

STAT 221 Introduction to Probability and Statistics Winter 2012

Quiz 5

Assigned on Thur Jan 12; due on Fri Jan 13. Please work individually. You may use your notes.

1. Would selecting words from the Gettysburg Address by closing your eyes and blindly pointing to the page be a *biased* or an *unbiased* sampling method? Explain briefly.
2. When we took a larger sample of words from the Gettysburg Address, did the sample mean word lengths vary more, less, or the same amount as when we took a smaller sample? (Answer with one of the three options; do not bother to explain.)
3. Suppose that I select Major League Baseball (MLB) games played during the 2nd week in April as a sample of all MLB games played in the upcoming 2012 season. Would this be a simple random sample? Explain briefly.
4. Following up on #3, consider two variables that you could record about each game: attendance and number of runs scored. With which of these two variables is the sample more likely to be representative of the population? Explain briefly.
5. Suppose that you select a sample of Cal Poly students by standing in front of the library and asking students who pass by to take a survey. Would this be a simple random sample from the population of all Cal Poly students? Explain briefly.