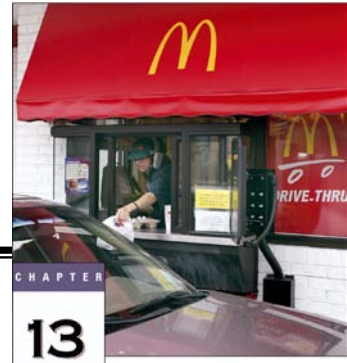


Chapter 13: Comparing Two Population Parameters



Key Vocabulary:

- two-sample z statistic
- two-sample t statistic
- Robust
- pooled
- Difference between two means
- Standard Error
- Combined Sample Proportion

Calculator Skills:



- 2-SampZTest
- 2-SampTTest
- 2-SampZInt
- 2-PropZTest
- 2-PropZInt

13.1 Comparing Two Means (pp.780-805)

1. Summarize the three key points of “two sample problems”:

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2. How does ‘mean difference’ differ to ‘difference between two means’?

3. In a two-sample problem, what conditions must be met for comparing two means?

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4. In a two-sample problem, must/should the two sample sizes be equal?

13.2 Comparing Two Proportions (pp.806-831)

1. Give the mean and standard deviation for the sampling distribution of $\hat{p}_1 - \hat{p}_2$.
2. How do you calculate the standard error of $\hat{p}_1 - \hat{p}_2$?
3. Give the formula for the *standard error* when calculating a confidence interval for $\hat{p}_1 - \hat{p}_2$, and define each variable in the equation.
4. Describe how to construct a level C confidence interval for the difference between two proportions, $p_1 - p_2$.
5. What conditions must be met in order to use *z procedures* for inference about two proportions?

6. State the null hypothesis for a *two proportion z-test*.
7. State and use diagrams to illustrate the three possible alternative hypotheses for a *two proportion z-test*.
8. What does \hat{p}_c represent, and how is it calculated?
9. Give the formula for the *two-proportion z-statistic*, and define each variable in the equation.
10. What conditions must be met in order to use *z procedures* for inference when comparing two proportions?