Quiz 1

Instructions

Before attempting the quiz, please make sure you are familiar with the material covered in class. For questions 7-10, you need to use RStudio and RMarkdown and read Ch. 1 and 3 and the first section of Ch. 5 from a **Guide to R.** **(https://rpubs.com/wsundstrom/home)**

Here is a **R Markdown Cheatsheet** and **R Markdown Reference** that you might find useful.

Notice that the RMarkdown loads GrowthSW data (available in AER package) that contains information on average growth rates over 1960–1995 for 65 countries.

Second, use stargazer command to create a table of summary statistics and use lm command to run a simple regression.

Here is more information on **Stargazer** command.

Question 1	**1 / 1 pts**

Econometrics can be defined as follows with the exception of

- The science of testing economic theory
- Fitting mathematical models to real-world data

Correct!

- Measuring the height of economists
- A set of tools used for forecasting future values of economic variables

Question 2

1 / 1 pts

A low correlation coefficient implies that:

- The line always has a flat slope
- The two variables are unrelated

Correct!

- In the scatterplots, the point fall quite far away from the line.
- You should use a tighter scale of the vertical and horizontal axis to bring observations closer to the line.

Question 3

1 / 1 pts

Your textbook presented you with the following regression output:

TestScore = 698.9 - 2.28* STR; n=420

According to these estimates, you learn that:

An increase in the STR by 1% will decrease the test scores by 2.28 percent.

A decrease in STR by 1 student per teacher will decrease the test score by 2.28 points.

Correct!

An increase in STR by 1 student per teacher will decrease the test scores by 2.28 points.

An increase in STR by 2.28 students per teacher will decrease the test scores by 1 point.

Question 4

1 / 1 pts

In the simple regression model, the regression slope

Represents the elasticity of Y on X.

Correct!

Indicates by how many units Y increases, given a one unit increase in X.

When multiplied with the explanatory variable will give you the predicted Y

Indicates by how many percent Y increases, given a one percent increase in X.

Question 5

1 / 1 pts

Your textbook presented you with the following regression output:

TestScore = 698.9 - 2.28* STR; n=420

If you decided one day to divide STR by 10:

- The intercept will decrease and the slope remains unchanged.
- Correct! The intercept will remain unchanged and the slope will increase.
- The intercept will decrease and the slope will decrease.
- The intercept will increase and the slope will increase.

Question 6

1 / 1 pts

Your textbook presented you with the following regression output:

TestScore = 698.9 - 2.28* STR; n=420

If you decided one day to measure TestScores in 100s (i.e. a test score of 650 became 6.5), then:

- The intercept will increase and the slope will increase.
- Correct! The intercept will decrease and the slope will decrease.
- The intercept will remain unchanged and the slope will increase.
- The intercept will decrease and the slope remains unchanged.

Question 7

1 / 1 pts

Using Growth and Trade dataset, the mean growth rate is:

- 1.3
- Correct! 1.94
- 1.5
- 0.56

Question 8

1 / 1 pts

Using Growth and Trade dataset, the standard deviation of the trade share is:

- Correct! 0.29
- 0.56
- 1.9
- 1.3

Question 9

1 / 1 pts

If you run a simple regression of growth rate on trade share, you find that the intercept is _____ and the slope is _____:

- 0.64; 0.77.
- Correct! 0.64; 2.3
- 1.5; 1.8

0.56; 0.77.

Question 10

1 / 1 pts

The correlation coefficient between growth rate and trade share is:

0.3

Correct!

0.35

0.49

0.77

Quiz Score: **10** out of 10