

School	Business			
Department	Economics, Business & Finance			
	Assignment []			
Type of Submission	Exam []			
	Homework []			
Submitted By:				
Name:				
Student ID:				
Date:				
Instructor:				
Name:				
Grade:				
Part A				
Part B				
Part C				
Total				

Eco 2104209 Econometrics for Economics

Instructions for the Coursework (To be assessed by a 10 points)

Carefully examine the provided EViews regression output with missing values.

Calculate the missing values based on the information given.

Interpret the results as instructed.

Scenario

A researcher is studying the factors affecting house prices (in thousands of dollars). They use multiple regression with the following variables:

- **Dependent Variable**: House Price
- Independent Variables:
 - Square Footage (SqFt)
 - Number of Bedrooms (Bedrooms)
 - Distance to City Center (DistCity, in miles)

The following output from EViews represents the regression results. <u>Some values are missing</u> and must be calculated.

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
Constant	120.50	[A]	[B]	0.010	
SqFt	0.25	0.05	5.00	0.000	
Bedrooms	[C]	8.00	[D]	[E]	
DistCity	-4.20	[F]	-2.80	0.006	
R-squared: 0.72 F-statistic: 2		F-statistic: 25.	5.00		
Adjusted R-squared: 0.70 Prob(F-statistic): 0.000					
Number of Observations: 100					

EViews Regression Output with Missing Values

Missing Value Tasks (40%)

1. Calculate the Missing Values [A,B,C,D,E,F]

Interpretation Questions (60 %)

1. Interpretation of Coefficients

- Once you've calculated the missing coefficients and statistics, interpret each variable's coefficient (SqFt, Bedrooms, DistCity). Explain what each suggests about the relationship between each variable and the house price.

2. Model Fit

- Interpret the R-squared and Adjusted R-squared values. Explain what they indicate about the model's ability to explain the variation in house prices.

- Why might the Adjusted R-squared be more useful than the R-squared in this context?

3. Overall Model Significance

- Using the F-statistic and its p-value, explain whether the model is statistically significant.
- What does this imply about the overall predictive power of the model?

End of the questions