

The following data were obtained from a repeated-measures study comparing three treatment conditions:

Person	Tmt 1	Tmt 2	Tmt 3
A	0	4	5
B	1	5	6
C	3	3	3
D	0	1	5
E	1	2	6

- Write the full model for the data, specifying point estimates for the grand mean μ , treatment effects α_j , and subject effects π_i .

- Test the constrained model $\mathcal{H}_0 : \alpha_j = 0$ against the full model in part (a). Report both a p -value and a Bayes factor.

The following data were obtained from a repeated-measures study comparing three treatment conditions:

Person	Tmt 1	Tmt 2	Tmt 3
A	6	2	3
B	5	1	5
C	0	5	10
D	1	8	2

- Write the full model for the data, specifying point estimates for the grand mean μ , treatment effects α_j , and subject effects π_i .

- Test the constrained model $\mathcal{H}_0 : \alpha_j = 0$ against the full model in part (a). Report both a p -value and a Bayes factor.

The following summary table presents the results from a repeated-measures ANOVA comparing three treatment conditions with a sample of $N = 11$. Fill in the missing values in the table.

Source	SS	df	MS	F
Between tmts				5.00
Residual	60			
Between subj	20			
Total				

The following summary table presents the results from a repeated-measures ANOVA comparing four treatment conditions with a sample of $N = 12$. Fill in the missing values in the table.

Source	SS	df	MS	F
Between tmts			18	6
Residual				
Between subj				
Total	194			