

Answer Sheet for Lab #6: Testing Means and Differences in Means

Name: _____

1. What is the margin of error when testing average annual income for men = \$80,000?
2. What is the test-statistic when testing average annual income for women = \$80,000?
3. What is the sample standard deviation in the difference in men and women average annual income?
4. What p -value do you calculate when testing that there is no difference in average annual incomes between men and women?
5. What p -value does Excel produce (using Data Analysis) when testing that there is no difference in average annual incomes between men and women?
6. What accounts for the difference in p -values between 4 and 5?
7. Would you reject or fail to reject the claim that there is no difference in average annual incomes between men and women? Explain.
8. What is the 97% confidence interval for the average SAT score for men?
9. What is the p -value associated with the test that average SAT scores for women = 800?
10. Would you reject or fail to reject the claim that average SAT scores for women equal 800? Explain.
11. What is the average SAT score for men? What is the average SAT score for women? Is the difference statistically significant? Explain.