

FIGURE 7.3 Example of Evaluating the Interaction

$$\frac{(X_1 + Y_2)^2}{\left(\frac{1}{n^1} + \frac{1}{n^2}\right)(MS_{\text{error}})} = F \text{ value (1, omnibus df)}$$

Residence Hall 1 (50)		Residence Hall 2 (100)		Residence Hall 3 (150)		Residence Hall 4 (200)	
1st n=70	4th n=119	1st n=65	4th n=121	1st n=51	4th n=100	1st n=77	4th n=132
AA 2.41	AA 3.18	AA 2.81	AA 2.74	AA 2.94	AA 3.28	AA 2.77	AA 3.04