friday, 10/9/09, 10:30 a.m.)

Abbott, section 2.4, problems 1, 2, and 5(a).

Abbott, section 2.5, problems 2, 3, and 5.

Abbott, section 2.6, problems 3.

Extra problem A: Show that if $a_n \geq 0$ for all n and $a_n \rightarrow 1$, then $\sqrt{a_n} \rightarrow 1$.
(Hint: Use the identity $x - 1 = (\sqrt{x} - 1)(\sqrt{x} + 1)$.)

Please don't forget to write down **who you worked on the assignment with** (if nobody, then write "I worked alone"), and record **how much time you spent on each problem** (this doesn't need to be exact).