

Take Test: Module 03 Week 5 Paper and Pencil Assignment

🚩 Test Information

Description

This week's paper and pencil assignment is intended to reinforce concepts covered both this week and in prior weeks leading up to ordinary least squares regression, i.e. simple regression. Multiple linear regression and logistic regression will be covered in coming weeks. As is typical, this assignment includes a variety of types of questions; true/false, fill in the blank, etc.

For redundancy, below is a copy of the Word doc with complete notes about the Week 5 Paper and Pencil Assignment.

[mphModule 3 Week 1, PP5 ANA 500.docx](#)

Instructions

Complete your Week 5 gretl assignment prior to attempting this paper and pencil assignment!

I'm attaching a Word doc below with my complete notes for the paper and pencil assignment. There is not much for you to compute but lots for you to think about. If you have any questions - ask!

Once you have thought through the topics covered, click begin to start this assignment's assessment.

[mphModule 3 Week 1, PP5 ANA 500.docx](#)

Multiple Attempts

This test allows 2 attempts. This is attempt number 1.

Force Completion

This test can be saved and resumed later.

Your answers are saved automatically.

⌵ Question Completion Status:

QUESTION 1

Considering descriptive statistics for the small Boston housing dataset, was the mean home value greater than, equal to, or less than the computed home value using the larger dataset? Enter greater than, equal to, or less than.

5 points

✓ Saved

QUESTION 2

Considering descriptive statistics, was the mean (average) number of rooms greater than, equal to, or less than the computed average number of rooms using the larger dataset? Enter greater than, equal to, or less than ...

5 points

✓ Saved

QUESTION 3

Was the correlation between home values and the average number of rooms greater than, equal to, or less than the correlation value you computed using the larger dataset? Enter greater than, equal to or less than .

5 points

✓ Saved

QUESTION 4

Was the intercept value with this smaller sample greater than, equal to, or less than the intercept value you obtained in your gretl assignment using the larger dataset? Enter greater than, equal to, or less than .

5 points

✓ Saved

QUESTION 5

Was the coefficient of the slope greater than, equal to, or less than the value obtained from the larger dataset? Enter greater than, equal to, or less than .

10 points

✓ Saved

QUESTION 6

I have read the text in the Word notes document.

10 points

✓ Saved

QUESTION 7

Interpret the estimated slope coefficient you computed from your reduced sample data file. Enter the home value you compute if you have 10 rooms. Note that everyone will get a different answer here too! I got 58.31 as my (estimated) home value which is more than double the mean value of CMEDV. Enter my value for the mean CMEDV to get credit for this question.

10 points

✓ Saved

QUESTION 8

This question is very long in the Word notes document. The actual question is in bold font. For the simple dataset we're using the answer to this question you should get is yes.

After you have read and thought about this question enter your answer to the question: **Are all the requirements and assumptions for conducting this OLS analysis satisfied?**

10 points

✓ Saved

QUESTION 9

Using the data and analysis I have shared answer the following question.

The correlation coefficient between the rate of crime represented by the variable crim and the percentage of lower socio-economic status population represented by the variable lstat is _____?

10 points

✓ Saved

QUESTION 10

Using the data and analysis I have shared determine if the following statement is true or false.

The value of this correlation coefficient indicates that a strong relationship exists between the variables crim and lstat.

- ☐ True
- ☒ False

10 points

✓ Saved

QUESTION 11

Again, using the data and analysis I have shared, what is the r-squared value computed? Be sure you are continuing to round your answers to two decimal places!

10 points

Save Answer

QUESTION 12

Using the data and analysis I have shared, determine whether or not this r-squared value indicates that the OLS model explains most of the variability in the data.

☒ Yes

☐ No

10 points

Save Answer

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers

Save and Submit