例 9.12

$n=3 \quad F_{0.05}(3-1, 17-3) = 3.74$

$S = \sqrt{0.092} = 0.303 \quad \sqrt{(3-1)3.74} = 2.73$

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

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

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

只有 2, 3 無明顯差異

例 9.10

$SST = 39.159 - 33.264 = 5.895$

$SSTR = 37.873 - 33.264 = 4.609$

$SSE = 5.895 - 4.609 = 1.286$

ANOVA

	自由度		
$SSTR = 4.609$	$3-1=2$	$MSTR = 2.305$	$F = \frac{2.305}{0.092} = 25.05$
$SSE = 1.286$	$17-3=14$	$MSE = 0.092$	
$SST = 5.895$	$17-1=16$		

$F = 25.05 > F_{0.05}(2,14) = 3.74$ 拒絕 H_0

到答：

$m = \binom{3}{2} = 3$ $\frac{\alpha}{2m} = 0.0083$

$t_{\frac{\alpha}{2m}}(14) = 2.718$ $S = \sqrt{0.092} = 0.303$

$\mu_2 - \mu_1 = (1.53 - 0.63) \pm 2.718 \times 0.303 \times \sqrt{\frac{1}{6} + \frac{1}{5}} = (0.401, 1.399)$ 不包含0

$\mu_3 - \mu_2 = (1.91 - 1.53) \pm 2.718 \times 0.303 \times \sqrt{\frac{1}{6} + \frac{1}{6}} = (-0.095, 0.855)$ 包含0

$\mu_3 - \mu_1 = (1.91 - 0.63) \pm 2.718 \times 0.303 \times \sqrt{\frac{1}{6} + \frac{1}{5}} = (0.781, 1.779)$ 不包含0

2,3 無差異，方法1,2 與 1,3 有差異