

## **STAT 251 Statistical Inference for Management I Winter 2012**

### **Quiz 19**

Assigned on Wed Feb 29, due on Thur Mar 1. You may work with a group of as many as 4 students, submitting one quiz with all names, provided that you all contribute to the work.

Continue to analyze the sample of 124 kissing couples, 80 of whom leaned to the right. Now consider this question: Do the sample data provide enough evidence to reject that 60% of all kissing couples lean to the right? Investigate this question with the following steps:

1. State the null and alternative hypotheses, in symbols and in words.
2. Check the conditions for whether the CLT applies here.
3. Calculate the value of the test statistic.
4. Calculate the p-value.
5. Summarize your conclusion, using a significance level of  $\alpha = .10$ .