

Exam 4 Objectives

For Exam 4, a well-prepared student should be able to

- interpret a confidence interval
- interpret a significance test
- distinguish between standard deviation and standard error
- distinguish between a z statistic and a t statistic
- check conditions under which a given method applies
- identify population(s) and parameter(s) of interest
- identify relevant sample(s) and statistic(s)
- select and carry out an appropriate method for computing a confidence interval for any of the following:
 - mean for one population
 - difference of means for two population
 - proportion for one population
 - difference of proportions for two populations
- determine a sample size to produce a given margin of error for a proportion
- select and carry out an appropriate method for a significance test involving any of the following:
 - mean for one population
 - difference of means for two populations
 - proportion for one population
 - difference of proportions for two populations
- used a “matched pairs” design when relevant
- analyze a study design for potential bias