

STAT 221 Introduction to Probability and Statistics Winter 2012

Quiz 4

Taken on Tues Jan 10. You may work with a group of as many as four students, submitting one quiz with all names, provided that you all contribute to the work. You may use your notes.

Reconsider the “which tire” data that we collected in class yesterday. For my two sections combined, 34 of 86 students selected the right front tire.

1. State the null and alternative hypotheses to be tested.
2. Use simulation to determine the approximate p-value, based on the data from my two sections combined.
3. Interpret this p-value: This is the probability of _____, assuming _____.
4. Summarize your conclusion.
5. Determine how many students (out of 86) would have had to pick the right front tire in order for the p-value to be less than .05. Explain how you determine this.