例9.10

$H_0: \mu_1=\mu_2=\mu_3$，$n=5+6+6=17$

$SST=\sum_{i=1}^{3}\sum_{j=1}^{n_i} y_{ij}^2 - \frac{T^2}{n} = 39.159 - 33.264 = 5.895$

$SSTR=\sum_{i=1}^{k}\left(\frac{T_i^2}{n_i}\right) - \frac{T^2}{n} = 37.873 - 33.264 = 4.609$

$SSE = SST - SSTR = 1.286$

變異來源	平方和	自由度	均方	F檢定值
減肥藥	SSTR=4.609	3-1=2	MSTR=2.305	$\frac{2.305}{0.092}=25.05$
隨机誤差	SSE=1.286	17-3=14	MSE=0.092	
總和	SST=5.895	17-1=16		

$F=25.05 > F_{0.05}(2,14)=3.74$ 有明顯差異

例9.12

$m=\binom{3}{2}=3$，$t_{0.05}(3-1, 17-3)=3.74$

$S=\sqrt{MSE}=\sqrt{0.092}=0.303$，$\sqrt{(k-1)F}=\sqrt{(3-1)3.74}=2.73$

95%信賴区間

$\mu_2-\mu_1=(1.53-0.63)\pm 2.73\times 0.303\times\sqrt{\frac{1}{6}+\frac{1}{5}}=(0.399, 1.401)$ 沒包0

$\mu_3-\mu_2=(1.91-1.53)\pm 2.73\times 0.303\times\sqrt{\frac{1}{6}+\frac{1}{6}}=(-0.098, 0.858)$ 包括0

$\mu_3-\mu_1=(1.91-0.63)\pm 2.73\times 0.303\times\sqrt{\frac{1}{6}+\frac{1}{5}}=(0.779, 1.781)$ 沒包0

只有2與3之間無明顯差異