

**MATH 241: ANALYSIS IN SEVERAL REAL VARIABLES I**  
**HOMEWORK #5**

PROBLEMS (FOR ALL)

**2.6.1**

**2.6.2**

**2.7.1**

**2.7.3**

**2.7.A:** Let  $(a_n)$  be a conditionally convergent sequence. Show that for any real number  $c$  there exists a rearrangement  $(b_n)$  of  $(a_n)$  such that the sequence  $b_n$  converges to  $c$ . [*Hint: Use Problem 2.7.3, and see the discussion in §2.9*]

**2.7.8**

**2.7.9**

PROBLEMS (FOR GRAD STUDENTS)

**2.6.6**

**2.7.12**

**2.7.14:** [*You may assume the results in Problem 2.7.13.*]