

MEMO NO.
DATE

$$9.7 \quad T_1 = 300 \quad T_2 = 390 \quad T_3 = 570 \quad T_4 = 540$$

$$T = \sum_{i=1}^k \sum_{j=1}^{n_i} y_{ij} = 1800$$

$$\sum_{i=1}^k \sum_{j=1}^{n_i} y_{ij}^2 = 120^2 + 180^2 + \dots + 240^2 + 500^2 = 354400$$

$$SST = 354400 - \frac{(1800)^2}{10} = 30400$$

$$SSTR = \frac{(300)^2}{2} + \frac{(390)^2}{3} + \frac{(570)^2}{3} + \frac{(540)^2}{2} - \frac{(1800)^2}{10} = 25800$$

$$SSE = SST - SSTR = 30400 - 25800 = 4600$$

$$SSTR = 25800 \quad 4-1=3 \quad MSTR = \frac{25800}{3}$$

$$SSE = 4600 \quad 10-4=6 \quad MSE = \frac{4600}{6}$$

$$SST = 30400 \quad 10-1=9$$

9.8

$$\begin{aligned} SSTR &= 25800 & 4-1=3 & MSTR = \frac{25800}{3} = 8600 & \frac{8600}{767} &= 11.2 \\ SSE &= 4600 & 9-3=6 & MSE &= \frac{4600}{6} &= 767 \\ SST &= 30400 & 10-1=9 & & & \end{aligned}$$

$$F = 11.2 > F_{0.05}(3,6) = 4.76 \quad \text{Reject } H_0$$