

Name _____

Student Number _____

STA 441s 2024 Quiz 8

1. For the Diversity data,

- (a) (3 points) give the lower and upper 95% prediction interval for employee 508. The answer is a pair of numbers. Write the two numbers in the space below. On your printout, circle the numbers and write “Question 1a” beside them.
- (b) (3 points) What percentage of the observations in the replication sample were within the prediction interval? The answer is a number between zero and one hundred. Write the number in the space below. On your printout, circle the number and write “Question 1b” beside it.

2. For the Raptors data, you fit a first-order autoregressive model. Based on that model,

- (a) (1 point) What is the estimated first-order autocorrelation between the error terms? The answer is a number on your printout. Write the number in the space below. On your printout, circle the number and write “Question 2a” beside it.
- (b) (1 point) You tested Home versus away game, controlling for Opponents’ won-lost record, Days since last game, and Weekend versus weekday. Please fill in the table below

t , χ^2 or F Statistic (a number)	p -value (a number or range)	Reject H_0 ? (Yes or No)	Statistically Significant? (Yes or No)

On your printout, circle the test statistic and write “Question 2b” beside it.

- (c) (2 points) In plain, non-statistical language, what do you conclude from the test of Home versus away? Don’t touch the time series issue.