

MITx: 14.310x Data Analysis for Social Scientists

Helj



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- Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions
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Module 5: Moments of a Random Variable, Applications to Auctions, & Intro to Regression > Expectation, Variance, and an Introduction to Regression > A Preview of Regression - Quiz

A Preview of Regression - Quiz

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Question 1

1/1 point (graded)

True or False: In linear regression, where the relationship between X and Y is expressed as $Y=\alpha+\beta X+U, \alpha+\beta X$ refers to the variation in Y that is "explained" by X, and U refers to the variation in Y that is "unexplained," where E[U]=0 and Cov(X,U)=0.

| a. True | ~ | | | | |
|---------------------------|----------|--|--|--|--|
| | | | | | |
| 0 b. False | | | | | |

Explanation

This is true, and provides some of the useful intuition to keep in mind when we will start to go more in depth into linear regression. Two helpful things to keep in mind are that the expectation of the error term, E[U], is equal to zero, and the error term and the independent variable X are uncorrelated.

Submit You have used 1 of 1 attempts

▼ Module 5: Moments of a Random Variable, **Applications to** Auctions, & Intro to Regression

Moments of a Distribution and Auctions

Finger Exercises due Oct 31, 2016 at 05:00 IST

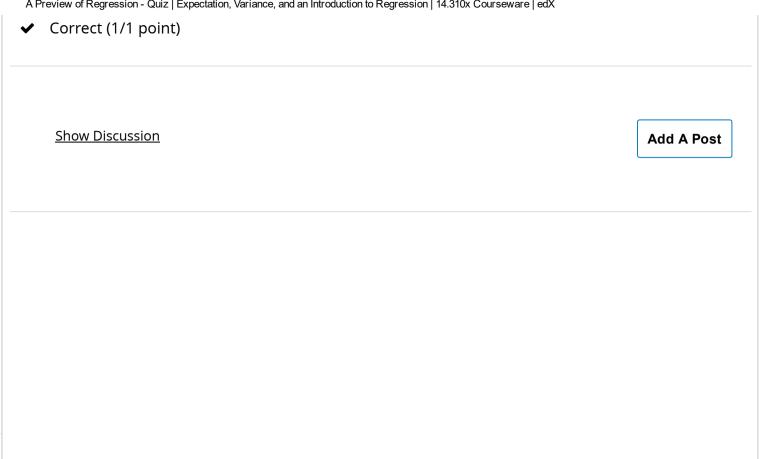
Expectation, Variance, and an Introduction to **Regression**

Finger Exercises due Oct 31, 2016 at 05:00 IST

Module 5: Homework

Homework due Oct 24, 2016 at 05:00 IST

Exit Survey



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