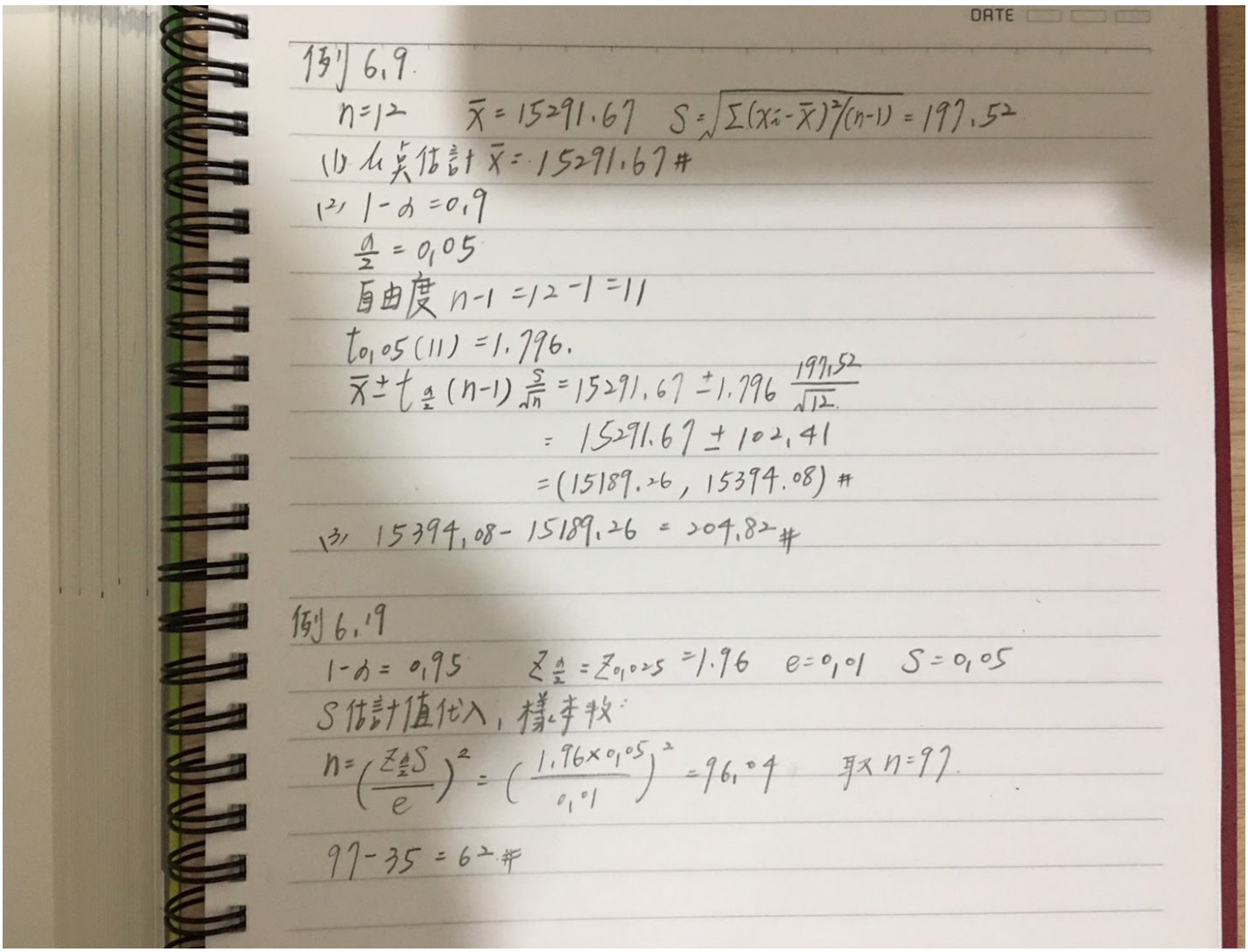

例 6.9

$n=12$ $\bar{x}=15291.67$ $S=\sqrt{\Sigma(x_i-\bar{x})^2/(n-1)}=197.52$

(1) 点估計 $\bar{x}=15291.67$ #

(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

$1-\alpha=0.95$ $z_{\frac{\alpha}{2}}=z_{0.025}=1.96$ $e=0.01$ $S=0.05$

S 估計值代入，樣本数：

$n=\left(\frac{z_{\frac{\alpha}{2}}S}{e}\right)^2=\left(\frac{1.96\times0.05}{0.01}\right)^2=96.04$ 取 $n=97$.

$97-35=62$ #