## February 20, 2008

## Office hours location change. New location: Math Study Center - B-014 Communications

## Problem 4.13

Let n be an integer between 1 and 999. If n = abc = 100a + 10b + c the reverse of n is cba. Suppose that  $a \neq c$ . Let x be the absolute value of the difference between n and its reverse. Prove that the sum that x and its reverse is 1089.