⑥

$\bar{x}=4.65 \quad s=1.26$

(1)

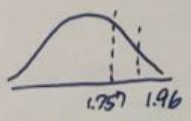
$n=40 \quad \alpha=0.05$

$H_0=\mu=4.3 \quad H_1=\mu\neq 4.3$

$z_{0.05}=1.96$

$$\frac{4.65-4.3}{\frac{1.26}{\sqrt{40}}}=1.757$$

不拒絕



∴不拒絕

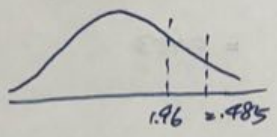
⑦ $n=80 \quad \alpha=0.05$

(2) $H_0=\mu=4.3 \quad H_1=\mu\neq 4.3$

$z_{0.025}=1.96$

$$\frac{4.65-4.3}{\frac{1.26}{\sqrt{80}}}=2.485$$

拒絕H_0



⑦ $H_0=\mu_1=\mu_2$

$H_1=\mu_1\neq\mu_2$

$z_{0.025}=1.96$

$$\frac{(\bar{x}-\bar{y})-0}{\sqrt{\frac{s_1^2}{n_1}+\frac{s_2^2}{n_2}}}=\frac{38.3-40.1}{\sqrt{\frac{40}{100}+\frac{30}{80}}}=2.045$$

∴拒絕H_0