

Math 148 - Elementary Bio Stats

Spring 2017 Homework 15

Review exercises Ch.26, p.495: Problems # 3, 8

Review exercises Ch.27, p.518: Problems # 1, 2, 5, 7, 9

Exercise A: t -test

A new medical procedure has been developed to cure a certain disease. The lab director claims that the average time to recovery is 16.3 days. A random sample of 10 subjects who underwent the procedure showed an average recovery time of 17.7 days. The sample standard deviation SD_x^+ is 1.8.

- a. Is there enough evidence to reject the director's claim at a P-value of 5%?
- b. Is the result highly significant?

Exercise B: t -test

The Teacher's Union claims that the average salary of adjunct faculty at New York State colleges and universities is less than \$60 per day. A random sample of eight institutions is selected, and the daily salaries (in dollars) are shown. Is there enough evidence to support the claim at a P-value of 10%?

Sample of daily wages : 60 56 60 55 70 55 60 55

All answers must be typed by computer.

You may do drawings by hand in case you choose to provide any. **Use a ruler!**