

STAT 200

Assignment 5

Issued: January 23, 2002

Due: January 29, 2002

Be sure to:

- Put your name and the Assignment # on the front
- Answer as completely as you can. All I can go on is what you give me, so show your work.
- Be as neat as possible. You can write it out, but please be neat.
- Staple or place in a folder

1. Answer Problem 7.18 on page 287 in Chapter 7 (employee participation rate). 15 pts
2. Answer Problem 7.27 on page 296 in Chapter 7 (lead and copper levels in water) 15 pts
You must show your work to get credit.
3. Use the data in Problem 7.29 on page 297. Enter the data into Excel and use the Descriptive Statistics under Data Analysis to get descriptive statistics. Then calculate the Confidence Interval for the problem. **Interpret your result.** 15 pts
4. Answer Problem 7.40 on page 304 (consumer taste test). 15 pts
You have to calculate the proportion. You can use Excel to help answer this one or calculate it by hand.
5. Answer Exercise 7.50 on page 305 in Chapter 5 (checkout scanners) 15 pts
6. For this problem we will look at some data for speeders on a federal highway. The data are a random sample of 63 motorists on a Federal highway where the speed limit is 65 mph. The data can be found on an Excel file on the web. 25 pts
 - a. Use Excel to give the descriptive statistics. Briefly (one paragraph) describe the data using the summary statistics
 - b. Calculate a 99% Confidence Interval for the data
 - c. Conduct a Hypothesis Test where the null hypothesis is that the average speed is 65 mph. Use an α level of .01.