

1. (10 pts) Use the following sample of 10 test scores in the parts below.

60, 72, 85, 89, 90, 93, 94, 95, 98, 100.

- (a) Find the mean.
  - (b) Find the standard deviation.
  - (c) Find the five-number summary.
  - (d) Find the IQR.
  - (e) Draw a modified boxplot of the sample.
  - (f) Calculate the  $z$ -score of the number 60.
2. (10 pts) Two statistics professors, Dr. Jekyll and Mr. Hyde, are each teaching a section of introductory statistics. On the first test, the grades in Dr. Jekyll's class had a mean of 85 and a standard deviation of 8. In Mr. Hyde's section, the scores had a mean of 65 and a standard deviation of 14. Susie, a student in Dr. Jekyll's class, scored 95, while Jimmy, a student in Mr. Hyde's class, scored 86. Use their  $z$ -scores to tell which student did better on the test relative to their respective classes.
3. (10 pts)