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Outlining the Linear Model - Quiz

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For the following questions, consider the linear model with two random variables (bivariate-style):

$$Y_i = \beta_0 + \beta_1 X_i + \epsilon_i \text{ for } i = 1, 2, \dots, n$$

Question 1

1/1 point (graded)

In this model, n is:☒ a. The number of observations ✓☐ b. The number of dependent variables☐ c. The number of regressors☐ d. A measurement of error**Explanation**

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The Linear Model

due Nov 28, 2016 05:00 IST



Each i in this model represents an observation. X_i is the i^{th} observation of the random variable X , and Y_i is the i^{th} observation of the outcome random variable Y .

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You have used 1 of 2 attempts

✓ Correct (1/1 point)

Question 2

1/1 point (graded)

Match each symbol to its correct meaning:

Y :

Dependent variable ▼

✓ Answer: Dependent variable

X :

Regressor/explanatory variable ▼

✓ Answer: Regressor/explanatory variable

β_0, β_1 :

Regression coefficients ▼

✓ Answer: Regression coefficients

ϵ :

The error ▼

✓ Answer: The error

The Multivariate Linear Model

due Nov 28, 2016 05:00 IST

**Module 9: Homework**

due Nov 21, 2016 05:00 IST



- ▶ [Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias](#)

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Explanation

Y is the dependent variable that we are considering as a function of the regressor X . Both X and Y are random variables. β_0 and β_1 are the regression coefficients – the parameters to be estimated (generally using linear regression). ϵ is the error caused by any unobserved random variables.

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Discussion**Topic:** Module 9 / Outlining the Linear Model - Quiz[Show Discussion](#)

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