

MA 113 B2

QUIZ 4

July 21, 2009.

Student Name (Last, First) _____

BU ID # _____

Show all your work for full credit.

1. (3 points) Blizzard Entertainment wishes to estimate the average time it takes to beat their popular *World Of Warcraft* title. They take a random sample of 30 subscribers and find that the mean time to achieve level 80 is 311 hours and the sample standard deviation is 64 hours. Estimate the population mean using a 90% confidence interval (OK to use Z).

2. (2 points) Using sample statistics from above, find the minimal sample size to ensure that the estimate is within 10 hours of the population mean with 95% confidence.