36 - 226 Introduction to Statistical Inference

Homework assignment 5
Due: Wednesday, February 20, 2013

- Write your full name, the course number, and the homework number at the top of each page.
- **STAPLE** your entire assignment together <u>with a staple</u>.
- Write clearly. Electronic submission of homework assignments is not accepted.

1. Wackerly 8.60.

2. Wackerly 8.65.

3. Wackerly 8.72.

4. Wackerly 8.75.

5. Wackerly 8.84.

6. Wackerly 8.90. For this question, you will need to use the *pooled estimator* of the sample standard deviation, S. The pooled estimator is denoted S_P. Read pages 428 - 429 for more background. Note that the degrees of freedom for the t-distribution is $n_1 + n_2 - 2$ for this situation. You may want to think about why it is necessary to use S_p (the answer is included within the noted textbook pages).

7. Wackerly 8.102.

8. Wackerly 9.38.

9. Wackerly 9.43

10. Wackerly 9.51