

例題 9.10

$$H_0 = \mu_1 = \mu_2 = \mu_3$$

$$n = 5 + 6 + 6 = 17$$

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

$$SSTR = \sum_{i=1}^k \left(\frac{T_i^2}{n_i} \right) - \frac{T^2}{n} = 39.873 - 33.264 = 4.609$$

$$SSE = SST - SSTR = 1.286$$

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

$$F = 25.05 > F_{0.05}(2, 14) = 3.74$$

拒絕 H_0