
AGSC 137
Analysis and Interpretation of Agricultural Data
Spring 2010

First Examination Study Guide

Prepared By

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- Define the term statistics
- Define the term descriptive statistics
- Define the term statistical inference
- Understand the difference between descriptive statistics and statistical inference
- Understand the common misuses of statistics, including bias, faulty generalizations, faulty deduction, non-comparable data, error in semantics, oversimplification, and spurious accuracy
- Understand the difference between qualitative and quantitative variables
- Understand the difference between discrete and continuous variables
- Understand the basic algebra of summation
- Understand the different ways of presenting data
- Know the difference between histograms and frequency polygons
- Know when to use relative frequency polygons
- Understand the difference between the less-than and more-than cumulative frequency distributions (and cumulative relative frequency distributions)
- Know how to work with measures of central tendency of ungrouped data, including arithmetic mean, midrange, median, and mode (any questions will be based on small sets of ungrouped data)
- Understand how the mean, mode, and median compare for symmetrical and skewed distributions
- Know how to work with measures of dispersion of ungrouped data, including range, quartile deviation, variance, and standard deviation
- Understand how to assess the relative variability in a set of data using the coefficient of variation