

Lecture 1b: Practice Problems

Practice

Everything that appears in the lecture notes are fair game for the test. They are the best “study guide” I can provide. It is impossible to provide a “list” that is more comprehensive than the lecture notes above. However, here are a few additional practice exercises or practice concepts.

- 1) Know the definitions of the following: population, sample, sampling elements, sampling frame, known vs. unknown populations, population parameters, sample statistics.

- a) If given an explanation of a research project, be able to identify each of these items in the project. For example: A researcher wishes to study all prison guards in the state of Hawaii. She cannot visit all prisons in the state so she obtains a list of prison guards who work at Halawa prison on Oahu. She randomly selects 30 prison guards from that list and she interviews them. What is her population? What is her sample? What is her sampling elements? What is her sampling frame? Is this population best described as known or unknown? Answers below.

Answers: population= all prison guards in HI, sample = 30 guards from list, sampling elements: individual prison guards, sampling frame= the list of all prison guards who work at Halawa prison, population is known

- 2) Be aware of the issues surrounding “bad” “good” and “perfect” matches between sampling frames and populations and the issues regarding sampling and inferential statistics