

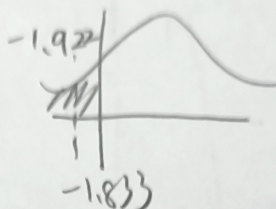
17

1. $n=10, s=13.16$
平均數 198

① $H_0: \mu \geq 198$

$H_1: \mu < 198$

② $\alpha = 0.05$

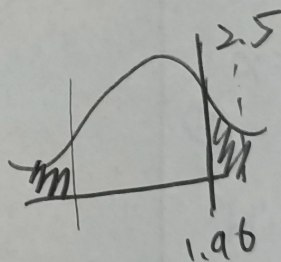


③ $C = \{t < -t_{0.005}(9)\}$
 $= \{t < -1.833\}$

④ $t = \frac{190 - 198}{\frac{13.16}{\sqrt{10}}} = \frac{-8}{4.16} = -1.922$

拒絕 $H_0 \Rightarrow$ 合格 是 #

2. $\mu = 420, \sigma = 12, n = 100$



① $H_0: \mu = 420$

$H_1: \mu \neq 420$

② $\alpha = 0.05$

③ $z > z_{0.025} \therefore$ 拒絕 $H_0 =$ 規格改變

$= z > 1.96$

④ $\frac{423 - 420}{\frac{12}{\sqrt{100}}} = 2.5$

3. $n=36, S^2=36, s=6$

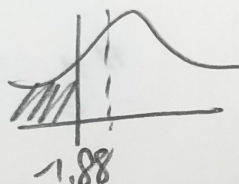
① $H_0: m \geq 70$

$H_1: m < 70$

② $\alpha = 0.03$

③ $Z < Z_{0.03}$

$Z < -1.88$



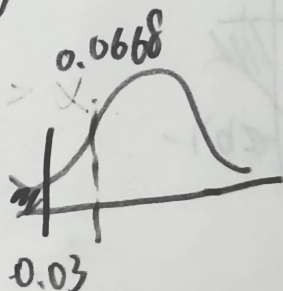
④ $\frac{68.5 - 70}{\frac{6}{\sqrt{36}}} = -1.5$

\therefore 接受 $H_0 \Rightarrow$ 否, 沒有不如去年

4. $P(Z < -1.5)$

$= 0.0668$

\Rightarrow 接受 H_0



5. $n=5$

$s=0.019$

① $H_0: m \leq 1.5$

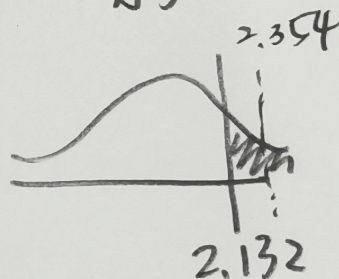
$H_1: m > 1.5$

② $\alpha = 0.05$

③ $t > t_{0.05}(4)$

$= t > 2.132$

④ $\frac{1.52 - 1.5}{\frac{0.019}{\sqrt{5}}} = 2.354$



拒絕 $H_0 \Rightarrow$ 否, 不合格.