

Homework 2 Key

- 1) There is strong evidence that there is a difference in the true mean GPA of male and female Stat 217 students.
- 2) Because gender was not randomly assigned, we can't say that the differences in sex cause the difference in average GPA. Because it was not a random sample of students, we can not infer our results beyond Stat 217 students in the previous semester.
- 3) Formula for CI:
$$\text{Est} \pm t^* SE$$
$$0.25 \pm (2)(.09)$$
$$= (.07, .43)$$
- 4) We are 95% confident that the difference in true mean GPA between women and men in Stat 217 is between .07 and .43 GPA points.
- 5) there are more outliers in the NFC and the mean is more strongly affected by outliers
- 6) for you to come up with