TABLE 8.14-1 (continued)

$$SS_C = [C] - [X] = 24.500$$
$$SS_{AC} = [AC] - [A] - [C] + [X] = 10.125$$
$$SS_{C \times \text{subj w.groups}} = [ACS] - [AC] - [AS] + [A] = 2.375$$
$$SS_{BC} = [BC] - [B] - [C] + [X] = 8.000$$
$$SS_{ABC} = [ABC] - [AB] - [AC] - [BC] + [A] + [B] + [C] - [X] = 3.125$$
$$SS_{BC \times \text{subj w.groups}} = [ABCS] - [ABC] - [ABS] - [ACS] + [AB] + [AC] + [AS] - [A] = 1.875$$

TABLE 8.14-2 Analysis of Variance Table

	Source	SS	df
1	Between subjects	12.500	$np - 1 = 7$
2	A	3.125	$p - 1 = 1$
3	Subj w.groups	9.375	$p(n - 1) = 6$
4	Within subjects	223.000	$np(qr - 1) = 24$
5	B	162.000	$q - 1 = 1$
6	AB	6.125	$(p - 1)(q - 1) = 1$
7	$B \times$ subj w.groups	4.875	$p(n - 1)(q - 1) = 6$
8	C	24.500	$r - 1 = 1$
9	AC	10.125	$(p - 1)(r - 1) = 1$
10	$C \times$ subj w.groups	2.375	$p(n - 1)(r - 1) = 6$
11	BC	8.000	$(q - 1)(r - 1) = 1$
12	ABC	3.125	$(p - 1)(q - 1)(r - 1) = 1$
13	$BC \times$ subj w.groups	1.875	$p(n - 1)(q - 1)(r - 1) = 6$
14	Total	235.500	$npqr - 1 = 31$

*$p < .05$.

**$p < .01$.

TESTS FOR HOMOGENEITY OF ERROR TERMS

Four sets of error terms in a type SPF-2.22 design can be tested for homogeneity. The variances estimated by $MS_{\text{subj w.group } a_i}$ at p levels of A should be homogeneous. Similarly, the variances estimated by $MS_{B \times \text{subj w.group } a_i}$ at p levels of A should be homogeneous, and the same is true for $MS_{C \times \text{subj w.group } a_i}$ and $MS_{BC \times \text{subj w.group } a_i}$. Computational procedures for computing the required mean squares at level a_1 appear in Table 8.14-3. The formulas at level a_2 follow the same pattern as those at level a_1. An F_{max} ratio for these partitioned error terms has the form