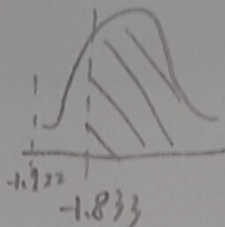


1.  $H_0: m \geq 198$

$H_1: m < 198$

$\alpha = 0.05$  t



$t_{0.05}(9) = -1.833$   $\frac{190 - 198}{\frac{13.16}{\sqrt{10}}} = -1.922 \Rightarrow$  拒絕  $H_0$   
 $\Rightarrow$  合格

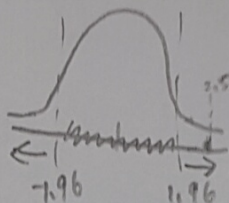
2.  $H_0: m = 420$

$H_1: m \neq 420$

$\alpha = 0.05$   $\frac{\alpha}{2} = 0.025$

$n = 100$

$z_{0.025} = 1.96$



$\frac{423 - 420}{\frac{12}{\sqrt{100}}} = 2.5 \Rightarrow$  拒絕  $H_0$   
 $\Rightarrow$  規格改變

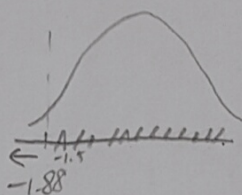
3.  $H_0: m \geq 70$

$H_1: m < 70$

$\alpha = 0.03$

$n = 36$

$z_{0.03} = -1.88$

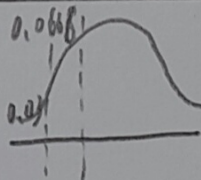


$\frac{68.5 - 70}{\frac{6}{\sqrt{36}}} = -1.5 \Rightarrow$  接受  $H_0$   
 $\Rightarrow$  成績沒有不如群

4.

$p(z < -1.5)$

$= 0.0668 > 0.03 \Rightarrow$  接受  $H_0$



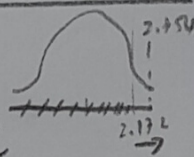
5.  $H_0: m \leq 1.5$

$H_1: m > 1.5$

$\alpha = 0.05$

$t_{0.05}(4) = 2.132$

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



$\Rightarrow$  拒絕  $H_0$   
 $\Rightarrow$  農藥超標不合格