

Your Name _____

Math 140: Statistics, February 5, 2008
Quiz 1, Chapters 1 & 2

1. (8 pts. total or 2 pts./each part) Fill-in-the-blank:
 - a. In a controlled study of a new drug, the individuals studied will be divided into a(n) _____ and a(n) _____.
 - b. When neither the doctor nor patient knows whether the patients are receiving the tested drug or a placebo, this is a(n) _____ study.
 - c. If the patient sticks to a treatment for the duration of a study, they are said to be a(n) _____.
 - d. If the study compares the records of patients receiving a treatment to the records of previous patients that did not receive the treatment, the study is said to use _____.

2. (6 pts.) To improve physical fitness, a school adopts an opt-in fitness program. Students who elect to participate will be compared to those who don't.
 - a. Is this a controlled or observational study?

 - b. Identify the two groups in the study.

 - c. If data shows a general improvement in fitness, could you conclude the program was beneficial? Justify your conclusion.

3. (4 pts.) In one study it was shown that there were 1423 traffic fatalities for people driving a Forvette while only 952 fatalities for people driving a Toyda. Subsequently, Toyda began an advertising campaign arguing that the Toyda is a much safer car. Is this assertion justifiable? Explain your conclusion.