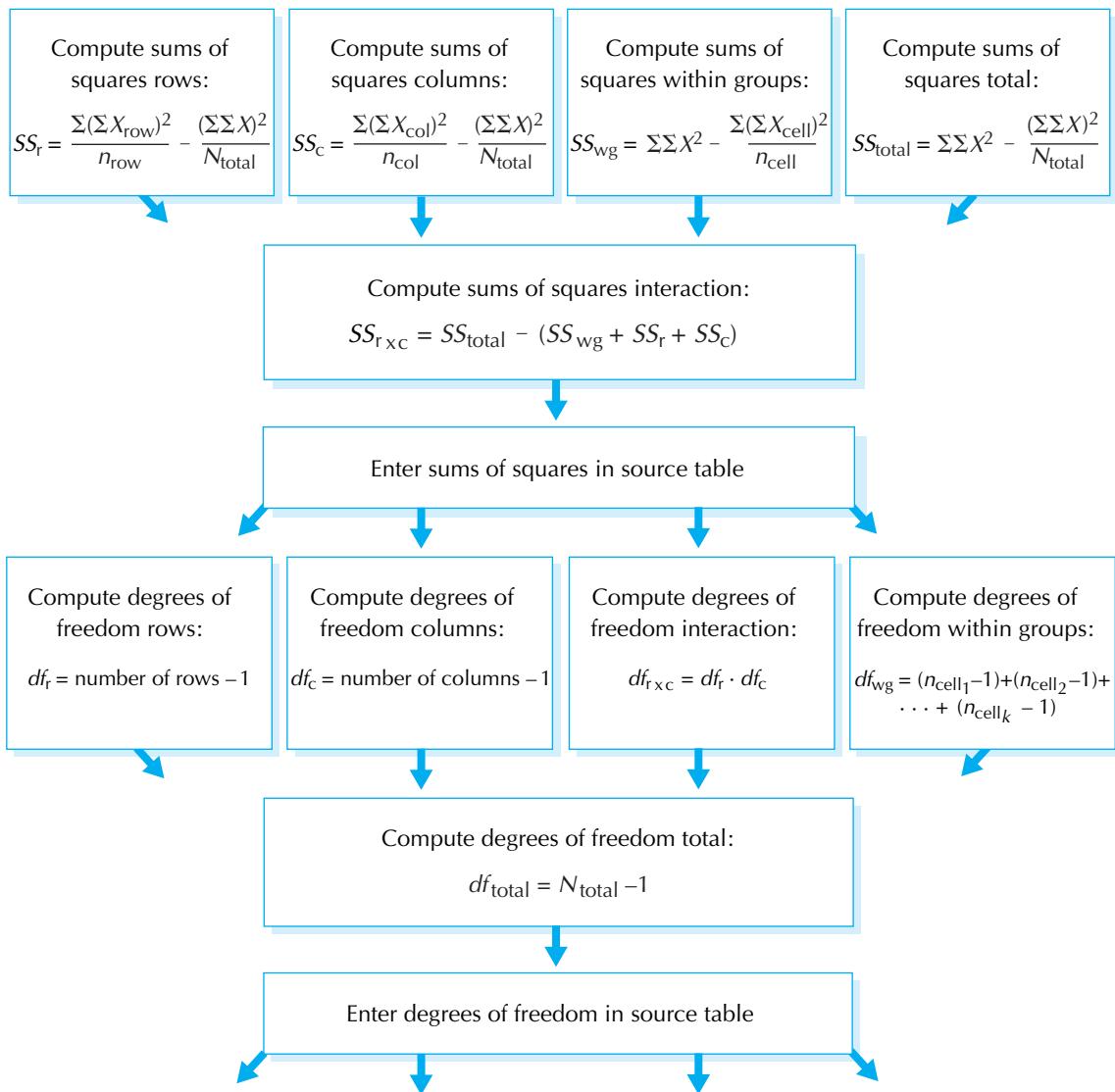


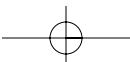
VISUAL SUMMARY

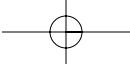
Two-Way Analysis of Variance

Before You Begin: Compute $\Sigma\Sigma X^2$, $\Sigma\Sigma X$, $\Sigma(\Sigma X_{\text{cell}})^2$, $\Sigma(\Sigma X_{\text{row}})^2$, $\Sigma(\Sigma X_{\text{col}})^2$, N_{total} , n_{cell} , n_{row} , n_{col} .



(continued)





VISUAL SUMMARY (continued)

Compute mean square rows:

$$MS_r = \frac{SS_r}{df_r}$$

Compute mean square columns:

$$MS_c = \frac{SS_c}{df_c}$$

Compute mean squares interaction:

$$MS_{r \times c} = \frac{SS_{r \times c}}{df_{r \times c}}$$

Compute mean squares within groups:

$$MS_{wg} = \frac{SS_{wg}}{df_{wg}}$$

Enter mean squares in source table

Compute *F* ratio for rows:

$$F_r = \frac{MS_r}{MS_{wg}}$$

Compute *F* ratio for columns:

$$F_c = \frac{MS_c}{MS_{wg}}$$

Compute *F* ratio for interaction:

$$F_{r \times c} = \frac{MS_{r \times c}}{MS_{wg}}$$

Enter *F* ratios in source table