

Your Name: _____

Math 140: Statistics, April 29, 2008
Quiz 18, Chapter 27: More Tests for Averages

1. (8 pts.) Box A has an average of 100 and an SD of 20. Box B has an average 90 and an SD 10. With each box, 25 draws are made at random with replacement.
 - a) What is the appropriate SE for Box A?

 - b) What is the appropriate SE for Box B?

 - c) What is the combined SE for the two boxes?

 - d) Estimate the difference of the averages of the two boxes as a give-or-take number.

2. (8 pts.) In a hypothetical study, 100 students had an average score of 53 with an SD of 18 on one test and an average score of 57 with an SD of 12 on a later test. Use a two-sample z -test to decide if the students did significantly better on the second test.

Pledged: _____