

First Writing Assignment

Write a short paper (1-2 pages, double-spaced, typed) on ONE of the questions below. These are to be turned in by Noon on Friday, November 1. Papers should be submitted electronically to your TA in .doc, .docx, or .rtf format.

The goal of this paper is to explain clearly the central concepts employed in the question you select. Assume that your audience is a fellow student not in this class and that you are writing a tutorial to teach this student. To explain the material to that person you cannot just use the concepts we have developed in class; rather you must *explain* them. If you think it will help, you may create an illustrative example. Present your answers totally in your own words—do not quote material either from the website, the lecture slides, or any other source.

1. Explain why, when a researcher is trying to determine the mean value of a score variable in the actual population, a sample of 500 is just as reliable when studying a population of 3,000 and a population of 100,000,000. This requires you to explain what is meant by variability in values of a variable, the concept of standard deviation, why it is desirable to reduce the standard deviation in making an estimate from a sample, and how standard deviation changes with sample size.
2. Explain how researchers characterize distributions of score variables. Be sure to discuss both of the main types of measures of distributions (those describing variability and those identifying the central tendency), how they differ, and why just one alone would not suffice to describe a distribution. Characterize the three measures of central tendency and identify conditions under which they give the same results and those under which they don't. In cases in which they don't, what would be a reason for wanting to know the value on each measure?