

MTH 316 NONPARAMETRIC STATISTICS
Homework #11 (Due Thursday, December 05)

1. The following table classifies a sample of people according to their gender and their opinion about an afterlife.

		Belief in Afterlife	
		Yes	No or Undecided
Gender	Female	509	116
	Male	398	104

- a. Construct a 90% confidence interval for the difference in proportions of yes's and interpret.
- b. Construct a 90% confidence interval for the odds ratio of yes's and interpret.
- c. Conduct a test of statistical independence concerning gender and belief in afterlife. Interpret your results.

The following exercises are from Chapter 12, pages 382–388.

2. Problem 12.8
3. Problem 12.12
4. Problem 12.25

The following exercise is from Chapter 14, page 467.

5. Problem 14.4
6. Refer to Problem 11.11 on pages 345–346 of the textbook. Find a 95% percentile-based bootstrap confidence interval for Pearson's correlation coefficient.