MATH 241: ANALYSIS IN SEVERAL REAL VARIABLES I
HOMEWORK #2

Problems (for all)

1.3.3(a)(b)

1.3.A: Using the axiom of completeness, show that every nonempty set $A \subset \mathbb{R}$ which is bounded below has a greatest lower bound. *[Hint: Let* $-A = \{-x : x \in A\}$*. Show that* $-A$ *is bounded above and that* $-\sup(-A) = \inf A$*.]*

1.3.5

1.3.7

1.4.1

1.4.4

1.4.5

1.4.6(a)

Problems (for grad students)

1.4.7

Date: due Wednesday, 16 September 2009.