Activity BOOK:NEILAWESIS

ANOVA

*In Exercises **16.38–16.41**, fill in the missing entries in the partially completed one-way ANOVA tables.*

16.38

Source	df	*SS*	*MS* = *SS*/df	*F*-statistic
Treatment	2		21.652	
Error		84.400		
Total	14			

16.39

Source	df	*SS*	*MS* = *SS*/df	*F*-statistic
Treatment		2.124	0.708	0.75
Error	20			
Total				

16.40

Source	df	*SS*	*MS* = *SS*/df	*F*-statistic
Treatment	4			
Error	20		6.76	
Total		173.04		

16.41

Source	df	*SS*	*MS* = *SS*/df	*F*-statistic
Treatment			1.4	
Error	12		0.9	
Total	14			

In Exercises ***16.42–16.47****, we provide data from independent simple random samples from several populations. In each case,*

a. compute SST, SSTR, and SSE by using the computing formulas given in Formula 16.1 on page 726.

b. compare your results in part (a) for SSTR and SSE with those in Exercises 16.24–16.29, where you employed the defining formulas.

c. construct a one-way ANOVA table.

d. decide, at the 5% significance level, whether the data provide sufficient evidence to conclude that the means of the populations from which the samples were drawn are not all the same.

16.42

Sample 1	Sample 2	Sample 3
1	10	4
9	4	16
	8	10
	6	
	2	

16.43

Sample 1	Sample 2	Sample 3
8	2	4
4	1	3
6	3	6
		3

16.44

Sample 1	Sample 2	Sample 3	Sample 4
6	9	4	8
3	5	4	4
3	7	2	6
	8	2	
	6	3	

16.45

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
7	5	6	3	7
4	9	7	7	9
5	4	5	7	11
4		4	4	
		8	4	

16.46

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
4	8	9	4	3
2	5	6	0	6
3	5	9	2	9

16.47

Sample 1	Sample 2	Sample 3	Sample 4
11	9	16	5
6	2	10	1
7	4	10	3