

1. A sample for a simple linear regression produced

$$n = 8, \bar{x} = 1.375, \bar{y} = 3.125, Sxx = 19.875, Syy = 18.875, Sxy = 10.625.$$

For each required computation below, keep 3 digits after decimal point for final results.

- (1) Complete ANOVA table

Source	SS	DF	MS	F	p
Model	_____	_____	_____	_____	_____
Error	_____	_____	_____		
C. Total	_____	_____			

- (2) Is the model useful? Support your conclusion by a test for the significance of regression.

2. A researcher has an incomplete ANOVA table for a simple linear regression

Source	SS	DF	MS	F
Model	_____	_____	57.857	_____
Error	_____	7	_____	
U. Total	97	_____		

For required computations keep 3 digits after decimal point for final results.

- (1) Complete the ANOVA table

- (2) Is the researcher's model useful with the data? Support your conclusion by a test at the level 0.05 using rejection region.