題次：＿＿＿＿年＿＿班 座號：＿＿姓名：＿＿＿＿＿＿得分：＿＿＿＿

企管二甲 A107207012 陳柏璋

例 6.7

(1) $1-\alpha=0.95$, $\frac{\alpha}{2}=0.025$

$Z\frac{\alpha}{2}=Z_{0.025}=1.96$

$\bar{x}\pm Z\frac{\alpha}{2}\frac{s}{\sqrt{n}}=16.33\pm1.96\frac{4.29}{\sqrt{36}}=16.33\pm1.4$

$\rightarrow(14.93, 17.73)$

(2) $1-\alpha=0.9$, $\frac{\alpha}{2}=0.05$

$Z\frac{\alpha}{2}=Z_{0.05}=1.645$

$\bar{x}\pm Z\frac{\alpha}{2}\frac{s}{\sqrt{n}}=16.33\pm1.645\frac{4.29}{\sqrt{36}}=16.33\pm1.18$

$\rightarrow(15.15, 17.51)$

例 6.9

(1) M 點估計為 $\bar{x}=15291.67$

(2) $1-\alpha=0.9$, $\frac{\alpha}{2}=0.05$

自由度 $=n-1=12-1=11$ $t_{0.05}(11)=1.796$

$\bar{x}\pm t\frac{\alpha}{2}(n-1)\frac{s}{\sqrt{n}}=15291.67\pm1.796\frac{197.52}{\sqrt{12}}=15291.67\pm102.41$

$=(15189.26, 15394.08)$

(3) $15394.08-15189.26=204.82$

例 6.19

$1-\alpha=0.95$, $Z\frac{\alpha}{2}=Z_{0.025}=1.96$

$n=\left(Z\frac{\alpha}{2}\frac{s}{e}\right)^2=\left(\frac{1.96\times0.05}{0.01}\right)^2=96.04$ $n=97$, $97-35=62$