

Math 138: Statistics

Quiz #4 Topics

Chapters 21–24.

- Chapter 21: Hypothesis tests: Choosing and working with one-sided or two-sided alternatives. The result of changing alpha levels on the conclusion of a hypothesis test. Understanding type I and Type II errors, the power of a test, and effect size. The relationship between confidence interval conclusions and hypothesis test conclusions.
Chapter 21: 1 (One sided or two?), 5 (Alpha), 7 (Significant?), 11 (Approval 2007), 21 (Testing cars), 23 (Cars again), 25 (Equal opportunity)
- Chapter 22: 2-proportion z -intervals and tests. Finding and interpreting confidence intervals, and performing and interpreting hypothesis tests. Writing, interpreting, and understanding statements about the difference between two proportions.
Practice problems: 1 (Online social networking), 3 (Name recognition), 11 (Pets), 21 (Pregnancy), 23 (Politics and sex)
- Chapter 23: 1-sample t -intervals and tests. Finding and interpreting confidence intervals, and performing and interpreting hypothesis tests. Understanding the use of t -distributions for the critical value of a confidence interval and the P -value of a test.
Practice problems: 9 (Pulse rates), 13 (Normal temperature), 29 (Marriage)
- Chapter 24: 2-sample t -intervals and tests. Finding and interpreting confidence intervals, and performing and interpreting hypothesis tests. Writing, interpreting, and understanding statements about the difference between two means. Making conclusions based on software output.
Practice problems: 1 (Dogs and calories), 3 (Dogs and fat), 5 (Dogs and fat, second helping), 9 (CPMP, again), 23 (Sex and violence)