

Problem Set 9 for Math 30

Date Due: May 6th, 2011

April 25, 2011

Chapter 15 Problems (Sections 15.1-15.6, 15.9-15.10):

4, 13, 22, 27, 48, 50, 54

Chapter 10 Problem:

65a - Do with 2 different nonparametric tests (obviously ignore book comment about using t table). How do the results compare?

Chapter 14 Problems (Sections 14.1-14.4):

4, 5, 18

Additional:

(You may use R to confirm your results for the additional problems, but should try them by hand).

1. Is the following set of 8 observations inconsistent with a Normal distribution with mean 10 and variance 4? Use a nonparametric test, and reasonable alpha (roughly .05 is fine).

12.82, 9.63, 0.95, 10.72, 8.60, -5.61, 2.25, 11.09

2. Two random samples X and Y yield observations shown below. Is there sufficient evidence that X and Y come from populations with different distributions? (Not 'shifted', possibly entirely different distributions). Use a nonparametric test, and reasonable alpha (roughly .05 is fine).

X: 19.58, 15.16, 10.45, 10.93, 20.18

Y: 18.58, 24.17, 13.80, 21.36, 14.79