

(A) Define variables in a tabular format, as follows.

name      symbol      scale

scales: nominal (=categorical), ordinal, or cardinal  
cardinal = interval or ratio scale.

(B) Using the symbols, write a general linear model relating the response variable to explanatory variable(s) and interaction terms (if appropriate).

(C) Complete the first two columns of the ANOVA table      source df

(D) State the name of the analysis, from the following list.

t-test, one-way ANOVA, two-way ANOVA, three-way ANOVA  
paired comparisons, randomized blocks,  
hierarchical (nested) ANOVA  
regression, multiple regression,  
ANCOVA (at least 1 nominal and at least 1 cardinal scale explanatory variable)  
none of the above.

1. Simpson *et al* (1960, *Quantitative Zoology*) reported earlier data (Marian, 1950) on the winglength in males of three species of starling *Sturnus*, from India:

-*S. contra* (sample size = 11)

-*S. ginginiamus* (sample size = 12)

-*S. fuscus* (sample size = 8)

A=6 B=2 C=6 D=1

A. name    symbol    scale

C. source    df

B. \_\_\_\_\_ = \_\_\_\_\_ +  $\epsilon$

D.