

# MA 113 B2

# QUIZ 5

July 21, 2009.

Student Name (Last, First) \_\_\_\_\_

BU ID # \_\_\_\_\_

**Show all your work for full credit.**

1. (5 points) A study is conducted to compare salaries of managers and journalists who work for newspapers. Two independent samples were taken for this study: 40 journalists and 30 managers. It was found from these samples that journalists made on average 3500 dollars per month with a standard deviation of 420, while managers made on average 5650 dollars per month with a standard deviation of 983. Is there sufficient evidence to suggest that newspaper managers have higher salaries than journalists? Run the appropriate test with  $\alpha = 0.01$ . Use  $Z$  statistic and assume that population variances are different.