

STAT 251 Statistical Inference for Management I Winter 2012

Quiz 3

Taken on Mon Jan 9. Please work individually on a half sheet of paper. You may use your notes.

Recall that we took samples of words from the population of words in the Gettysburg Address, for which the average (mean) length of a word is 4.295 letters. Answer YES or NO to the following questions.

- 1) Is the number 4.295 a *parameter*? Do not bother to explain.
- 2) Did every student in class obtain the same value for the *statistic*? Do not bother to explain.
- 3) Would selecting words by closing your eyes and blindly pointing to the page be a *biased* sampling method? Explain briefly.
- 4) Is it *possible* for a random sample of 5 or 10 words to obtain a sample mean that equals the population mean *exactly*? Explain briefly.
- 5) With random sampling, does taking a *larger* sample produce *more variability* in values of sample statistics? Do not bother to explain.