Week 3 Lab

Quiz, 10 questions

X Try again once you are ready.

Required to pass: 80% or higher

You can retake this quiz up to 3 times every 8 hours.

Back to Week 3

Retake



1/1 point

1.

Is this an observational study or an experiment?

0

Observational study

Correct

Experiment



Quiz, 10 questions 2.

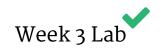
The original research question posed in the paper is whether beauty leads directly to the differences in course evaluations. Given the study

	should the question be rephrased? If so, how?	
\bigcirc	No, the question is worded accurately.	
	Yes, revise wording to "Is there an association between beauty and course evaluations?"	
Correct		
	Yes, revise wording to "Does beauty score increase the professor's course evaluations?"	
	Yes, revise wording to "Does beauty score decrease the professor's course evaluations?"	



Quiz, 10 qu

ons 3 . Which score?	of the following statements is false about the distribution of
	11 of students gave a professor a score below 3.
	25% of the students gave their professors a score of over 4.6.
This	should not be selected
	The left skewness of the data suggests that the students are less likely to rate the professors highly.
	The median of the distribution is 4.3.
~	1 / 1 point
_	ge beauty score is a statistically significant predictor of tion score.
0	True
Corr	ect
	False



Quiz, 10 questions 5.

Use residual plots to evaluate whether the conditions of least squares regression are reasonable. Which of the following statements is an incorrect analysis of the residual plots and conditions

	Independent observations: Classes sampled randomly, no order effect
	Linear association: The residuals plot shows a random scatter.
	Constant variance of residuals: No fan shape in residuals plot.
	Nearly normal residuals: Residuals are right skewed, but the sample size is large, so this may not be an important violation of conditions.
Corre	ect



Quiz, 10 questions 6.

P-values and parameter estimates should only be trusted if the conditions for the regression are reasonable. Using diagnostic plots, we can conclude that the conditions for this model are reasonable.

\bigcirc	True
	False

This should not be selected



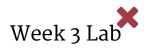
1/1 point

7.

For two professors (one male and one female) who received the same beauty rating, the male professor is predicted to have the higher course evaluation score than the female.

\bigcirc	True
Corr	ect

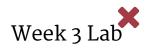
False



Quiz, 10 questions 8.

Which of the following is the correct order of the three levels of rank if
we were to order them from lowest predicted course evaluation score
to highest predicted course evaluation score?

o highest predicted course evaluation score?		
	Tenure track, Tenured	
\bigcirc	Tenure Track, Tenured, Teaching	
	Teaching, Tenured, Tenure Track	
This should not be selected		
	Teaching, Tenure Track, Tenured	



Quiz, 10 questions 9.

Which of the following is the correct interpretation of the coefficient associated with the ethnicity variable. Non-minority professors are expected on average to score ...

expected on average to score		
	0.12 points lower than minority professors, all else held constant.	
This	should not be selected	
	0.12 points higher than minority professors, all else held constant.	
	0.02 points higher than minority professors, all else held constant.	
	0.02 points lower than minority professors, all else held constant.	



Quiz, 10 questions 10.

Elimination of which variable from the full model yielded the highest adjusted ${\cal R}^2$?



bty_avg

This should not be selected

	cls_profs
\bigcirc	cls_students

rank

2

