

STAT 270 Lecture 36  
Fall 2015  
4 December 2015

- I discussed hypothesis tests, fixed level testing, Type I and Type II errors.
- I did a test of the hypothesis that a population proportion was equal to a specific value.
- I did a test of the hypothesis that two population means are equal.
- In “Inference for 1 Sample” we have covered slides 1-78. In ‘Inference for 2 Samples’ we have done all the slides (though I have not done an example with 2 population proportions yet).
- Relevant problems: 6.10, 6.12, 6.14, 6.15, 6.31, 7.02, 7.03, 7.04, 7.06, 7.10, 7.11, 7.12, 7.13, 7.14, 7.16, 7.17.
- Handwritten slides.
- Key jargon, ideas:
  - A Type I error is made if the null hypothesis is true but it is rejected.
  - A Type II error is made if the null hypothesis is false but it is not rejected.
  - You need to have a table of steps to follow in doing these problems: Introduce notation for the mean, proportion, means, or proportions; define the null and alternative hypotheses; compute the appropriate Test statistic; compute the appropriate  $P$ -value; check to see if this  $P$ -value is smaller than the value of  $\alpha$ ; interpret the results.