

5. An experiment was designed to study the effects of three different drugs and three types of stressful situation in producing anxiety in adolescent subjects. The table shows the difference between the pre- and posttreatment scores of 12 subjects who participated in the experiment, for drugs A and B only. (Data from Daniel 1995 Ex 8.16 p337)

Stressful Situation (Factor A)	Drug (Factor B)		Ratio
	A	B	
I	4	1	_____
	5	3	
II	6	6	_____
	6	6	
III	5	7	_____
	4	4	

5a Assign symbols to variables [2]

Name	Symbol
_____	_____
_____	_____
<u>Diff in scores</u>	<u>DiffSc</u>

5b. Write a general linear model to analyze the data [5]

GLM _____ = _____

5c. Compute the mean value in each of the 6 cells in the table, compute the ratio of mean scores of Drug A / Drug B for each stress type, and place this value in the Ratio column in the table. [3]

5d. Do your calculations suggest that there will be interactive effects of stress and drug type on scores ? _____ [1]

Why or why not? [1]

5e. Complete the first two columns of the ANOVA table, for the data on 12 subjects shown above. [2]

Source	df
_____	_____